

•The English version•

## **Declaration on Conserving Biodiversity and Building a Community of All Life in Arid Lands**

Organizing Committee of the International Symposium on Biodiversity Conservation & Sustainable Development in Arid Lands

(Correspondence: Yuanming Zhang, Xinjiang Institute of Ecology & Geography, Chinese Academy of Sciences, Urumqi 830011, E-mail: [zhangym@ms.xjb.ac.cn](mailto:zhangym@ms.xjb.ac.cn); Jinghua Cao, International Alliance of Science Organizations, Beijing 100101, E-mail: [jinghua.cao@anso.org.cn](mailto:jinghua.cao@anso.org.cn); Keping Ma, Institute of Botany, Chinese Academy of Sciences, Beijing 100093, E-mail: [kpma@ibcas.ac.cn](mailto:kpma@ibcas.ac.cn))

*The International Symposium on Biodiversity Conservation & Sustainable Development in Arid Lands, co-organized by Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences (XIEG-CAS) and the International Alliance of Science Organizations (ANSO) was successfully held on December 16–17, 2021 in Urumqi, China. The theme of this symposium was “Conserving Biodiversity and Building Life Community in Arid Lands”. It attracted more than 200 experts and scholars from 10 plus countries, including China, South Africa, Senegal, Mauritania, Ethiopia, the United States, Germany, Belgium, Poland, Kazakhstan, Kyrgyzstan, Tajikistan, Uzbekistan, Turkmenistan, Nepal and India, and the representatives from the Ministry of Ecology and Environment of China, UNEP, CBD, UNCCD, UNDP, UNESCO and ANSO as well.*

*All experts participating at this Symposium agreed and proposed with releasing the following Declaration after exchange of views and interests and further discussion.*

- 1.** Due to the particularity of their ecosystems, arid lands have rich and unique biodiversity, which is an important material assurance to support human livelihood and social well-being. And considering that biodiversity conservation in arid lands will contribute to the synergies to the commitments of Rio conventions, and is important component of the way to meet the Sustainable Development Goals.
- 2.** Recognizing that global biodiversity has suffered severe damage as human activities have increased, which is particularly prominent in arid lands. Arid lands are more sensitive to the affection of climate change. Though many nations and international organizations have made great efforts to reversing some negative biodiversity trends, overall, progress towards halting biodiversity loss is still insufficient.
- 3.** Acknowledging that challenges to biodiversity in arid lands include: rapid population growth, land use patterns changing, unsustainable and unreasonable use of biological resources, large-scale construction, climate change, alien species invasions, weak policies and management mechanism, and insufficiency of information sharing.
- 4.** Proposing the strategy for addressing causes of biodiversity loss in arid lands includes:
  - a.** Mainstream the biodiversity conservation in arid lands into state policies, plans, strategies and practices could be achieved with more proactive and goal-oriented approaches.
  - b.** Call for conserving and restoring the degraded original ecosystem by nature based solution to protect the unique plant species in arid lands.
  - c.** Decline pressures and promote sustainable management of biodiversity and ecosystem.
  - d.** Improve contributions of biodiversity and ecosystem services benefit to livelihood.
  - e.** Ensure that arid ecosystems are adequately encompassed state strategy and plan of protected area.
  - f.** Promote legislation to ensure environmental impact assessments prior to development or modification of arid land ecosystems, and prevent the plantation of nonnative, and potentially invasive species.
  - g.** Mobilize financial resources to the countries in arid lands, strengthen capacity building, accelerate technology transfer and scientific cooperation, and improve governance skill at various levels in arid lands.
- 5.** Proposing the actions adopted for biodiversity conservation in arid lands includes:
  - a.** Establish a biodiversity conservation alliance as a cooperation mechanisms adopted by all stakeholders for creating platforms for joint scientific research, capacity building, and programme implementation in arid lands.
  - b.** Strengthen biodiversity background investigation and digitization in arid lands and establish shared

databases for the global sharing of biodiversity information in arid lands.

- c.** Develop partnerships to avoid and stop unsustainable utilization of arid-land species traded between Africa and Asia.
- d.** Create technical and administrative guidance to prevent unsustainable development and modification of arid land ecosystems and to provide education to policy-makers and other actors to understand the needs for sustainable management of arid land ecosystems.
- e.** Establish a germplasm conservation and research center for arid lands, effectively conserve valuable wild germplasm resources, and produce more adaptable new crop varieties with better performing genetic characteristics and stress-resistance.
- f.** Enhance biodiversity monitoring and assessment, with an emphasis on invasive species; increase cross-border regional cooperation, strengthen the construction and management of natural protected areas, national parks, wildlife reserves and botanic gardens in arid land regions.
- g.** Engage local communities by employing the knowledge and customary practices of local peoples to synergize biological conservation with sustainable utilization.
- h.** Adopt measures to collaborate with governmental agencies and Civil Society Organizations (CSOs) to disseminate knowledge and best practices, to promote building capacity and to strengthen public awareness on biodiversity conservation, with a positive impact preferred on policy and decision makers in particular.
- i.** Strengthen the synergies among the Rio conventions to enhance the effective implementation and better maintain biodiversity whilst achieving global targets of UN SDGs, as well as the Convention on Migratory Species (CMS) for migratory species which rely on connectivity in arid land regions.
- j.** Apply remote sensing technique to enable more effective monitoring of arid ecosystems and meet the goals of the proposed monitoring of the Post-2020 Global Biodiversity Framework.
- k.** Build a network to enhance capacity and implementation of the development of effective indicators and the conservation of biodiversity in arid ecosystems.