



MINISTERO
PER I BENI E
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CULTURALI



Laboratorio di Geografia applicata
Università degli Studi di Firenze

Sharing the knowledge of national territory for democratic sustainable development

Cetinje
October 2-3 2013

Les territoires du futur : identification et qualification des paysages, un exercice de démocratie.

Two projects (carried out by MiBAC and SGI), closely related, that have as their main purpose:

- 1) to make available strategic information on the transformation of the landscape
- 2) to add to the decision support system the knowledge about the identity elements that every community recognises in the landscape.



"Terre Certe" Project
A knowledge base for
designing and protecting
landscapes



"Paesaggio culturale
identitario" (Cultural
Identity Landscape) Project





Landscape analysis, evaluation, planning

- The focus is on methodology and tools for assessing and monitoring landscape quality.
- Landscape reading is a complex operation that goes beyond what can be seen and implies a mental process that seeks to understand how we have reached the current situation.
- It is important to carry out efficient cultural values models, which offer an integrated conceptual framework for understanding the potential range of values that might be present within a landscape, and the potential dynamics between these values.



Data and Indicators

- To produce knowledge as bases to develop sustainable policies and actions we use a wide set of geographic data and indicators to measure social and economic performances and environment and landscape quality
- To be effective, indicators need to be targeted on measurable attributes. This is less easy to achieve for landscape than for other environmental characteristics, nevertheless it is possible to define landscape characteristics that are measurable in a quantitative or a qualitative way, considering the overview of historical processes of anthropic action upon landscapes as a fundamental tool of investigation of settlement patterns, agricultural mosaics and other networks.

- This project aims to carry out a survey of existing data regarding the evolutionary dynamics acting on the territory, also through the historical analysis of its transformation, in order to achieve a more complete integration of knowledge, so as to set up an updated priority calendar for landscape protection and planning.
- It will consider most significant natural hazards (climate change, drought, flood, bushfire, volcanic eruption, earthquake, landslide, cyclones, diseases, ...) and the effects of anthropic impact (urban sprawl, fragmentation, homogenization, biodiversity loss...). Each hazard will be defined, considered in the context of historical events, analyzed for its impacts and risks to human socio-economics.



"Terre Certe" Project

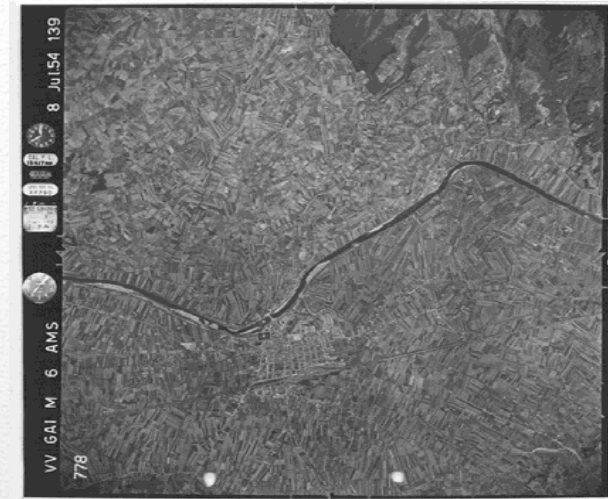
A knowledge base for designing and protecting landscapes

In order to create a geographic information system as an instrument for landscape protection and planning on a national scale it was necessary to first evaluate the existing geodatabases and their potential use.

Data was analysed and classified according to the following three types:

- Basic mapping;
- Cartography related to planning and/or to endangered landscape;
- Cartography for landscape analysis.

Land use changes analysis was carried out at different scales of detail for the detection of macro-areas of potential risk, related to changes in the use of agricultural land and the expansion of urban areas through a diachronic comparison of the different layers of information.



