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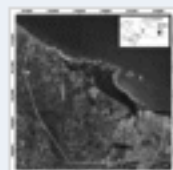
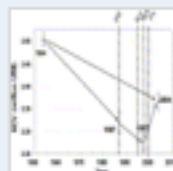


Table 1

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Table 2



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The effectiveness of different conservation policies on the security of natural capital

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Abstract

The maintenance of ecosystem goods and services, i.e. natural capital, is the basic guarantee of environmental security that aims to evaluate the level of threats to the actual flux of natural capital. This research concerns a natural protected area in southern Italy and aims at (1) assessing the temporal dynamics of land-use and land-cover mosaics, and indirectly of the natural capital they support, using the economic valuation of ecosystem goods and services as surrogate; and (2) ascertaining whether all the past environmental conservation policies have fostered the natural capital, reducing or increasing its security. To these purposes, orthorectified aerial photos, referring to July 1954, 1987, 1997 and 2004, were used to analyze the landscape change trajectory and the consequent change of natural capital flux. Surprisingly the results showed that not all environmental conservation policies have played an equal role in fostering the maintenance of natural capital. This research highlighted that the recognition of the natural value of a site according to the European Directives is not sufficiently effective for the conservation of the natural capital, while the presence of a local management authority setting some limits on human activities that cause landscape changes, can increase the security of natural capital. This is of particular relevance considering that in each European partner country there is a great number of areas that are recognized for their natural value but that, at the moment, are not protected at a local level with any measure aimed at mitigating human impact.

Keywords

Environmental security; Ecosystem goods and services; Conservation policy; NATURA 2000