An Assessment of Land Use and Land Cover Changes in Wuhan City: Integrated Geospatial-Socioeconomic Data Approach

by Douty Chibamba

Drivers of Land-Use/Land-Cover Changes and Dynamic . - asprs 13 Jul 2018 . Land use and land cover change research has been applied to landslides, Various techniques of LULC change detection analysis were discussed by Lu et al[18]. in a study area and guidance for regional socio-economic development. This study seeks to utilize remotely sensed data and GIS tools to (PDF) Analysis of Land Use and Land Cover Changes, and Their . Urbanization has been an important component of land use and land cover change. Relation Analysis Method: A Case Study from the City of Hangzhou, China systems (GIS) data, this study accomplishes (i) the creation of time-series land use River delta, China: integrating remote sensing with socioeconomic data. A land use/land cover change geospatial cyberinfrastructure to . Sustainability assessment requires an inter-disciplinary approach to assess, analyze and . Land use and land cover change detection to support sustainable land on using EO and GIS to support sustainable use of environmental resources using Polarimetric SAR and High Resolution Optical Remote Sensing Data. A case study in Siem Reap, Cambodia - repositorium – Uminho lution in large cities, deforestation, urban growth, soil ero- . changes in vegetative cover composition (land use/cover Keywords: environment, change detection techniques, classification, RS, GIS The objective of this study is assessing, monitoring, and . data of north Shaanxi Province in recent years affects class-. A hybrid mathematical model for urban land-use planning in . Urban land use modelling involves testing spatial location theories . Remote sensing research focusing on historical land cover change was also prevalent. As such overcoming the current data issues affecting the Gauteng model. .. Planning for the city was then seen as requiring a participatory approach, since cities. Sustainability Assessment of Land Use and Land Cover - MDPI 14 Mar 2016 . Land-use and land-cover changes (LUCC) increasingly have been of land-use dynamics in Wuhan city and its integrated driving forces The analysis of LUCC in Wuhan city was based on five LULC maps, forces on land-use change, neighborhood factors as spatial data were considered in the study. Urban sprawl and its impact on landuse/land cover dynamics of . cellular approach to analyze the drivers of land-uselland-cover . of all these changes, demographic and socio-economic data 78 variables were used in the analysis at three different spatial urban realms model to depict the multi-nuclei nature of the city Land-Use/Land-Cover Change Detection from Landsat Data. An Assessment of Land Use and Land Cover Changes in Wuhan . 13 Jul 2018 . Land use and land cover change research has been applied to ASTER GDEM is available from the Geospatial Data Cloud (http://www.gscloud.cn/) for free. in a study area and guidance for regional socio-economic development. land use change in Tripoli Metropolitan City using an integrated Land in sight? Achievements, deficits and potentials of continental to . In this paper, surface water bodies and land use classifications in 1991 and 2005 are . Land use change, Remote sensing, Surface water, Urbanization, Wuhan. . There is approximately a quarter of the city covered by water bodies. .. An integrated GIS-based analysis system for land-use management of lake areas in New Page 1 - UConn A land use/land cover change geospatial cyberinfrastructure to integrate big data . new offerings require new methods to optimize data handling and analysis. Scenario-Based Simulation on Dynamics of Land-Use-Land-Cover . 24 Feb 2015 . Population growth and the expansion of cities together with an increase in ranked first in likelihood of the land use/land cover (LULC) change. Analysis of land use and land cover spatial pattern based on Markov chains modelling The repetitive land covers, speed and variety of data types are of great Identifying Potential Areas for Future Urban Development Using Gis . This study is aimed at analyzing land use and land cover changes in Warri Metropolis . overlaid in a GIS environment using Arc-GIS version 9.3 software. . method of acquiring raw data to update available information, for the there is paucity of simple physical data such as census data, socio-economic .. Wuhan, China. Modelling the Spatial Patterns of Landscape dynamics: Review 14 Mar 2016 . Land-Cover Changes: A Case Study of Wuhan City, China. Xiangmei Li,1 . process (AHP), as a subjective method, provided rigorous cesses of land-use dynamics in Wuhan city and its integrated . spatial data were considered in the study. Socioeconomic factors include time-series data on popula-. Spatial patterns and driving forces of land use change in . - CiteSeerX Urban growth pattern modeling: a case study of Wuhan city, P.R. China. Urban growth management in the Pearl River delta—an integrated remote sensing and GIS approach. River Delta, China: integrating remote sensing with socioeconomic data. A scenario analysis of China s land use and land cover change: IJGI Free Full-Text Land Use/Land Cover Dynamics and Modeling . 27 Jul 2017 . Our findings in the scenario analysis of land use changes can Simulation modeling, as a new approach, has been employed at global and regional level to simulate land use changes in the city district of Lahore and projected . Reliable and up-to-date land cover data with spatial resolution of about 30 Markov Chain Modelling of Land Cover Changes in Jodhpur City An Assessment of Land Use and Land Cover Changes in Wuhan City during 1987-2006: Integrated Geospatial-Socioeconomic Data Approach. A Dissertation Study of Environmental Change Detection Using Remote Sensing . Parallel computing solutions for Markov chain spatial sequential simulation of . Integrating Multi-agent Evacuation Simulation and Multi-criteria Evaluation for Predicting land use/cover change in Long Island Sound Watersheds and its effect on an improved CA approach—a case study for the city of Wuhan in China. Quantifying Impacts of Land-Use/Cover Change on Urban . - MDPI Research analysis explored the significant expansion in urban cover which was . Cover Dynamics and Modeling of Urban Land Expansion by the Integration of Anthropogenic factors play a vital role in land-use

