

## Honors thesis

## COURSE OF TERRITORIAL, URBAN, ENVIRONMENTAL AND LANDSCAPE PLANNING

## **Abstract**

## A KNOWLEDGE PROJECT ON THE PHOENOMENA OF SOIL CONSUMPTION IN THE AUTONOMOUS PROVINCE OF TRENTO. THE DYNAMICS OF THE PRODUCTIVE SECTOR.

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Prof. Roberto Moncaco Arch. Emma Salizzoni Arch. Giorgio Tecilla The thesis proposes and experiments a project of knowledge of the soil consumption phenomena in the Autonomous Province of Trento (PAT) with the aim of verifying the link between the dynamics of land consumption and the dynamics of economic development, taking into account the processes of general productive restructuring that, in the last decades, have affected the craft and tertiary sectors of Trentino's economy. from the analysis of the land use it has been possible to identify a correlation index between the propensity to the extension of the productive surfaces in relation to the dynamics of the urbanized. a linear regression model was therefore designed allowing to verify and examine the impact of land consumption (at the actual state and the planned future trend), identifying the transformations of agricultural, natural and semi-natural areas envisaged by planning tools (2016), compared to the real state (2003).

The model has been applied for the analysis of the productive settlement dynamics in the territory along the river rod of the Adige and in the north-east valleys; two very different territorial realities and representative of the Trentino's dynamics of soil consumption in the last decades.

The thesis was followed by the Landscape Observatory of PAT which will develop this cognitive project, object of first validation and experimentation through this work, to support the process of governing the provincial territory.

The methodological framework consists of three main phases:

Phase 1: Bibliographic research, definition of the study areas and tools.

Phase 2: Reading of the evolution of land use (reconstruction of the dynamics of propensity to the extension of urbanized and productive areas) carried out through GIS elaborations, ie through the definition of macro-categories and standardization of the Real land use of 2003 and Planned land use 2016. To these instruments have been subsequently applied "Intersect" and calculation operations of the form factor with the aim to homogenize them and make them comparable and then proceed with the analysis and processing with respect to the urbanized and productive areas.

Phase 3: Diachronic occupied / hectare reading realized using the linear regression method with which it was possible to calculate the correlation coefficient, the variation rates of workers and productive areas and the ratio employed / hectare.

The results obtained have no predictive but cognitive and interpretative purpose, and represent a contribution for the governance of Trentino's territories, through the launch of a systematic process of analysis and monitoring. This project is intended as a first knowledge base for guiding local planning tools in order to pursue the strategic vision of the Provincial Urban Plan (PUP) in 2008. This project of knowledge returns an integrated reading of the settlement and economic phenomena, which today has never been realized in the Autonomous Province of Trento, correlating planning and socio-economic programming. The work undertaken in this study represent only a first stage of knowledge of the phenomena of land consumption related to the productive sector in the Province, which the PAT Landscape Observatory intends to develop in the coming years, since, because of its results, it has being considered of particular interest.

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