



# THEME COMMONS

**SUB-THEME:**

Common Goods

**TITLE OF WORKSHOP**

Soil as Common Good



# **PROPONENT:**

**Laura Fregolent**

**Stefania Tonin**

# **FACILITATOR:**

**Tommaso Sorichetti**

# **STAFF:**

**Elisabetta Peccol**

**Tommaso Sorichetti**

**Irene Cavallazzi**



# NAME OF PARTICIPANTS:

N°	NAME	SURNAME	N°	NAME	SURNAME
1	Averardo	Armandio			
2	Marcello	Lucci			
3	Ines	Cosme Teixana			
4	Vincenzo	Riso			
5	Lorenzo	Ciancaglini			
6	Marianna	Broglia			
7	Yaella	De Pietri			
8	Fabiano	Turollo			
9	Giuseppe	Rizzardo			
10	Elena	Calatti			
11	Federica	Cempretti			
12	Livia	Basso			
13	Miguel	Angel			
14	Fulvio	Orsenigo			



## **EVALUATING LAND CONSUMPTION AND SOIL FUNCTIONS TO INFORM SPATIAL PLANNING.** Elisabetta Peccol and Alessia Movia Department of Agricultural and Environmental Sciences, University of Udine

### **Abstract**

The European Union, in the European Soil Thematic Strategy (EC. 2006a), recognizes the need to improve the integration of measures to prevent soil consumption and degradation, in spatial planning and in those sector policies such as transport, tourism, commerce etc. that have a major influence on land use change. Indeed, there is a growing awareness at many territorial levels (Europe, Member States, regions) of the problem of land consumption is urban development, which in some areas of Europe, due to its sprawling nature, has higher impact in terms of Energy and soil disturbance, than compact development. For a sustainable spatial planning, for the purposes of reducing the impact of new urban development, it is essential the knowledge of the many functions that soil performs such as biomass production, filtering, carbon pool, habitat support ect. and their spatial distribution. There is a need for spatial decision support tools and methods to allow the in corporation of soil information and the spatial knowledge of soil functions as part of planning decisions. In particular, for the purposes of soil conservation and soil management, it is recognised the high potential of spatial planning in order to limit soil loss, both in strategic environmental assessment and in plans. This paper presents an analytical approach to the problem of land consumption by urban development and its impacts on land resources with particular attention to soil resources. In the first part of this paper, trends in urban development are analyzed for some regions of North Italy and for the provinces of the Friuli Venezia Giulia (FVG) region. Then a land evaluation model developed within a GIS for assessing the performances of selected soil functions in the Pordenone area (FVG region) is presented and is applied to demonstrate its effectiveness/validity for assessing the impact of future urban development on the soil resource.

### **Toward the soil as common good**

**Giuseppe Caridi**



## ABSTRACT

In the last few years many contributions have highlighted, starting from different point of views, the key-role of soil in the current stage of the national and international scientific debate. Two conceivable approaches emerge and both, even though closely complementary and related to each other, seem to be developed in activities of critical observation with an attitude of mutual indifference (and impatience).

On the one hand the aspects having a technical peculiarity prevails; what counts it is the definition of methodologies, criteria and tools for the soil use control. On the other hand, the attention is focused on the epistemological aspects with an aim of re-defining the modalities of thinking such a resource; a need that also emerges about the need to indicate the overcoming of the development notion intended as indefinite increase of mercification, as well as of the same notion of development taken in as a natural and positive condition. Within this second approach the various lines of conceptual revision establish a very variegated framework of critical issues which testifies a drastic phase of re-configuration of the theme and for which is already very early to focus clear convergences. Anyway we can find a strong trend to very attentive attitudes to “formal” economical/juridical aspects instead of “substantial” aspects congruent with a particular idea of soil toward a system of clear and precise values. In this sense we can highlight the lack of an explicit stance about some basic principles that it’s necessary, very shortly indeed, to mention. The first one is connected to the aware or not adhesion to neo-liberal ideology. This has consequences on the theme of the management of the urban revenue whose absolutely dominating role has brought about a reorganization of the building sector where the financial component of the soil plays an increasing role (“financialization of the building block”). Second, the support to the dismantling of the public government system of urban and territorial transformation (authoritative planning) operated by the so named planning of informal answers (informal deregulation) that has enabled to sanction mechanisms according to which the waiver to planning indications has almost become the rule to be followed. Through a process with a really uncommon character that, in the last twenty years, has been directed to rewrite principles, methods and tools of urban and territorial planning through the “myths” of the political actions (tax shields, securitization and sale of state assets, “Tecnotremonti”, Lupi’s proposal, question of local finances, fiscal federalism, etc.) and the “rituals” of the technical actions (concertation, “planning by doing”, planning for projects, great works and the ephemeral



structures, emergencies and compulsory administrations, compensations and related operative tools: special programs, real estate funds, etc.)

