

THE CONVENTION ON WETLANDS
64th meeting of the Standing Committee
Gland, Switzerland, 20-24 January 2025

SC64 Doc.29.4 Rev.1

**Proposed draft resolution on promoting incorporation of frontiernew
technology and traditional ~~ecological~~ knowledge in wetland conservation,
restoration, management, and wise use**

Submitted by China, Burkina Faso, Cambodia, Gabon, Libya, Madagascar, and Panama

Action requested:

The Standing Committee is invited to review and approve the attached draft resolution for consideration by the 15th meeting of the Conference of the Contracting Parties.

Secretariat cover note

The draft resolution is to call on incorporation and integration of frontier technology and TEK in wetland conservation, restoration, management, and wise and sustainable use.

Paragraph 19 requests the Secretariat to report on the status on technology and knowledge sharing under Resolution VII.19 to the 67th meeting of the Standing Committee. It is not clear what guidance in Resolution VII.19 is to be applied in the preparation of a report on technology and knowledge sharing. The Secretariat suggests including specific language as to the nature, content, format, etc. of the report in the draft resolution to determine what resources would be needed to implement this action.

The Secretariat has invited the STRP to review the draft resolution.

Introduction

~~Frontier or new~~New technologies and traditional knowledge are important working areas and initiatives to address global challenges in environment and sustainable development. Technology and knowledge are important working areas in UN programmes and agencies and MEAs, including UNEP, UNESCO, UNFCCC and CBD, particularly implementation of the Kunming-Montreal Global Biodiversity Framework. Both ~~frontier~~new technology and traditional ~~ecological~~ knowledge (~~TEK~~) are contributing to wetland conservation, restoration, management and wise use. Scientific knowledge and indigenous and local knowledge are integral parts of knowledge systems. Modern science-based technology and traditional knowledge are inseparable in long-term human development and both vital to build a harmonious relationship with nature. Resolution VII.19 on Guidelines for international cooperation under the Convention on Wetlands indicates that the Convention will increase its efforts to share knowledge (traditional, indigenous, and more recently derived technologies and methods) among Contracting Parties. Traditional knowledge and technology are targets of the Fifth Strategic Plan of the Convention. The draft resolution is to call on incorporation and integration of frontier technology and ~~TEK~~ traditional knowledge in wetland conservation, restoration, management, and wise and sustainable use.

Financial implications of implementation

Paragraph (number and key part of text)	Action	Cost (CHF)
Paragraph 18	Request STRP to develop a technical report and recommendations to COP17	25,000
Paragraph 19	Request the Secretariat to report status to SC	3,000

Draft Resolution XV.xx on Promoting incorporation of ~~frontier~~new technology and traditional ecological knowledge in wetland conservation, restoration, management, and wise use

1. AWARE that science ~~and~~, technology and innovation are means to implement and revitalize the Global Partnership for Sustainable Development under Goal 17 of the United Nations 2030 Sustainable Development Goals (SDGs); and that the Technology Facilitation Mechanism was established and aimed at supporting the SDGs¹;
2. NOTING that ~~frontier or~~ new technologies and traditional knowledge and practice are important working areas and initiatives to address global challenges in environment and sustainable development in multiple UN programmes and specialized agencies, including the UN Secretary-General's Strategy on New Technologies, the UN Environment Programme's Digital Transformations and the Coalition for Digital Environmental Sustainability (CODES), and the Science, Technology and Innovation (STI) system and Local and Indigenous Knowledge Systems (LINKS) of the UN Educational, Scientific and Cultural Organization (UNESCO);
3. ALSO NOTING that ~~technology and knowledge are important in multiple environmental agreements (MEAs); that~~ the UN Framework Convention on Climate Change (UNFCCC) established its Technology Mechanism in 2010; and that the Parties to the Convention on Biological Diversity (CBD) confirmed in Section C of the Decision 15/4 that implementation of the Kunming-Montreal Global Biodiversity Framework (KM-GBF) should be based on scientific evidence and traditional knowledge and practices, recognizing the role of science, technology and innovation²;
4. ACKNOWLEDGING that advances and practices of frontiernew technology are contributing to wetland conservation, restoration, management and wise use, ~~such as machine learning and artificial intelligence, space-air-ground integrated networks (SAGIN), smart sensors, the internet of things, clouds and data processing engines, biotechnology, nanotech, robotics, etc., which provide~~ providing significant support to wetland inventory and monitoring, ecological character assessment, ~~prediction of trends of change~~ trend analyses and predictions, regulation of hydrological and ecological processes, etc., ~~with precise, highly frequent, and intelligent data and analysis~~;
5. ALSO ACKNOWLEDGING that traditional knowledge, ~~especially traditional ecological knowledge (TEK³)~~, has an irreplaceable value and role in wetland conservation, restoration, management, and wise and sustainable use; and NOTING that many numbers of Wetlands of International Importance are also nominated as World Natural and Cultural Heritage Properties or Cultural Heritage Landscapes, or Biosphere Reserves, for example for their traditional wetland agriculture;
6. AWARE that scientific knowledge and indigenous and local knowledge are integral parts of knowledge systems (IPBES, 2022)⁴; and REALIZING that modern science-based technology and traditional knowledge are inseparable in long-term human development and both vital to build a harmonious relationship with nature;

¹ Paragraph 70, the 2030 Agenda for Sustainable Development.

² CBD/COP/DEC/15/4 Section C. Paragraph 7(I).