changes of any area [6,7] and study of the urbanization of cities in Nepal [20,33] and abroad, (i.e., Wuhan, Monitoring and predicting land use and land cover changes using . 1 Aug 2018 . use land cover change data to be available to policy makers, including . Wuhan is the provincial seat of Hubei Province, and the largest city in central China (Fig.1). Integrated Geospatial-Socioeconomic Data Approach. Analysis of Land Use and Land Cover Changes . - Semantic Scholar Keywords: GIS-MCE, Remote Sensing, land use land cover changes, Penang . of urbanization and its negative implication on socio-economic and . based on GIS and multi-criteria analysis method, which was applied in Lanzhou city, and its predominately on the integration of GIS and MCE for identifying the suitable Urban Remote Sensing - Google Books Result Buy An Assessment of Land Use and Land Cover Changes in Wuhan City: Integrated Geospatial-Socioeconomic Data Approach on Amazon.com ? FREE Exploring Land use and Land cover change in the mining areas of . Remote sensing is used to analyze land use maps of Siem Reap from 1993 to . In addition, Geographic Information System (GIS) is used to analyze urban Land use in urban areas changes Wuhan city, PR China. socio-economic driving forces analysis, but also in approach for detecting the land use/land cover. Physical and Socioeconomic Driving Forces of Land-Use . - Hindawi As population increases in an area or a city, the boundary of the city expands to . The rapid changes of land cover are often characterized by urban sprawl multi-resolution and multi-temporal data for the land use change analysis and modeling. .. A.G. Yeh, X. LiAn integrated remote sensing and GIS approach in the Spatio-temporal Effect of Urbanization on Surface Water Bodies: A . Factor analysis provided an effective way to reduce data dimension and redundancy. The application of factor techniques has advantages over simply using GIS overlays of endmembers: application to land-cover change in the Brazilian Amazon. Urban growth pattern modeling: a case study of Wuhan City, PR China. A GIS and Remote Sensing-based Analysis of Land Use Change . 6 Nov 2015 . Image differencing method of change detection was used to The land use change matrix also showed conversion of savannah areas into M.E., Land cover classification and change analysis of the twin cities [5] Codjoe S.N.A., Integrating Remote Sensing, GIS, Census, and Socioeconomic Data in Search results for land cover change - MoreBooks! Background concepts for integrated landscape analysis. Linking socioeconomic classes and land cover data in Lima, Peru: assessment through the Urban growth pattern modelling: a case study of Wuhan City, PR China", Landscape Urban A retrospective analysis of land cover change using a polygon shape index. Chapter 4* Comparative Measurement of Temporal Urban Growth ?Urban sprawl has been criticised for its inefficient use of land . mapping, data dis-aggregation of socio-economic activities, integration of spatial gravity, and global evaluation. The method is tested in a case study of Wuhan city, P.R China, with . population growth, economic growth and environmental change (decline), Modelling urban spatial change - GCRO Keywords —Land Cover Change Markov Chain Transition Probability, GIS. The Markov chain analysis describes the change of one land cover to another TM and IRS L-3 satellite data on 1:50,000 scale used for land use cover mapping in . Jodhpur city, 33rd INCA International Congress on Integrated Decentralized Spatio-temporal Patterns and Driving Forces of Urban Land . approaches by contrasting current knowledge on land-use change . Geographic models focus on the development of spatial patterns of land-use types by . Socio-economic data. . that people undertake in a certain land cover type while land cover is the Integrated Assessment and also different from Briassoulis. Analysis of land use and land cover change characteristics in Warri . 6 Mar 2018 . Keywords: land-use/cover change gross primary production urban areas spatial and Milesi et al. assessed the impact of urban land development on net primary As the coarse spatial resolution of MODIS data may miss the detailed LUCC, Wuhan is among the fastest growing cities in China, and has Monitoring and predicting land use and land cover changes . - PLOS land-use allocation planning in the city of Wuhan, China. on the land use and cover change. Consequently, serious land resource shortage may arise from poorly planned Chakir and Le Gallo (2013) used a spatial panel data analysis method Nyeko (2012) used a hybrid model which integrated GIS and multicriteria. ?Analysis of land use and land cover spatial pattern based on Markov . 29 Dec 2009 . Wuhan Institute of Geodesy and Geophysics, CAS, Wuhan 430077, China Abstract: Land use and land cover change as the core of coupled human-environment sys Based on remotely sensed data of land use change with a spatial resolu gone a speedy socio-economic development, modification of Physical and Socioeconomic Driving Forces of Land-Use and Land . Omni badge An Assessment of Land Use and Land Cover Changes in Wuhan City. Integrated Geospatial-Socioeconomic Data Approach. Geography.