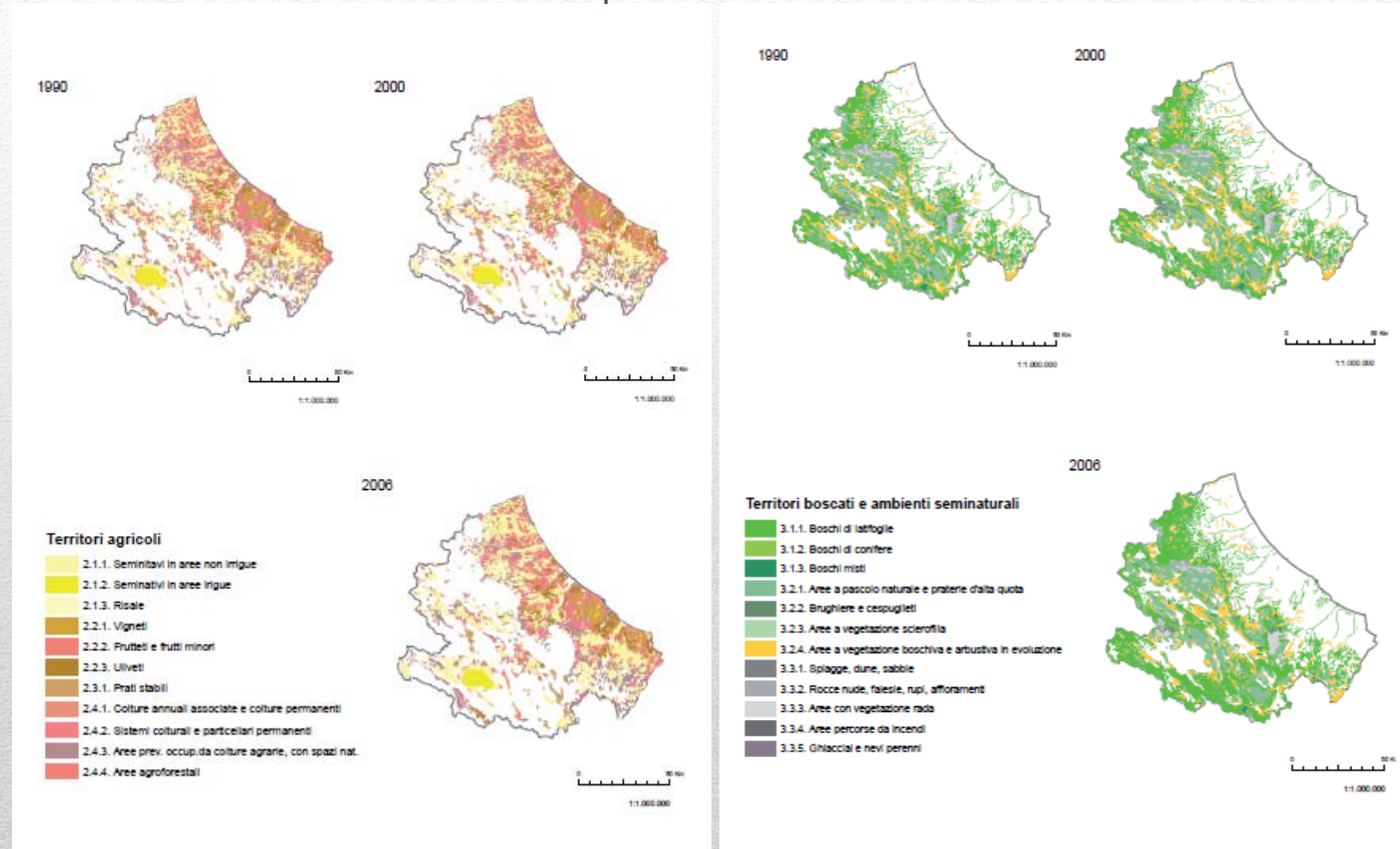
Empoli (1954; 1987)

