PERUBAHAN PENGGUNAAN LAHAN DAN POLA PERUBAHANNYA SERTA ARAHAN STRATEGI PENGENDALIAN PEMANFAATAN RUANG DI KABUPATEN BOGOR

TESIS

Diajukan untuk memenuhi sebagian persyaratan
memperoleh gelar Magister Perencanaan Wilayah dan Kota

Oleh:

NUR IRFAN ASYARI
NPM 072722011

**PROGRAM STUDI
MAGISTER PERENCANAAN WILAYAH DAN KOTA
SEKOLAH PASCASARJANA UNIVERSITAS PAKUAN
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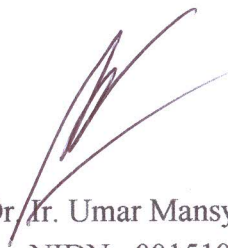
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NUR IRFAN ASYARI. Perubahan Penggunaan Lahan Dan Pola Perubahannya Serta Arahan Strategi Pengendalian Pemanfaatan Ruang Di Kabupaten Bogor. Dibimbing oleh. SANTUN R.P. SITORUS dan ARIF WICAKSONO.

ABSTRAK

Penetapan Kabupaten Bogor sebagai Pusat Kegiatan Nasional (PKN) mendorong peningkatan jumlah penduduk dan perubahan penggunaan lahan yang cepat. Perubahan penggunaan lahan yang terus berkembang maka diperlukan pemodelan spasial perubahan lahan berbasis prediksi. Hasil prediksi tersebut dapat dijadikan dasar dalam arahan kebijakan pengendalian pemanfaatan ruang. Tujuan penelitian adalah: 1)Menganalisis perubahan penggunaan lahan Tahun 1997-2010-2023 dan pola perubahannya. 2). Memprediksi arah perubahan penggunaan lahan. 3). Menganalisis keselarasan penggunaan lahan dan pola ruang RTRW. 4). Merumuskan arahan penyempurnaan pola ruang RTRW Kabupaten Bogor. 5). Merumuskan arahan rencana pengendalian pemanfaatan ruang dan strateginya di Kabupaten Bogor. Penelitian dilakukan di Kabupaten Bogor. Analisisnya menggunakan Overlay ArcGIS 10.8 dan IDRISI Selva Edition dan ISM v. 2.3 untuk pengolahan questioner. Perubahan penggunan lahan tahun 1997-2010, luas yang tetap sebesar 263.288,35 Ha atau 87,98 %, sedangkan lahan yang berubah sebesar 35.937,07 atau 12,01 %. Perubahan penggunaan lahan tahun 2010-2023, luas penggunaan lahan yang tetap sebesar 218.907,52 Ha atau 73,16 % sedangkan penggunaan lahan yang berubah sebesar 80.317,90 atau 26,84 %. Pola perubahan lahan yang paling dominan yaitu Pertanian Lahan Kering menjadi Sawah. Pola perubahan yang paling kecil yaitu Tanah Terbuka menjadi Pertanian Lahan Kering. Prediksi penambahan luas penggunaan lahan pada tahun 2036, menurut luasan yang terbesar adalah Permukiman, Semak Belukar dan Tanah Terbuka. Prediksi pengurangan, menurut luasan yang terbesar adalah Pertanian Lahan Kering, Hutan dan Sawah. Keselarasan penggunaan lahan dengan pola ruang RTRW, menunjukan 58,68 % selaras, 23,85 % transisi dan 17,46 % tidak selaras. Arahan penyempurnaan pola ruang RTRW, untuk penggunaan lahan yang selaras dengan pola ruang disarankan penggunaan lahannya tetap. Penggunaan lahan yang transisi dimanfaatkan sesuai dengan arahan pola ruang RTRW. Penggunaan lahan yang tidak selaras dan bersifat permanen sebaiknya diakomodasi dalam penyempurnaan RTRW Kabupaten Bogor. Strategi pengendalian pemanfaatan ruang yang utama yaitu peningkatan pengetahuan dan keterampilan aparatur dalam penilaian pelaksanaan KKPR dan implementasinya melalui pelatihan teknis tata ruang, peningkatan daya dukung sarana dan prasarana, penempatan pejabat struktural dan staf sesuai dengan kebutuhan dan fungsi organisasi, penataan kelembagaan organisasi bidang penataan ruang dalam menghadapi perubahan kebijaksanaan pemanfaatan ruang, penilaian perwujudan RTR dan penyelesaian sengketa. Arahan Pengendalian pemanfaatan ruang di Kabupaten Bogor yaitu mengendalikan kegiatan pertambangan dan melarang perluasannya, mengendalikan dan melarang perluasan permukiman di zona pertanian lahan basah, zona lahan kering dan zona perkebunan.

Kata Kunci : CA-Markov, Kesesuaian Lahan, Prediksi Penggunaan Lahan

NUR IRFAN ASYARI. Land Use Change Pattern Of Change And Strategy Directions For Spatial Utilization Control In Bogor Regency. Supervised By. SANTUN R.P. SITORUS and ARIF WICAKSONO.

ABSTRACT

The establishment of Bogor Regency as a National Activity Center (PKN) encourages an increase in population and rapid land use change. Land use change that continues to grow requires spatial modeling of land change based on prediction. The prediction results can be used as a basis in the direction of spatial utilization control policies. The research objectives are: 1) Analyzing land use change from 1997-2010-2023 and the pattern of change. 2). Predicting the direction of land use change. 3). Analyzing the alignment of land use and spatial pattern of RTRW. 4). Formulate directions for improving the spatial pattern of the Bogor District RTRW. 5). Formulate directions for spatial utilization control plans and strategies in Bogor Regency. The research was conducted in Bogor Regency. The analysis used ArcGIS 10.8 Overlay and IDRISI Selva Edition and ISM v. 2.3 for questioner processing. The results of the analysis of land use change in 1997-2010, the area that remained was 263,288.35 Ha or 87.98%, while the land that changed was 35,937.07 or 12.01%. Land use change in 2010-2023, the area of land use that remained was 218,907.52 Ha or 73.16%, while land use that changed was 80,317.90 or 26.84%. The most dominant pattern of land change is Dry Land Agriculture to Rice Fields. The least pattern of change is Open Land to Dryland Agriculture. Predicted increase in land use area in 2036, by area, the largest are Settlements, Shrubs and Open Land. Predicted reductions, by area, are Dryland Farming, Forest and Rice Fields. The alignment of land use with the spatial pattern of the RTRW, shows 58.68% aligned, 23.85% transitional and 17.46% not aligned. Direction for improving the spatial pattern of the RTRW, for land use that is in harmony with the spatial pattern, it is recommended that land use remains. Transitional land use is utilized in accordance with the direction of the RTRW spatial pattern. Land use that is not harmonized and is permanent should be revised in the improvement of the Bogor District RTRW. The main spatial utilization control strategy is to increase the knowledge and skills of the apparatus in assessing the implementation of KKPR and its implementation through technical spatial planning training, increasing the carr capacity of facilities and infrastructure, placing structural officials and accordance with the needs and functions of the organization, institutional of the spatial planning organization in the face of changes in spatial utili assessing the realization of RTR and resolving disputes. The d. utilization control in Bogor Regency is to control mining activi expansion, control and prohibit the expansion of settlemen zones, dryland zones and plantation zones.

Keywords: CA-Markov; Land Suitability; Land Use Pr

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Keywords: CA-Markov; Land Suitability; Land Use Prediction.