



Assessment of the geosites and mining sites present in the Zaruma-Portovelo mining district (Ecuador)

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The focus of this research is to develop a qualitative and quantitative assessment of the geosites and mining sites present in the Zaruma Portovelo mining district (Ecuador). This work's methodology can be summarized as follows: i) compilation and inventory of all the sites within the study area with particular geological or mining interest; ii) assessment and classification of the elements of geological-mining interest; and iii) SWOT (Strengths, Weaknesses, Opportunities, Threats) and TOWS (Threats, Opportunities, Weaknesses, Strengths) analysis. The process followed allowed the characterization, assessment and use of 27 areas with singular geological-mining values. As result of this work, 16 potential areas were defined as geosites (eg. Mountains, rivers and waterfalls) and 11 areas as mining sites (eg. mines and mining facilities stand out). The 77% of these sites were proved to be of high and very high interest in scientific terms. Furthermore, all areas studied in terms of protection priority reached a medium-high rating. Finally, the study of the geosites and mining sites defined applying SWOT-TOWS analysis revealed the possibility of applying action strategies in order to facilitate the compatibility of geotourism (eg. the development of a specific itinerary of the geosites and mining sites) with the current productive activities in the area studied, such as mining, agriculture or livestock.