Technical sheet

Policy:
Europe: *RDP 2014- 2020.*
Italy: *Rete Rurale Nazionale. Azione 4.2.1 Servizi per la diffusione della innovazione. / Support PUC planning / The municipal urbanization plan (PUC) is a tool for the management of the Italian municipal territory, which consists of cartographic and technical documents along with regulations for the management of urban and territorial transformations within the municipality.*
Campania Region: *Integrated Production Regulations of the Campania Region (Decree n. 29 of 29.02.2019);*

First draft

TOOL LAND USE CHANGE – *Territorial Scale: Europe*

WHY

A correct territorial and agricultural planning starts from the knowledge of the current state of land use of the specific area of interest but also – most importantly – by the knowledge of its dynamics. In fact – in term of planning – an area having a land use being the same for a very long period (e.g. long lasting olive tree farm) is very different from the same land use that was changed last year. Thus land use dynamics is an essential part of the local knowledge.
Obtaining an immediate snapshot of changes in land use categories over the years can take long time and the availability of much data. This tool enables to obtain in few clicks the comparison of the singles categories of Corine Land Cover (at different CLC level) over the years for the entire European territory.
This tool may have also a value in view of a comparison with LULUCF accountability.

FOR WHOM

The tool for Land Use Change is designed to be used by everybody (public administration, planners, freelancers) who instantly need to better understand the dynamics of a territory in terms of land use.

HOW – if you want to select your Region Of Interest (ROI)[i]

The tool can be applied to anywhere in the entire European territory and allows free selection of a region of interest (ROI) through a very simple procedure:

Operational procedure

- Simply select the Administrative limits or;
- Click on the "Draw (Polygon)" button on the top bar and draw the desired area (ROI). Then, assign a name to this ROI[ii].
- By using the "Save" button, the ROI is included in the memory, stored in the system and it may be re-selected whenever necessary

TOOL LAND USE CHANGE

HOW – if you aim to "LAND USE CHANGE"

Operational procedure

Click either on "Land use change" and select the region of interest previously drawn and saved or Administrative limits at any NUTS level. Then choose a start date and an end date between 1990 and 2018, as well as choose the level of detail of the Corine Land Cover (L1, L2 or L3).

This tool allows the user to compare, for the entire European territory, the variations of the Corine Land Cover from 1990 to 2018. The result is a matrix with the variations, in hectares, of all land use classes at the selected Corine level, in the time interval selected for the analysis.

What for

The tool allows the user to instantly obtain, for the entire European territory, a picture of the evolution of land use (at the different levels of detail of the Corine Land Cover) in the selected region of interest and in the chosen time interval.

LIMITATIONS

The user must be aware that the following limitations exist. As others, this tool inherits the limitations (scale, spatial resolution, misclassification etc.) of the original maps (see metadata on the platform). More specifically, Corine Land Cover data are known to have some limitations including large minimum mapping unit of 25 hectares, mixed classes that could be considered to be ambiguous and overlap in their description and content (e.g. "discontinuous urban fabric" or "land principally occupied by agriculture with significant areas of natural vegetation"), CLC delivers information corresponding roughly at the 1/100 000 scale, this is not sufficient for local applications.

FUTURE DEVELOPMENT

An interactive mapping tool will soon further support this tool (currently only a matrix change table is available) moreover there many new exciting developments within the Corine CLC+ (https://land.copernicus.eu/pan-european/clc-plus)

[i] Special care is required when user draws/select the Region of Interest. In fact LANDSUPPORT is a multi-scale decision support system. Each of the 15 available tools is designed for a specific application and for a specific scale. Furthermore, the databases using specific standards required for that specific scale. The users of LANDSUPPORT web platform must therefore be well aware of the limitation embedded in the different maps that they require for their specific application. The users must be expert on their specific problem and must understand if the input data offered by the platform are suitable for their problem. In light of the above, the system provides very reliable results only if used appropriately.

[ii] It is also possible to draw a ROI with numerous polygons. In this case, it is possible to assign different values (eg numbers) to each of the drawn polygons.