

Huangshan Vision: UNESCO-designated sites and Sustainable Development

30 June 2023

Experts, policy-makers, managers and practitioners participating in the 4th Huangshan Dialogue, having completed eight sessions on the theme of “Digital Technologies Enabling Sustainable Development of UNESCO-designated sites” in Huangshan City, China, from 29 to 30 June 2023 envisage a road towards both better protection of our shared global heritage and enhanced contribution of such UNESCO-designated sites towards the UN’s Sustainable Development Goals.

Recalling the success of the previous three Huangshan Dialogues, hosted by HIST and the Huangshan City Administration, in demonstrating the valuable application of space technologies for the effective management of UNESCO-designated sites;

Expressing their sincere appreciation to the 4th Huangshan Dialogue and the hope that they will continue their collaboration in convening future directional dialogues every two years;

Continuing to recognize the great potential for UNESCO World Heritage sites, Biosphere Reserves and Global Geoparks to serve as pilot inspirational, educational, experimental and learning sites for context-specific climate change mitigation and adaptation strategies, biodiversity conservation, sustainable tourism planning, disaster risk reduction, mitigation, preparedness and monitoring, and also the strengthening of links between conservation and sustainable development of regions and peoples where these sites are located;

Emphasizing again the potential role of space-, air- and ground-based remote sensing technologies and associated GIS and other digital applications, in identifying, recording and understanding the past as well as to model and foresee future scenarios for UNESCO-designated sites and surrounding areas in the context of on-going and future global trends of environmental change;

Encourages UNESCO, its National Commissions, **the** National Committees responsible for coordinating the work of the World Heritage Convention, the Man and the Biosphere (MAB) Programme and the International Geoscience and Geopark Programme (IGGP), as well as the authorities and institutions involved in the conservation and management of UNESCO-designated sites to use these sites in order to:

Take full use of available digital technologies to support the monitoring of UNESCO-designated sites, including in the identification and evaluation of potential new sites;

Continue to document and disseminate knowledge on the impacts of climate change, to raise awareness of local communities and the general public of the causes and consequences of climate change and their implications for the environment, heritage, people and societies;



Analyse and disseminate information and data on the risks facing UNESCO-designated sites and their surrounding land and seascapes with regard to disasters caused by natural and human-induced hazards, and on predictions for future scenarios based on vulnerabilities and risks, and related impact on natural and cultural heritage, including advise on precautionary measures to be taken;

Identify cultural landscapes, heritage sites, buildings and artifacts that may face inevitable decay or disappearance due to natural processes or consequences (e.g. sea-level rise, flooding, fire, glacier melt etc.) and encourage the use of virtual reality and other appropriate technology to establish their 3D images and other copies for archives to benefit future generations and act as blueprints to meet the needs of any cases of authentic repair and reconstruction in the future and to help demonstrate essential characteristics of these sites to the public;

Continue to improve the application of digital technologies for the support of UNESCO-designated properties through refined focus and application of a wider range of new technologies, including Light Detection and Ranging (LiDAR), weather radar data, different sensors of Unmanned Aerial Vehicles, to be used in 3D modelling and increasingly accurate future scenario modeling;

Strengthen international cooperation between the world's leading technological countries, in particular the academic bonds between scholars in the field of spatial technology, and strengthen knowledge-sharing platforms and networks and Encourage UNESCO to develop a mutually agreed plan among various research centres for openly sharing significant data necessary to achieve high level of analysis through the combined data pool. IPCC can serve as a model for such a coordinated approach;

Take specific actions to make the contribution to the UN SDGs. UNESCO-designated sites have great potential to support several of the many SDG goals especially under goals 1,6,11,13,14,15 and 17. The sites themselves should be models of responsible management providing compatible livelihoods and opportunities for local communities and contribute greatly to the conservation goals of biodiversity and water; the 5th World Congress of Biosphere Reserves to be hosted by China in 2025 could be a good opportunity to explore this relationship;

Continue to develop capacities of site managers, professionals and communities to effectively use space technologies for sustainable heritage conservation and management of UNESCO-designated sites with the support of international organizations such as ICCROM;

Continue to actively promote sustainable and resilient tourism models in UNESCO-designated sites following the principles of ecological civilization in balancing environmental, cultural, economic and social benefits. These should serve as inspirational, intergenerational, places;

Continue to pay special attention to the theme of developing a network of UNESCO-designated sites for potential collaboration in the future by using space technologies, in

The background features a traditional Chinese ink wash style illustration. It depicts a landscape with rolling green mountains in the foreground and middle ground. In the upper right, a multi-tiered pagoda with green roofs is visible. On the left side, there is a large, leafy tree and a structure that appears to be a pavilion or a part of a temple complex. The overall color palette is soft and muted, consisting of various shades of green, grey, and white, creating a serene and historical atmosphere.

particular for identifying opportunities for implementing well defined targets and indicators for monitoring contributions of UNESCO-designated sites to attaining SDGs.