Third: the parallel subordination of private interest over the public one (as it happens in the so called project financing). Furthermore since the second half of the 80s, the mistake to force a particular series of normative acts has occurred and these have caused an increase in building activities. First of all the “amnesty for infringement of local building regulations” which have characterized urban planning facts in the last quarter of the century (1985, 1994, 2003), and marginally there’s also an articulated and smoky issue of measures for the building sector (House Plan 1, House Plan 2, etc.) also at regional level.

Concerning the disciplinary scope of urban planning, notwithstanding the rich and various framework of speculative tensions and critical debate, the soil continues to be the most indefinite and uncertain among the central terms of its vocabulary, even though it represents the main conceptual and operative element at the basis of the disciplinary epistemology.

Urban planning history both in the debate developed around its founding contents and in its “practice”, highlights the centrality of soil.

Each action of transformation deals, in fact, with the soil, because it always involves its features, criteria with which its use is organized as well as the concrete modalities of actions are aimed at favoring such organization. This is true even when the action is not directed to create “manufactures”, but it has for example other features. This determinates also a specific orientation on the criteria defining the settlement and so on the setting of project and building activities.

Anyway, in a cyclic path the cultural and material connotations that settlement and its development assume in a certain historical period influence the modalities of perception very much and so the use of the soil. It is possible to emphasize how the majority of the disciplinary working out lines about the soil issue very often avoid to express the basic question concerning the current ideological and cultural trend assumed by soil, its own essence that is a mere passive element of banal goods; and consequently they don’t pursue objectives aimed at unhinging those processes have contributed to cause it.

Personally I believe it isn’t enough to focus only on the research of specific technical solutions but rather the central issue concerns in the meeting between “shared values” (intended as social regulations) regulating the social behavior and “interests of settled communities”. It is necessary



to solve this gordian node and wonder: can the umpteenth cementification counts more than our future?

## TACKLED ISSUES:

Soil functions:

- 1- Biomass Production
- 2- Provision of a spatial base
- 3- Filtering, buffering, transforming of substances
- 4- Provision of raw material
- 5- Support of ecological habitats and biodiversity
- 6- Protection of cultural heritage
- 7- Acting as carbon pool

Consequences of urbanization.

Urbanized soil:

- Artificial areas: industrial, commercial area
- Soil: asphalted and “covered” soil

Land use intensity: artificial surface for capital in northern Italian region. Pordenone in 2000: 800 mq per capita. In Italy: lack of soil planning framework. Now it's starting a consideration for soil environmental functions.

Spatially explicit approach (GIS):

- Soil functions change in space and time
- Mapping soil qualities and functions: every function needs a specific quantity of soil

Functions by parameters and indicators: integrated, they produce soil functional ability index map

- 1- Soil production capacity
- 2- Carbon stock capacity
- 3- Protective capacity of ground and superficial water
- 4- (new) mapping cultural and social values of soil

UE data of soiled areas. The soil functions method needs consultation with local experts and inhabitants. Problem: not all the provinces have data set regarding soil

## GIVEN ANSWERS:



Regions in Italy have to produce soil data and maps: Strategic Environmental Assessment.

We've got open software to build the index.

In most cases regions put attention only to the agricultural function of soil. If you map something, it means that you think it's important. When politicians consider worthy the index map, they put it in a greater planning.

Our map would become part of governance politics.

To add social indicator or unmeasurable data to the index is one of the second step of the model.

Nobody, also the Trentino Alto Adige institutions, knows why artificial regional area has decreased so much in the last years.

## UNANSWERED QUESTIONS, MESSAGES AND COMMENTS:

- E' corretta l'affermazione “ abbiamo usato la terra (land) dimenticando il suolo (soil) ?  
( Is it correct to say, we have used the land, but forgotten the soil?)
- How can you add social parameters in the index you have shown?
- Is possible to use this notion to find a better use of soil? Are there organizations in Italy that made that possible?
- What can be done to “reconvert” artificial soils? (would it be possible to gain free soils again?)
- Why is sprawl not mapped?





- How does your research contribute to commons-based soil/land governance?
- How can this model be used to reduce the problems of extraordinary water/rain run — off in cities?