



## **How to analyse the typological features of stone terrace walls. A methodology applied to the rural landscape of the Tuscan Region (Central Italy)**

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Terraced systems currently represent an indubitable added value for Tuscany, as for other regions. This value goes beyond their original function of hosting new areas for cultivation. Indeed, the hydrological functions performed by such systems within the historic and modern agricultural matrix, including control of erosion, stabilisation of the slopes, prolongation of run-off times and the possible reduction of the volumes of surface runoff, are well-known. In addition they also play a strategic role in the conservation of biodiversity and in maintaining local identity value. These systems are evidence of the laborious knowledge built up by many generations of farmers in making the most of the territorial resources in terms of quality production through agronomic operations for the management of the crops.

Within the framework of policies for the conservation and valorisation of the rural landscape, this recognised economic, environmental and historic-cultural value has engendered a growing awareness and sensitivity towards the safeguarding of such structural characteristics. Indeed, at national level the terraced agricultural systems come within the scope of actions scheduled in the National Strategic Plan for Rural Development 2007-2013, and the Cross-Compliance Decree envisages that they be maintained through the granting of economic aid as laid down in the Regional Development Plans, to be pursued through appropriate agronomic and environmental conditions in adherence to the obligatory management criteria for the protection of the soil.

18 sample areas, previously selected on the basis of the terracing intensity index ( $> 400$  m/ha), were subjected to on-site surveys to determine the geo-typological features through the identification and measurement of the main technical-construction parameters of the dry stone walls.

In view of the complexity of carrying out a census of the entire regional territory, it was essential to restrict the analysis to a limited number of areas. The overall knowledge base enabled the qualitative characterisation of the water and soil conservation systems under investigation through observations of the construction type and dimensional parameters of the artefacts and land strips of the most representative terraced systems. This analysis also enabled assessments of the overall state of conservation of the dry stone walls in order to suggest operations for safeguarding and protection.