

## KEBERLANJUTAN PEGEMBANGAN PETERNAKAN KERBAU MOA DI PULAU MOA PROVINSI MALUKU

### INTISARI

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Tujuan umum penelitian menganalisis keberlanjutan pengembangan peternakan Kerbau Moa di Pulau Moa Provinsi Maluku. Penelitian dilaksanakan di Pulau Moa Kabupaten Maluku Barat Daya pada Tahun 2018. Materi penelitian adalah 261 responden peternak Kerbau Moa pada 6 desa sampel dan 16 responden pakar yang diambil secara *purposive sampling*. Data sekunder diambil dari penelitian sebelumnya dan instansi terkait. Data primer diambil dengan metode survey melalui wawancara mendalam (*in-depth interview*) kepada responden menggunakan kuisioner, FGD dengan pakar terpilih serta pengukuran kualitas dan kuantitas pakan. Variabel penelitian adalah indikator-indikator dari 3 dimensi ekologi, sosial budaya, ekonomi. Analisis data secara deskriptif, perhitungan ekonomi, uji proksimat hijauan, Teknik ordinas RAP-BANGKER melalui metode *Multi Dimensional Scaling* (MDS) untuk mengukur indeks dan status keberlanjutan, Analisis *Leverage* untuk menentukan indikator-indikator sensitif, analisis *Monte carlo* untuk menilai pengaruh galat pada pendugaan nilai ordinas pengembangan Kerbau Moa, analisis Prospektif (*Participatory Prospective Analysis*) untuk menentukan faktor kunci yang mempengaruhi keberlanjutan pengembangan peternakan Kerbau Moa. Hasil penelitian menunjukkan bahwa peternak berusia produktif, tingkat pendidikan rendah, tujuan sebagai sumber pedapatan dan tabungan. Rataan jumlah kepemilikan  $17,95 \pm 11,59$  UT/peternak, dipelihara secara tradisional, penggembalaan komunal, kerbau Moa memiliki nilai sosial budaya. Padang penggembalaan alam didominasi oleh hijauan rumput, produksi hijauan rendah saat musim kemarau diikuti dengan penurunan kandungan nutrisi, kapasitas tampung 0,63 UT/ha, kategori Indeks daya dukung ternak (IDD) kritis, pada musim hujan 1,43 UT/ha, IDD aman. Usaha ini efisien dengan nilai R/C ratio 2,21, kontribusi pendapatan 57,45% (cabang usaha). nilai indeks gabungan keberlanjutan pengembangan kerbau Moa 51,80%. Dimensi ekologi 41,15% dengan 7 indikator sensitif, dimensi sosial budaya 60,28% dengan 5 indikator sensitif, dimensi ekonomi 56,73% dengan 3 indikator sensitif dan 10 faktor kunci. Dapat disimpulkan bahwa peningkatan keberlanjutan pengembangan kerbau Moa dapat dilakukan dengan intervensi dan perbaikan kinerja indikator sensitif dan faktor kunci. Sejumlah strategi disarankan berdasarkan faktor kunci tersebut yaitu mempertahankan fungsi sosial budaya ternak kerbau, meningkatkan peran generasi muda untuk turut mengelola kerbau, membuka akses informasi, meningkatkan peran penyuluh, perbaikan kualitas padang penggembalaan, pemanfaatan limbah tanaman pangan untuk pakan, pemanfaatan limbah kerbau, bantuan sarana produksi, meningkatkan keterlibatan anggota keluarga, meningkatkan pengontrolan ternak saat musim kemarau.

Kata kunci: Kerbau Moa, dimensi ekologi, sosial budaya, ekonomi, status dan faktor kunci keberlanjutan

## **THE SUSTAINABILITY OF MOA BUFFALO FARMS DEVELOPMENT ON MOA ISLAND, MALUKU PROVINCE**

### **ABSTRACT**

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The general objective of the study was to analyze the sustainability of the development of Moa Buffalo farms on Moa Island, Maluku Province. The research was carried out on Moa Island, Southwest Maluku Regency, in 2018. The research material was 261 respondents from Moa buffalo breeders in 6 sample villages and 16 expert respondents taken by purposive sampling. Secondary data was taken from previous research and related agencies. Primary data was taken by survey method through in-depth interviews with respondents using questionnaires, FGDs with selected experts, and measurement of the feed quality and quantity. Research variables were indicators of 3 dimensions, namely ecological dimension, socio-cultural dimension, and economic dimension. Data were analyzed through several methods, namely descriptive analysis, economic calculations, forage proximate test, RAP-BANGKER ordination technique through Multi-Dimensional Scaling (MDS) method to measure the sustainability index and status, Lverage analysis to determine sensitive indicators, Monte Carlo analysis to assess the effect of the error on the ordinance value estimation of Moa Buffalo development, and Participatory Prospective Analysis to determine the key factors influencing the sustainability of Moa Buffalo farming development. The results showed that the breeders were in productive age, had a low level of education, and used farming as a source of income and savings. The average number of ownership was 17.95+11.59 Animal Unit (AU)/breeder, which was maintained traditionally by communal grazing. In addition, Moa buffalo also had socio-cultural values. Natural grazing fields were dominated by forage. During the dry season, the forage production was low and followed by a decrease in nutrient content. The holding capacity was 0.63 AU/ha and the livestock carrying capacity index (IDD) was critical. During the rainy season, the holding capacity was 1.43 AU/ha and the IDD was safe. This business was efficient with an R/C ratio of 2.21 and a revenue contribution of 57.45% (business branch). The combined sustainability index value of the Moa buffalo development was 51.80% consisting of the ecological dimension 41.15% with 7 sensitive indicators, the socio-cultural dimension 60.28% with 5 sensitive indicators, and the economic dimension 56.73% with 3 sensitive indicators and 10 sensitive indicators. It can be concluded that the sustainability of Moa buffalo development can be increased by intervening and improving the performance of sensitive indicators and key factors. Several strategies were suggested based on these key factors, namely maintaining the socio-cultural function of buffalo, increasing the role of the younger generation to participate in managing buffalo, opening access to information, increasing the role of extension workers, improving the quality of grazing fields, utilizing food crop waste for feed, utilizing buffalo waste, supporting the production facilities, increasing the involvement of family members, and improve control of buffalo during the dry season.

**Keywords:** Moa buffalo, ecological dimension, socio-cultural dimension, economic dimension, status and sustainability key factor