ANALISIS KECUKUPAN PAKAN DAN KELAYAKAN USAHA PETERNAKAN SAPI BALI DI KECAMATAN TANETE RIAJA KABUPATEN BARRU PROVINSI SULAWESI SELATAN

INTISARI

Indrawirawan
18/434154/PPT/01017

Tujuan penelitian ini adalah menginventarisasi potensi ketersediaan pakan dari limbah tanaman pangan, menganalisis kemampuan wilayah dalam menampung ternak, menganalisis lokasi persebaran peternak berdasar elevasi lahan dan pola usaha pembibitan dan penggemukan, dan menghitung kelayakan usaha peternakan sapi Bali. Penelitian dilakukan di Kecamatan Tanete Riaja dari Juni sampai September 2019. Responden ditentukan secara *purposive sampling* sebanyak 121 orang terdiri dari 75 orang pada usaha pembibitan dan 46 orang pada usaha penggemukan. Penelitian menggunakan metode survei melalui observasi dan wawancara. Data primer meliputi karakteristik responden, lokasi koordinat peternak, komposisi ternak, dan identifikasi biaya-biaya dan penerimaan sedangkan data sekunder meliputi luas panen tanaman pangan, populasi ternak, peta Rupa Bumi Indonesia (RBI), dan citra SRTM (*Shuttle Radar Topogrpahic Mission*). Analisis produksi pakan dari limbah tanaman pangan berupa jerami padi, jerami jagung, jerami kacang tanah, dan jerami ubi jalar diketahui dengan mengalikan luas areal panen dengan produksi bahan kering (BK). Analisis daya tampung pakan dari limbah tanaman pangan dihitung dari selisih produksi BK dan populasi sapi Bali. Peta sebaran peternak dianalisis menggunakan metode tumpang susun (*overlay*) dengan menambahkan peta administrasi, data koordinat peternak, dan peta tipologi lahan. Analisis *cash flow* dihitung dengan jangka waktu lima tahun dan tingkat suku bunga 7% setahun. Analisis kelayakan usaha menggunakan kriteria *Net Present Value* (NPV), *Benefit Cost Ratio* (BCR), *Internal Rate of Return* (IRR), dan *Payback Period* (PP) dilanjutkan analisis sensitivitas. Hasil penelitian menunjukkan bahwa potensi ketersediaan pakan dari limbah tanaman pangan berdasarkan produksi BK sebesar 24.412,47 ton. Kecamatan Tanete Riaja mampu menampung ternak berdasarkan kebutuhan BK sebanyak 12.484,92 UT dengan total populasi sebanyak 9.817,72 UT sehingga masih ada potensi penambahan populasi sebanyak 2.667,20 UT. Penyebaran lokasi peternak berdasarkan tipologi lahan menunjukkan semua peternak berlokasi di lahan berelevasi rendah (0 – 100 m dpal). Usaha pembibitan dan penggemukan sapi Bali secara fianansial layak diusahakan oleh peternak. Nilai kriteria kelayakan usaha pembibitan yaitu NPV sebesar Rp10.640.251,03/peternak, BCR sebesar 1,30, IRR sebesar 19,20% dan PP selama 4,34 tahun. Nilai kriteria kelayakan usaha penggemukan yakni NPV Rp34.569.547,93/peternak, BCR sebesar 1,21, IRR sebesar 36,91%, dan PP selama 2,64 tahun. Hasil analisis sensitivitas usaha pembibitan dengan perbaikan parameter teknis CI menjadi 14 bulan dan parameter ekonomi pembelian hijauan pakan dapat meningkatkan kriteria kelayakan finansial usaha. Analisis sensitivitas usaha penggemukan dengan simulasi pemeliharaan enam dan sembilan bulan per periode menunjukkan bahwa pemeliharaan selama sembilan bulan paling menguntungkan karena semakin lama pemeliharaan maka pertambahan bobot badan bakalan semakin tinggi.

Kata kunci : daya tampung, kelayakan usaha, sapi Bali

ANALYSIS OF CARRYING CAPACITY AND BUSINESS FEASIBILITY OF BALI CATTLE IN TANETE RIAJA DISTRICT, BARRU REGENCY, SOUTH SULAWESI PROVINCE

ABSTRACT

Indrawirawan
18/434154/PPT/01017

The study aimed to make an inventory of the potential for feed availability, to analyze the ability of the region to accommodate Bali cattle, analyze locate of distribution of farmers based on land elevation, and calculate the feasibility of the Bali cattle business. The research was conducted in Tanete Riaja District, Barru Regency from June to September 2019. Respondents were determined by purposive sampling with 121 respondents including 75 respondents in the breeding business and 46 respondents in the fattening business. The study used a survey method of observation and interviews. Primary data including respondent characteristics, location of farmer coordinates, compose Bali cattle, and costs and revenues components. Secondary data includes the harvested area of food crops, Bali cattle population, Indonesian topographical base map (RBI), and Shuttle Radar Topographic Mission (SRTM) imagery. Analysis of food crop waste production from rice straw, corn straw, peanut straw, and sweet potato straw by multiplying the harvested area with dry matter production (DM). The analysis of the feed carrying capacity of food crop waste was calculated by subtracting the DM production of feedstuffs from the Bali cattle population. Farmer's distribution was analyzed by overlay by adding administrative maps, farmer location coordinates data, and land typology maps. Cash flow analysis calculated using five years business projection with an interest rate of 7% a year. The business feasibility analysis used the criteria of Net Present Value (NPV), Benefit-Cost Ratio (BCR), Internal Rate of Return (IRR), and Payback Period (PP) followed by a sensitivity analysis. The results showed that the potential for feed availability from food plant waste based on DM production was 24,412.47 tons. Tanete Riaja District could accommodate Bali cattle based on DM needs was 12,484.92 AU with a total population of 9,817.72 AU, so that there was still a potential for an added population of 2,667.20 AU. The distribution of farmer locations based on land typology showed that all farmers were on low elevation land (0 – 100 MASL). The financial feasibility analysis of the Bali cattle breeding and fattening business showed that these businesses were workable to run. The criteria for the feasibility of breeding business were NPV of IDR 10,640,251.03, BCR of 1.30, IRR of 19.20%, and PP for 4.34 years. The value of the feasibility criteria for the Bali cattle fattening business got NPV of IDR 34,569,547.93, BCR of 1.21, IRR of 36.91%, and PP for 2.64 years. The results of the sensitivity analysis of the Bali cattle breeding business by improving the technical parameters of CI for 14 months and the economic parameters of purchasing forage could improve the criteria for business financial feasibility. The sensitivity analysis of the Bali cattle fattening business with simulation six and nine months of fattening per period showed that the fattening for nine months was the most profitable because the longer the fattening, the higher the weight gain of the feeder cattle body.

Keywords: Bali cattle, business feasibility, carrying capacity