## A report on Brainstorming Session on "Conservation of Geoheritage: Current Scenario and Future Action Plan" 5-6 August 2019, INSA, New Delhi

Indian subcontinent is the most travelled landmass during the geological timescale resulting into great geological diversity. The rising Himalaya in the north, Deccan Plateau in the west, mosaic of geologically oldest terrane in the south and the west, great Vindhyan basin, coal bearing Gondwana basins, foreland basins of Himalaya, the Siwaliks and Indo-Gangetic plains, to name a few. Thus, India's geological heritage attracts scientists from every part of the globe. As such these geological records of India needs to be preserved for future generations as it is a non-renewable asset. While our rich cultural heritage has largely been taken care of, the country's geological heritage is still awaiting its turn. The fossil sites are being vandalized and fossils being sold to visitors at several places in India. Many important geological sections of global significance are being sacrificed on the pretext of development. India is far behind in geoheritage conservation from many smaller countries like Malaysia, Vietnam, Morocco, Portugal and several others. The great resource of knowledge tourism in the form of geotourism and geoparks are still untapped in India, while it started in Europe about two decades back. A time has come to formulate a law to conserve geoheritage and convert them to knowledge destination at par with global standards.



In order to address the need to assess the status of geoheritage in India and discuss the draft legislation, The Society of Earth Scientists (SES) jointly with the Indian National Committee for IUGS-INQUA, Indian National Science Academy (INSA) jointly organized a Brain Storming Session on "Conservation of Geoheritage: Current Scenario and Future Action

*Plan*" during 05-06 August 2019 at INSA, New Delhi. As a run up to the BSS and to enhance the awareness across the country, an outreach program *'Walk to Save our Geoheritage'* was organized on 21 July, 2019 at several locations across the country-Jodhpur, Udaipur, Chandigarh, Lucknow, Hyderabad and Visakhapatnam. The walk invited a lot of interest and enthusiasm among the geoscientists, students and Earth lovers and a message was floated across the society to conserve our geoheritage.

The core group of geoscientists involved in the preparation of status paper and draft legislation with some invited senior geoscientists met on 5<sup>th</sup> August under the chairmanship of Prof. D. M. Banerjee, FNA to discuss various issues and passed few resolutions. Prof. Rameshwar Bali, Lucknow University proposed that in the M.Sc. syllabus there should be at least a chapter on 'Geoheritage'; Dr. S. K. Wadhawan, Jaipur proposed that the National/International Geoheritage Day should be declared and be celebrated every year in India by various organisations and Universities to enhance awareness in the society about the importance of geological monuments; Dr. Wadhawan also proposed that there should be a separate Central Geological Programming Board Sub-committee on Geoheritage. All the members unanimously resolved and advised to The Society of Earth Scientists to circulate the resolutions to all concerned.

The session on the second day was chaired by Dr. Rasik Ravindra, Chairman of SES and Secretary General of the 36<sup>th</sup> International Geological Congress who welcomed all the delegates specially officers of Geological Survey of India, UNESCO and Vigyan Prasar. Dr. Dhiraj Mohan Banerjee, FNA welcomed the delegates on behalf of INSA and emphasized the



need to attract the attention of policy makers toward the implementation of legislation to conserve our geoheritage. The technical session was started with a presentation by Dr. Satish C. Tripathi, General Secretary, SES on the topic "Geoheritage and Geoparks: Indian and International Scenario". Dr. Tripathi elaborated upon the current status of geoheritage protection in the country and the international scenario on UNESCO geoparks as well as other geopark networks across the globe. He emphasized that in the fast development scenario, important geosites are being vandalized because of lack of awareness and absence of any proper legislation. Many fossil sites were unscrupulously destroyed and fossils were sold for petty gains. Participants highlighted the need to educate the society about the importance of these sections and that these are non-renewable assets and can not be restored.

Ms. Bidisha Bayan, Research Scholar at Central University of Karnataka, and an ardent geoheritage conservationist elaborated upon the outreach event "Geoheritage Walk" organized by SES in collaboration with different organizations. Dr. Pushpendra Singh Ranawat, former Professor of Geology at MLS University, Udaipur, and a promoter of Zawar geoheritage site of Rajasthan proposed two case studies on Zawar and Ramgarh impact sites which are most suited to be declared as Global Geopark as they are meeting all norms as per the international standard. Zawar lead-zinc mining areas are filled with the evidences of more than 2500 old record of ancient metallurgy, one of the oldest in the world.

Dr. Manjit Kumar Mazumdar, Guwahati, outlined the provisions listed in a draft legislation entitled "The Geoheritage (Conservation and Promotion) Bill (draft), 2019". Dr. Mazumdar while stressing upon the need for a specific Indian legislation also highlighted upon key aspects of various legal provisions that are currently being enforced in twenty-four countries across the globe as well as their relevance in the Indian context.



Mr. Guy Broucke, Program Specialist in Natural Sciences, of UNESCO, New Delhi and Dr. Chitiz Joshi, Assistant Technical Officer, of UNESCO Category 2 Centre (C2C) on World Natural Heritage Management and Training for Asia and the Pacific Region, Dehradun, explained the UNESCO view

points and also emphasized that the geosites should be conserved and there is need to establish Geoparks. Mr. M. Chandra Das, Deputy Director General, GSI, Delhi, Prof. G.V.R. Prasad, University of Delhi, Prof. Arundeep Ahluwalia, former professor at Punjab University and Mr. Rajendra Kondapalli, non-fiction film producer and director also participated in the brainstorming session along with others, by advancing their

valuable opinions and suggestions. The formal vote of thanks was offered by Prof. Rameshwar Bali, University of Lucknow and Vice-President, SES.

During the BSS, Vigyan Prasar, an arm of DST, released a documentary film on "Geoheritage" which was greatly appreciated by the delegates. Mr. Kapil Tripathi, senior scientist, Vigyan Prasar gave an introduction about the film. The BSS was attended by geoscientists from the Geological Survey of India (GSI), 36th IGC Secretariat, eminent academicians from various Universities, UNESCO officials and research scholars who are actively involved in the conservation and promotion of geoheritage sites in the country, apart from Ms. Sulagna Chattopadhyay, Editor of fortnightly magazine 'Geography and You' (GnY) and senior officials of Vigyan Prasar.

It was decided in the BSS that a final Status Report and Draft Legislation, considering the comments of delegates, will be submitted to Government of India for consideration.







