

Article

Worrying about ‘Vertical Landscapes’: Terraced Olive Groves and Ecosystem Services in Marginal Land in Central Italy

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Table S1: Land use and land cover (LULC) change in the terraced landscape systems (TLS) and in the proximal spaces (buffer 50 m depth) in the short (2000–2012) period. TLS were delimited by the aggregation of terraced agro-ecosystems for a distance one from the other ≤ 500 m

LULC Classes	TLSs	Contact spaces (buffer)
Urban fabric	194.3	156.2
Pastures	51.1	60.6
Woodland	-21.2	-8.2
Uncultivated and semi-natural areas	54.7	22.4
Greenhouses	-42.9	-58.6
Mixed tree crops	-39.0	-66.6
Orchards	101.6	116.3
Olive groves	-11.0	-16.9
Vineyards	1342.5	515.4
Arable lands	-3.6	-13.2

Table S2: Soil bio-chemical indicators of two typical terraced agro-ecosystems: specialized and poly-cultural olive groves. N—total nitrogen; TEA—total enzyme activity; TOC—total organic carbon. MBC—microbial biomass carbon. (*, $p < 0.05$ significant; **, $p < 0.01$ highly significant; ns, not significant).

	Olive groves		Significance
	Specialized	Poly-cultural	
TEA	4.4	10.5	**
N ($\text{g} \cdot \text{kg}^{-1}$)	0.4	0.5	ns
TOC ($\text{gC} \cdot \text{Kg dry soil}^{-1}$)	4.2	4.6	ns
TOC/N	11.0	10.2	ns
MBC ($\mu\text{gC} \cdot \text{g dry soil}^{-1}$)	305.2	681.6	**
MCB/TOC	73.9	153.4	**

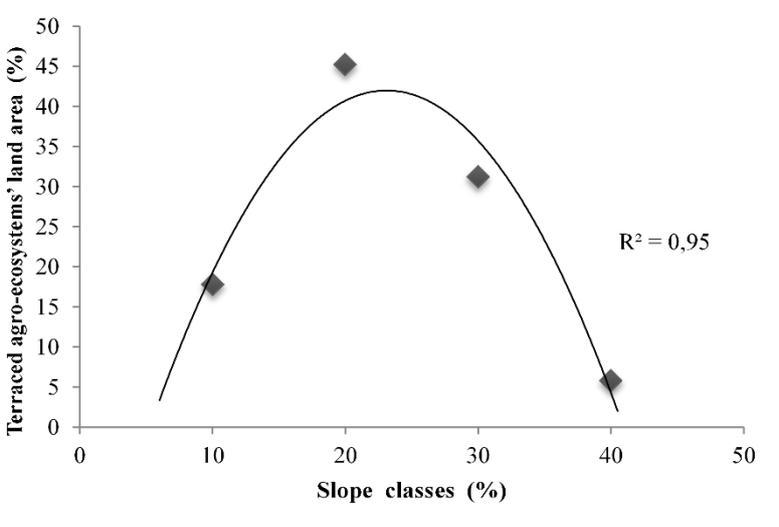


Figure S1: Distribution of the terraced agro-ecosystems' land area (%) in relation to slope classes (%)