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The potential of geological surveys in geoconservation

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The conservation of geoheritage and geodiversity, and the importance of using a geoconservation perspective in land use planning, protected area management and environmental impact studies, is gradually gaining momentum internationally. Geological survey organizations (GSOs), as public institutions dedicated to geology-related studies, have a strong potential to contribute towards geoconservation, with actions ranging from inventories and legal protection, to management plans and public use, including advising geopark and geotourism initiatives. However, this will only happen through effective effort driven by key political decisions.

In the last decades, several GSOs have been engaged in projects and activities to promote the geological perspective in planning priorities, nature conservation, resource development, geotourism and popularisation. It is, however, certainly difficult to take part in planning procedures since other levels of society seldom include geological aspects or are required to fulfil goals concerning natural geological values. Conversely, when needed, both in the fields of nature and tourism, GSOs are expected to provide the knowledge that is elsewhere missing, although they rarely have any Government commission or assignment to develop further the application of geological knowledge.

The challenge is that nature conservation and management has not been traditionally considered a field for GSOs. The traditional division of Government agencies between the environmental sector and the industrial and business sector is reflected in the response to GSOs' efforts. Initiatives concerning regional development, mineral resources or geotourism are met with interest, whereas those concerning nature conservation priorities are often considered difficult to handle. However, this does not necessarily need to be the case.

As with any other geological discipline, geoheritage and geodiversity studies require competence, information, support data, and an established network of contacts. Many take for granted that GSOs can provide this, but applied and available information is sparse, and inventories are still far from satisfactory. We have noticed an increased demand for such decision-supporting documents, and when they are provided they are highly appreciated.

Geoconservation is a geological-expert discipline and has its rightful place amongst the tasks of GSOs. However, other activities of GSOs, such as mapping, reporting and managing databases, have traditionally not incorporated any assessment of the value or vulnerability of geological sites and elements. GSOs can play a crucial role in (a) the development of synergies with academic, scientific and professional organizations, (b) the development of strategies, plans and actions, (c) the inclusion of the geological perspective in other strategies, (d) providing expert opinion to governments and organizations, (e) participating in cross-border cooperation to develop a shared view, and (f) building up inventories and databases for proper management.

As long as geoconservation is underestimated in nature conservation directives and policies, the misconception will prevail that geology is only related to resource development and economic interests. GSOs can play a crucial role acting as a bridge between the two sides and as a catalyst to integrate them. To discard geoconservation aspects in extraction activities can never be a sustainable use of a geological site. Geodiversity and geoheritage is -and must be- an integrated part of nature management. GSOs must promote the use of geological information by society, and can play an important role in producing customized information for different purposes. Today, the role of the geologist in a modern society has changed, and geologists and GSOs must step forward to not only say "Drill here", but also to say "Protect this", "Use this sustainably", or "Show this".