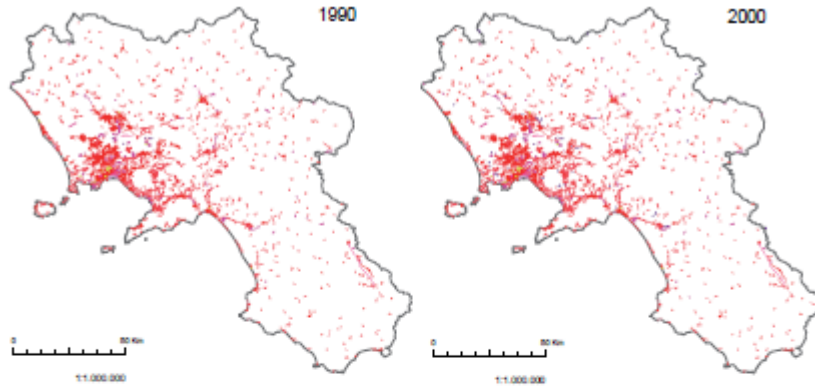
- **Landscape indicators** have only recently been used in the field of analysis and for the assessment of territorial transformation.
- These indicators derive from more consolidated and structured models, referring to socio-economic and environmental indicators (DEFRA 2009; Eurostat 1999, 2009; International Institute for Sustainable Development 1999; UNCSD 2001, 2007; World Bank 2008).
- The aim is to develop a **Decisional Dashboard** to assess and monitor the evolution and state of public satisfaction, and the effectiveness of public and private initiatives for the improvement of the same.



Amantea
1951- 2001

Land use change. A diachronic approach is fundamental in order to assess intensity and characteristics of the conversion process.

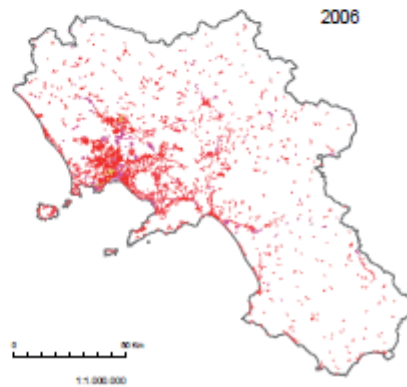




Roma
1960

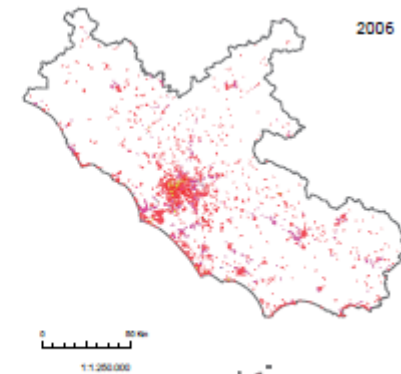
Territori modellati artificialmente

- 1.1.1. Tessuto urbano continuo
- 1.1.2. Tessuto urbano discontinuo
- 1.2.1. Aree industriali o commerciali
- 1.2.2. Reti stradali e ferroviarie e spazi accessori
- 1.2.3. Aree portuali
- 1.2.4. Aeroporti
- 1.3.1. Aree estrattive
- 1.3.2. Discariche
- 1.3.3. Cantieri
- 1.4.1. Aree verdi urbane
- 1.4.2. Aree sportive e ricreative



Territori modellati artificialmente

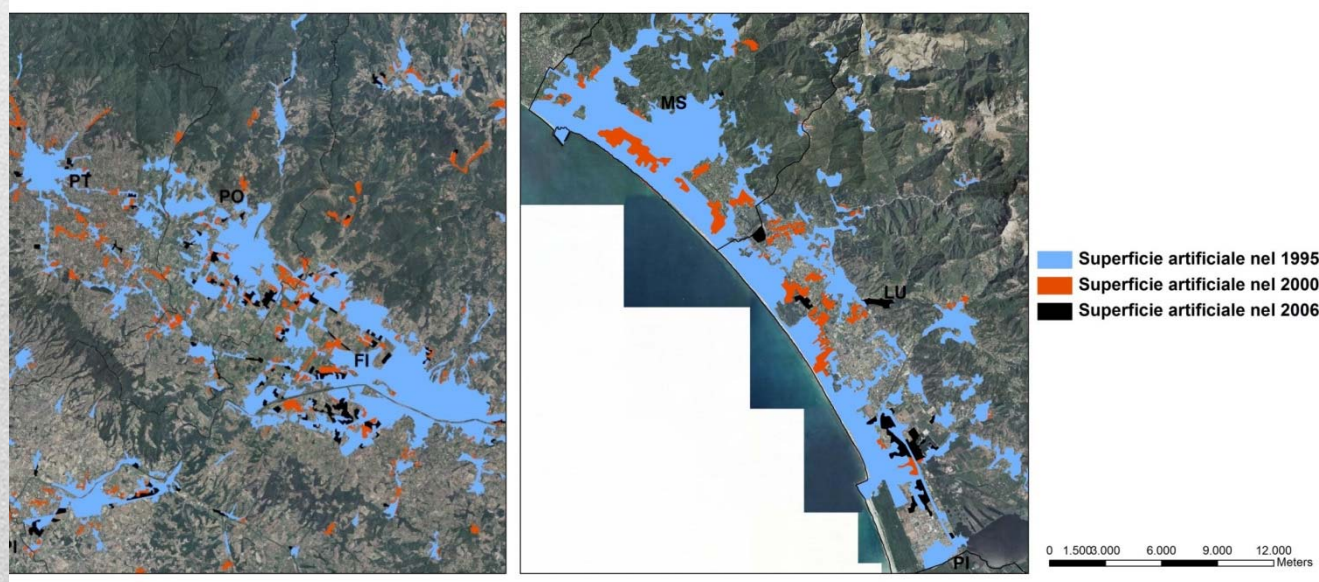
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Maps and Images from the Atlas of Land Use Transformation (1954-2013) we have carried out.

