



## ABSTRAK

Kabupaten Tanah Datar merupakan salah satu daerah penghasil padi terbesar di Provinsi Sumatera Barat. Dengan segala potensi yang dimiliki, sejauh mana kabupaten ini mampu mendukung kebutuhan masyarakat akan pangan. Tujuan penelitian ini adalah (1) Menganalisis daya dukung lingkungan berdasarkan pendekatan jasa ekosistem untuk penyediaan bahan pangan pertanian di Kabupaten Tanah Datar. (2) Mengkaji status daya dukung lingkungan berdasarkan pendekatan jasa ekosistem untuk penyediaan bahan pangan pertanian di Kabupaten Tanah Datar. (3) Merumuskan strategi pengelolaan lingkungan untuk penyediaan bahan pangan pertanian di Kabupaten Tanah Datar.

Metode penelitian yang digunakan adalah survei pada bebagai data sekunder dan disempurnakan dengan data primer. Data dianalisis secara deskriptif kuantitatif dan analisis spasial untuk memperoleh informasi spasial terkait objek kajian.

Hasil penelitian menunjukkan Kabupaten Tanah Datar terdiri dari 5 kelas jasa ekosistem penyedia bahan pangan. Berdasarkan Status daya dukung bahan pangan Kabupaten Tanah Datar masih mampu memenuhi kebutuhan pangannya. Terdapat beberapa tantangan atau permasalahan terkait lingkungan diantaranya, ancaman degradasi lingkungan akibat penggunaan agrokimia (pupuk dan pestisida kimia), tren penururan produksi bahan pangan, alih fungsi lahan pertanian, bencana kekeringan, bencana banjir bandang dan longsor, serta serangan hama tikus. Strategi pengelolaan lingkungan yang dapat ditawarkan diantaranya : (1) Peningkatan produksi dan daya saing produk bahan pangan pertanian; (2) Penegakan dan Penegasan Hukum; (3) Penerapan Pertanian Ramah Lingkungan; dan (4) Peningkatan Infrastruktur dan Sumber Daya Manusia.

Kata kunci : Kabupaten Tanah Datar, Daya Dukung Lingkungan, Jasa ekosistem Pangan, Strategi Pengelolaan Lingkungan



## ABSTRACT

Tanah Datar Regency is one of the largest rice producing areas in West Sumatra Province. With all the potential it has, to what extent is this regency able to support the community's need for food. The aims of this study were (1) to analyze the carrying capacity of the environment based on the ecosystem services approach for the supply of agricultural food in Tanah Datar Regency. (2) Assess the status of environmental carrying capacity based on the ecosystem service approach for the supply of agricultural food in Tanah Datar Regency. (3) Formulate an environmental management strategy for the supply of agricultural food in Tanah Datar Regency.

The method used in this research is a survey on various secondary data and refined with primary data. Data were analyzed using quantitative descriptive and spatial analysis to obtain spatial information related to the object of study.

The results showed that Tanah Datar Regency consists of 5 classes of food supply ecosystem services. Based on the status of the carrying capacity of food, Tanah Datar Regency still able to meet its food needs. There are several challenges or problems related to the environment, including the threat of environmental degradation due to the use of agrochemicals (chemical fertilizers and pesticides), the trend of decreasing food production, the conversion of agricultural land, drought, flash floods and landslides, and rat attacks. Environmental management strategies that can be offered include: (1) Increased production and competitiveness of agricultural food products; (2) Law Enforcement and Affirmation; (3) Application of Environmentally Friendly Agriculture; and (4) Improvement of Infrastructure and Human Resources.

Keywords: Tanah Datar District, Environmental Carrying Capacity, Food Ecosystem Services, Environmental Management Strategy