

The Use of the CORINE Land Cover (CLC) Database for Analyzing Urban Sprawl Municipality of Budva, Montenegro

Filip VUJOVIC ¹, Mladen DELIC ¹, Paul SESTRAS ², Goran SKATARIC ^{3,4}, Velibor SPALEVIC ^{1*}

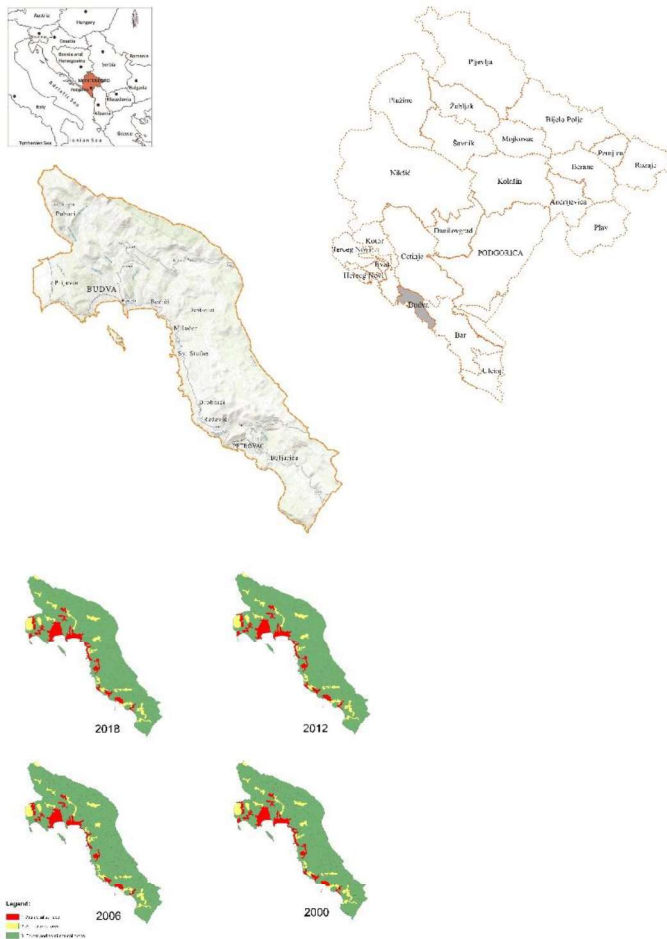
¹ University of Montenegro, Faculty of Philosophy, Geography, Danila Bojovica bb, Niksic, Montenegro

⁵ Technical University of Cluj-Napoca, Faculty of Civil Engineering, Department of Land Measurements and Cadastre, Cluj-Napoca, Romania

³ National parks of Montenegro, 16, Vojvode Becir-bega Osmanagica, Podgorica, Montenegro

⁴ Faculty of Economics and Engineering Management, University Business Academy, Novi Sad, Serbia

* Correspondence: velibor.spalevic@ucg.ac.me; velibor.spalevic@gmail.com; Tel.: +382 67 201 222



The main purpose of this research is to analysis urban sprawl Municipality of Budva, Montenegro using Corina Land Cover databases and GIS. This topic and method must be particularly relevant to the research area of Budva, a community that must continue with developmental ambitions in the field of tourism.

Introduction

We analyzed urban sprawl in the Municipality of Budva using computer-graphic methods, the CORINE Land Cover (CLC) and other available spatial planning documentation. ArcMap 10.5 was used to calculate urban sprawl using CLC spatial bases.

Data and Method

In the final calculation, we noticed that in the period from 2000 to 2018, there was an increase in discontinuous urban areas, in1990 urban areas occupied 639 ha, and for 2018 we calculated the area of 1065 ha. Study results show that urban areas have expanded dramatically transforming suburban and rural to urban. The different sprawl type patterns in the different study periods have transformed significantly, with their proportions altered both in terms of quantity and of location. The present research proves that urban sprawl quantification and pattern analysis can provide a clear perspective of the urbanization process during a long time period. Particularly, the present study on urban sprawl and sprawl patterns can be used by land use and urban planners.

Result and discussion