This type of research allows for knowledge of the area that takes into account the dynamics that affected it over time and its historical values – ingrained in its present landscape form – for the activation of local development policies which are truly sustainable and durable.

It will thus be possible to identify areas at risk of harmful land use and urban sprawl. The analysis will be carried out at various scales in order to have the necessary tools to evaluate the national framework, but also to consider the possibility of reusing abandoned industrial areas inside the consolidated urban tissue, expression of obsolete choice of location, that could and should be retrieved to help mitigate the use of new soil.



- This project aims to develop a landscape analysis methodology for the recognition, identification and delimitation of cultural landscapes – whose main values are the expressions of identity of local communities in order to define the necessary measures for their protection and for the enhancement of landscape planning activities.
- The knowledge of a landscape cannot be separated from the knowledge of its history and the identification of the identifying characteristics of a territory and must also be understood as awareness on the part of local populations. The focus is on models of knowledge of the landscape; activated on the tools and methods for the identification of material and immaterial values of the cultural landscape, the assessment of the social and economic drivers that make the landscape an ever changing place.

“Paesaggio culturale identitario” (Cultural Identity Landscape) Project

From historical maps to modern landscapes



It is difficult to delimitate a cultural landscape unless it is taken as relevant for this the analysis of the signs that the communities over time have impressed in the territory, the practices of reuse adopted, the new functions assigned in reinterpreting those signs, the evaluation of awareness of these values and dynamics by local communities.



Census of the historical, cultural and environmental wealth (rural buildings, villas, religious buildings, roads, bridges, historic place names, ...)

The implementation of the project was carried out through the use of a flexible methodology, which has combined quantitative and qualitative analysis. We have used a geo-historical approach (a wide set of archive documents, and historical maps), various modeling and displaying tools, and we have made an extensive use of GIS in the process of creation of the knowledge base and in the production of content.



- The software used for the photorealistic 3D rendering (Virtual Geographic Environments) have been the main tools to communicate and disseminate the consequent results, thanks to their communicative efficacy.
- These tools have been added to those typical of the qualitative analysis for the evaluation of the perception of the transformation processes by local communities and of the persistence of the historical memory of the place.
- The aim is to involve all local stakeholders to reach shared solutions, and characterized by the utmost mitigation of negative externalities, be they environmental, social and economic.





The results of the two projects will be integrated in SITAP, the webGIS of the Directorate General for the landscape, fine arts, architecture and contemporary art aimed at managing, browsing and sharing of information related to restricted areas in accordance with current legislation on landscape protection.

Ministero per i Beni e le Attività Culturali DIREZIONE GENERALE PaBAAC

sitap vincoli home help login

cerca un comune

Presentazione
Cartografia di base
Vincoli D.Lgs.42/2004 artt.136 e 157
Vincoli D.Lgs. 42/2004 art. 142

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