Mapping geodiversity and cultural heritage; a case study: Aït Bou Oulli valley in central High-Atlas, Morocco.

Hicham Bouzekraoui (1), Ahmed Barakat (2), Mohammed El Youssi (1), Yahia El Khalki (3), Abdelatif Hafid (3), and Atika Mouaddine (4)

(1) Mohammed V University of Rabat, Geology, Morocco (hbouzekraoui@gmail.com), (2) Georessources and Environment Laboratory, Faculty of Sciences and Techniques, Sultan Moulay Slimane University, Beni-Mellal, Morocco, (3) Research Group of Landscapes Dynamic, Risks and Patrimony, Faculty of Letters and Human Sciences, Sultan Moulay Slimane University, Beni-Mellal, Morocco, (4) Laboratory of Biology Engineering, Faculty of Sciences and Techniques, Sultan Moulay Slimane University, P.O. Box 523, Beni-Mellal, Morocco

Central High-Atlas mountain in the centre of Morocco, contains an exceptional geodiversity. Some geomorphological and geological objects of it are included and protected recently by the World Heritage list. The valley of Aït Bou Oulli is located in the heart of the Moroccan central High-Atlas, whose height is 4068 m in Ighil M’goun and 3800 m in Rat Mountain. The mountain areas are characterized by higher geodiversity in comparison with other areas. The valley possesses a geological and geomorphological heritage which is very rich, much diversified and exceptional landscapes of high mountains. It is part of geopark M’Goun; the valley attracts a number of tourists every year. However, this number remains restricted because of the lack of the tools of promotion, valuation and mediation of this geoheritage. Moreover, the touristic infrastructure is modest. Regarding this situation, the geotouristic map appears as a tool of promotion of the geotourism and diversification of the regional and national tourist product. This work aims at elaborating new maps of geomorphosites, cultural sites, and geomonuments in high Mountain landscapes of the valley, suggested in geotourism circuits. The first results reveal the low exploitation of the geodiversity of this valley-oasis: the spectacular waterfalls, water sources, canyons, glacial cirques and U-shaped valleys, superficial karstic forms (sinkholes and swallow-holes), high-Atlas peaks and cliffs, spectacular scree slopes, badlands landscapes, fairy chimneys, and the geological history dating back to the Paleozoic and angular unconformity. In addition, the valley has diverse tangible cultural heritage spanning hundreds of years such as the enigmatic rock engravings (dating from 2000 to 3000 years), troglodyte caves and terraced agriculture landscapes, geomonuments (old cooperative storage, Kasbah, traditional water mills) and the architecture of the villages. It has also an intangible cultural heritage such as folklore. This cultural heritage, however, remains low valued. This richness was the object of 3 geodidactic and geotouristic circuits and itineraries that will be proposed at the end of this work.

Keywords: geomorphosites, geoheritage, cultural heritage, circuits, geotouristic map, geotourism.