

REGIONAL GEOLOGICAL SITES OF ALBANIA IN A REGIONAL CONTEXT

Afat Serjani

ProGEO, Tirana, Albania

(afatserjani@gmail.com)

ABSTRACT

Albania is a country of special geological interest, representing a most suitable territory for the observation of the important regional geological phenomena, represented in specific geological sites (Geosites). The main goal of this paper is the definition, and the selection of the regional geological sites, in a regional, Balkan and Mediterranean context. The finalisation of the this study, was the compilation of regional list of geological sites.

A first attempt at a common framework list for South Eastern European countries was presented in Dublin (Theodossiou Drandaki, R. Nakov et al., 2002). In Albania, since the first paper given at the Balkan ProGEO Meeting (Bulgaria, May 1995), ProGEO members and the Geological Survey have undertaken a lot of studies and publications on geosites, geoparks, geotourism, and have done many presentations at international meetings and congresses. Alongside the system of classification of Geosites (Wimbledon et al., 1998), some new systems and subsystems have been added in the Albanian list of Geosites (Serjani A., 2008), and a new "geo-eco-system" concept was proposed for the first time. Special areas, where geodiversity and biodiversity are located together, can be defined as "geo-eco-systems" (Serjani A., 2011). The most widespread there are karst geo-ec-systems in carbonate and evaporite rocks, and glacial ones in geo-eco-systems, mainly in Albanian Alps and Korabi Highland.

Based on comparative documentation, on geological studies and publications on our region, we have made a selection of the regional Geosites for Albania. The definition of regional sites is done in the geological context of the Balkan Peninsula and the Mediterranean. Albania is part of the folded "Mediterranean Alpine Chain: Dinarides-Albanides-Helenides-Taurides Arc". The framework for selection is based on the geological features of Albania, conditioned by its geographical position, and by Albania's evolution during past geological periods. It has a shared geological story with neighbouring countries, including orogenies, structural events, palaeogeography, sedimentary sequences, magmatic and metamorphic processes.

Unique geological sites are determined in a European context.

The oldest geosites were formed during Silurian-Ordovician, when Albanian territory was part of Gondavana. During Upper Triassic-Lower Liassic all over mediterranean were sedimented limestone with ammonites. During Cimmerian Orogeny were formed Mirdita ophiolites, representing "a laboratory for study of magmatic transition between Mid-Oceanic Ridge and Premature Island Arc (Ohnenster, 1995), with some important regional geosites. The most part of geosites in Albanian territoire were formed during Alpine tectogenesis. Geomorphological sites, were formed during late tectonic and neotectonic movements, which have played main role in uplifting and relief formation of Albania, distinguishing four main geomorphological cycles, since the Middle-Upper Miocene, and continuing intensively during Pliocene and Quaternary.

After the selection in regional context, there are determined sixty regional geosites, included in "The list of Regional Sites of Albania". They belong to: Stratigraphical geological sections (8), Paleoenvironmental (5), paleontological and paleobiological (4), Igneous, Metamorphic and Sedimentary Petrology (7), Metalogenic-Economic (3), Tectonically-Structural (8), Geomorphological sites of different origin (22), Tectonic Plates (2) Geoarcheology (1).

Last years, the most important scientific event of ProGEO in Albania it was the organization of oral and poster sessions on "Geoheritage and Geotourism" in Carpatho-Balkan Geological Association Congress, held in Tirana, on 24-26 September, 2014. In Geological Survey of Albania, it is going new study (Moisiu L., Neziraj A., Avxhi A.) on geological sites and geoparks for all districts, according to the "New Territory Reform of Albania". Commonly, the activity on geological heritage conservation and geotourism in Albania is done by ProGEO members, in framework of the ProGEO strategy.

Keywords: *Albania, geosites, regional geological context.*