Historic agricultural landscape characterisation: first attempt of historic landscape characterisation (HLC) to Costa Viola terraced landscape (Calabria, Italy).

Salvatore Praticò1\*, Francesco Solano2, Salvatore Di Fazio1, Giuseppe Modica1

1 Università degli studi ‘Mediterranea’ di Reggio Calabria – Dipartimento di Agraria – loc. feo di Vito s.n.c., 89122 Reggio Calabria  
2 Department of Agriculture and Forest Sciences (DAFNE) – University of Tuscia – Via S. Camillo de Lellis, 01100 Viterbo

[salvatore.pratico@unirc.it](mailto:salvatore.pratico@unirc.it)

[f.solano@unitus.it](mailto:f.solano@unitus.it)

[salvatore.difazio@unirc.it](mailto:salvatore.difazio@unirc.it)

[giuseppe.modica@unirc.it](mailto:giuseppe.modica@unirc.it)

**Keywords.** Change detection, Historic Land-Use Assessment (HLA), Agricultural Terraces, Multi-Temporal Remote Sensing, GIS.

**Abstract.** By its own definition, the landscape is a constantly changing entity because of the continuous interactions between nature and human factors. These interactions are synthetically represented by land use land cover (LU/LC) changes.

The main object of this study is to analyse LU/LC changes that occurred for almost 60 years, from 1955 to 2014. The resulting landscape configuration was analysed, highlighting how yesterday’s landscape influenced the current landscape. Seven different years have been analysed: 1955, 1976, 1989, 1998, 2008, 2012 and 2014. A LU/LC map has been digitalised for each year based on a photo-interpretation process, using different base data.

In order to highlight the steps that led to the development of today’s landscape, the obtained polygons have been overlapped, obtaining a vector layer with all changes that occurred to the analysed landscape during the considered time interval. The last LU/LC stored have been taken into account. The proposed approach wants to identify the time when this LU/LC appears for the first period, the so-called first occurrence, highlighting how the past influences landscape composition. This is the common approach of the historic landscape characterisation (HLC) and historic land-use assessment (HLA), two very similar methods whose aim is to study today’s landscape and how it has originated.

The study object is the historic agricultural terraced landscape of the Costa Viola, in the province of Reggio Calabria (Southern Italy). This landscape is important because of its status as a protected landscape, listed by UNESCO in the convention for safeguarding the intangible heritage in 2018.