³ ~~Traditional Ecological Knowledge (TEK) is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment. IPBES. <https://www.ipbes.net/node/42038>~~

⁴ IPBES (2022). Summary for Policymakers of the Methodological Assessment Report on the Diverse Values and Valuation of Nature of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services. Pascual, U, et al. IPBES secretariat, Bonn, Germany. <https://doi.org/10.5281/zenodo.6522392>

7. RECALLING that the Guidelines related to Guiding Principles for the sharing consideration of traditional knowledge in wetlands management, developed based on shared expertise and information among Contracting Parties in Resolution VII.19⁵ indicate that the Convention will increase its efforts to share knowledge (traditional, preserve, promote and incorporate traditional knowledge, innovations and practices among Contracting Parties, complying with the international principle that guarantees that the rights of indigenous, and more recently derived technologies and methods) among Contracting Parties; peoples (Free, Prior and Informed Consent) and the Indigenous and Tribal Peoples Convention 1989 (No. 169);
8. ACKNOWLEDGING that the Scientific and Technical Review Panel has developed many of the technology and knowledge related publications for the Convention since 2006;
9. WELCOMING the fact that Standing Committee Decision SC63-26 decided the theme of World Wetland Day 2026 as “Wetlands and traditional knowledge: Celebrating cultural heritage”;
10. NOTING that traditional knowledge and technology are indicated addressed in Target 1.x, 2.x, 3.x and 4.x (to be updated with the final SP5) in the Fifth Strategic Plan of the Convention (Resolution XV.xx Annex 2); and
11. REALIZING the significance of the incorporation and integration of frontier new technology and TEK traditional knowledge in wetland conservation, restoration, management, and wise and sustainable use, and the weakness of separate applications of frontier new technology and TEK traditional knowledge;

THE CONFERENCE OF THE CONTRACTING PARTIES

12. AFFIRMS that Contracting Parties have different approaches and practices of frontier in promoting new technology and preserving traditional ecological knowledge (TEK) at national and local levels depending on their national situation, culture, and available resources;
13. URGES Contracting Parties to promote the development of wetland science and technology and preserve wetland TEK traditional knowledge;
14. ENCOURAGES Contracting Parties to voluntary share technology and knowledge relevant to wetland conservation and management for promotion of integrative development of frontier new technologies and TEK traditional knowledge at regional and global levels through multiple mechanisms, including Ramsar Regional Initiatives, thematic fora for addressing cross cutting issues such as the World Coastal Forum, other MEA programmes and IOP-led initiatives;
15. FURTHER ENCOURAGES Contracting Parties to promote the incorporation and integration of frontier new technology and TEK traditional knowledge, on voluntary basis and mutually agreed terms as appropriate, in wetland conservation, restoration, management, and wise use, based on national feasibility, and to share economic or other benefits from work undertaken on wetlands with the holders of traditional knowledges;
- ~~16. INVITES those Contracting Parties developing frontier technologies, such as satellites, artificial intelligence, open access databases, clouds and data process engines, etc. to build public services and access to the Convention on voluntary bases;~~

⁵ Annex Section D Paragraph D1.

15bis ENCOURAGES efforts to keep consistence with existing international agreements on intellectual property and principles of Free, Prior and Informed Consent (FPIC) regarding access to technology and knowledge and that should include protections around its dissemination according to the wishes of the participants.

17. INVITES those Contracting Parties incorporating and integrating ~~frontier~~new technology and ~~TEK~~traditional knowledge to share their good practices, experiences and lessons in wetland conservation, management, and wise use;

18. REQUESTS the Scientific and Technical Review Panel to

a. review the advances and practices in wetland ~~frontier~~new technology and their application, ~~and~~ the preservation status of wetland ~~TEK, best practices of~~traditional knowledge;

b. develop guidance on incorporation and integration of ~~frontier~~new technology and ~~TEK~~traditional knowledge into wetland conservation, restoration, management, and wise and sustainable use; ~~and to develop guidelines for presentation in priority areas of new technology and traditional knowledge subject to the selection of STRP~~;

c. report to the Contracting Parties at the 17th meeting of the Conference of the Contracting Parties (COP17), ~~withon refined~~ areas of ~~frontier~~new technology and ~~TEK possibly covering but not limited~~traditional knowledge subject to the capacity of STRP o:

- Wetland inventory, ~~(including tangible and living heritage)~~, mapping and monitoring;
- Carbon calculation and estimation;
- Evaluation of trends of ecological character changes;
- Regulation of hydrological and ecological processes;
- Ecosystem services valuation and trade-off;
- Wise and sustainable use of wetland resources;
- Threat treatment and management including restoration of and support for management of sacred sites;
- ~~Management~~Participatory management and decision making; including for indigenous territories;;
- ~~Risks and control of new technologies~~;
- Public access to technical and scientific information on wetlands stored in platforms created by the contracting parties;
- Systematic assessment of the ecological integrity of wetlands;

18bis REQUESTS that in tandem with this review, the STRP adapt the approach to recognising and working with Indigenous and local knowledge in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, to ensure ethical engagement protocols are followed when using traditional knowledge;

19. REQUESTS the Secretariat to ~~report on the status on technology and knowledge sharing under Resolution VII.19 to the 67th meeting of the Standing Committee (SC67)~~; assist STRP to work on the review assignment; ; and

20. CALLS ON the International Organization Partners of the Convention, other NGOs, research ~~institutes~~institutions, and private sector bodies to contribute to the development and application of wetland ~~frontier~~new technology ~~incorporating with TEK~~ and its use for the preservation, promotion and incorporation of traditional knowledge.