Geoheritage, Geoparks and Geotourism

Conservation and Management Series

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From Geoheritage to Geoparks

Case Studies from Africa and Beyond
The African continent possesses a rich and varied geoheritage which is regrettably not well known by the public and which does not contribute in a sustainable way to local development. Linking geoheritage to local socioeconomic development through the promotion of geotourism and geoparks offers an opportunity to increase awareness of the local communities and to inform decision makers about the need to evaluate and promote better the sustainable use of their geoheritage. In the absence of legislation that allows the preparation of inventories and the conservation and economic use of African geoheritage, the creation of geoparks would provide an opportunity to establish a local inventory and to institute local laws to protect the geoheritage in different regions on the continent.

To increase this awareness of the importance of geoheritage in local socioeconomic and human sustainable development, the African Association of Women in Geosciences created, in 2009, the African Geoparks Network. Both these organizations are arranging numerous activities, such as conferences, seminars, workshops and courses, throughout Africa and the Middle East.

This book is a direct outcome of the First International Conference on Geoparks in Africa and the Middle East, held in 2011 in El Jadida, Morocco.

Ezzoura Errami
African Association of Women in Geosciences
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The aims of this Special Volume are to provide examples of the valuable geoheritage of countries in Africa and the Middle East, and to document international case studies related to geoheritage, geotourism and geoparks more widely in China, Australia and Europe. The book consists mainly of papers presented at the First International Conference on Geoparks in Africa and the Middle East. The Conference was held in El Jadida (Morocco) from 20 to 28 November 2011 and was organised by the African Association of Women in Geosciences and the African Geoparks Network in collaboration with UNESCO Cairo Office. All manuscripts were reviewed to ensure that they be considered as fully “peer-reviewed scientific papers”. In order to allow wider access all the abstracts are translated into Arabic and French.

The book is organized into two parts. Part I, dedicated to the history of Geoheritage, Geoparks and Geotourism, consists of three papers. The paper by Errami et al. gives an overview of the present status of Geoheritage and Geoparks in Africa; Mabvuto Ngwira reviews geotourism and Geoparks with a focus on Africa’s current prospects for sustainable rural development and poverty alleviation; and Brocx and Semeniuk provide a brief history of Geology from antiquity to the present day and focus on geoheritage and geocuration in Britain.

Part II, dedicated to Geoheritage and Geoparks case studies globally, consists of 15 papers. Five of these address the geoheritage of different regions in Morocco. Errami et al. provide an overview of the geological features of the Anti-Atlas region, identifying geosites, Sites of Special Scientific Interest (SSSI) and potential geoparks. Druguet et al. introduce geological features of the geoheritage of the Kerdous Inlier (Western Anti-Atlas, Morocco). Saddiqi et al. recommend two geoheritage trails in Southern Morocco. Enniouar et al. provide an inventory of geosites in the Doukkala-Abda, a region rich in natural heritage, with the aim of making it an important tourist attraction for national and international visitors. Turning to more specific geological features in Morocco, Noubhani describes the late Cretaceous and lower Paleogene phosphate deposits as one of the best examples of the country’s geological heritage.

To illustrate the geoheritage potential of Tunisia, Ben Haj Ali et al. take the El Kef region as an example. They illustrate the need to increase the awareness of the local communities and decision makers for the importance of protecting and promoting the nation’s geoheritage to enhance local sustainable development. Bendaoud et al. describe the use of websites and GIS databases to compile an inventory and enhance major geosites in Algeria.

Two contributions describe dinosaur footprints and trackways as a key aspect of the geoheritage of northern Africa and the Arabian Peninsula. Chabou et al. describe dinosaur track sites in Algeria as a significant example of the country’s national geoheritage that needs urgent protection. The second paper, by Al-Wosabi and Al-Aydrus, outlines the conservation of internationally significant dinosaur footprints in the Arhab Area of Yemen and they propose the creation there of a geopark.

In Cameroon, Zangmo et al. argue that the geomorphological features of the Manengouba Volcano (Cameroon Line) should be viewed and conserved as assets for geotourism and other social and development activities.

Moving away from Africa and the Middle East, other authors provide global case studies. Amorfini et al. outline the geoheritage values of the Apuan Alps geopark in Italy. They
describe how to popularise geology through environmental education, publications, websites and partnerships with universities and agencies for research and environmental protection. Zhizhong et al. provide a general overview of the classification and development of geoparks in China. Also in China, Chen et al. describe karst types and present a model on how geoparks are designated in regard to karst features.

Brocx and Semeniuk describe how to use a Geoheritage Tool-kit systematically to compile inventories of the full geodiversity in a given area, taking as examples three areas in Western Australia. Semeniuk et al. describe the microscale geology and micropalaeontology of the Becher Point Cuspate Foreland in Western Australia and highlight the application of the term “geoheritage” at even the small scale.

This book would not be possible without the participation of the contributors. We thank them warmly for their submissions and their patience. Colleagues from various institutions who participated in the review of the papers in the Volume are sincerely thanked for their valuable contribution. Their names are listed below.

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Ezzoura Errami
Margaret Brocx
Vic Semeniuk
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