



Scientific Assessments, Management strategies and Technological Solutions for UNESCO Global Geoparks territories.

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The International Geoscience and Geoparks Programme approved in 2015 by the 38th session of the UNESCO General Conference, introduced the UNESCO Global Geoparks (UGGp) as the new UNESCO site designation for areas with geological heritage of international values. A bottom-up holistic approach is applied within areas of rich geodiversity and geoheritage, which aim to support local communities in promoting awareness on climate change issues and geo-hazards phenomena. Our research concentrates on two selected UGGp “key studies”: the Sesia-Val Grande UNESCO Global Geopark Italy and the Magma UNESCO Global Geopark in Norway by applying a trans-disciplinary approach within the H2020 “Tech4culture” project.

For assessing the geodiversity and enhancing the geoheritage of these UNESCO Global Geoparks we included both the so-called geosites “additional values” (Reynard, 2005) and the “abiotic ecosystem services approach” (Gray,2013) which described 5 services categories: “regulating, supporting, provisioning, cultural and knowledge”.

The research focuses on the most suitable quantitative and qualitative data on geodiversity of the selected UGG, to be assessed according to the recent studies by Zwolinski et Al. (2018)

Qualitative and quantitative indicators for the selected geosites are analysed considering the “services” they provide to the society within the “ecosystem service approach”. Both the geodiversity assessment and indicators analyses are developed taking in mind the UGG mandate, values, goals and management’s needs.

The results will be visualized within new technologies, thank to existing cooperation with the Earth Science Department of the Turin University (Ontogenous initiative), ARPA Piemonte, the Norwegian Geological Survey, and others.