

Urgent challenges to the wise use of wetlands to receive enhanced attention: Update on wetland inventories

Actions requested:

The Standing Committee is invited to:

- i. note the progress of the Secretariat to provide a support mechanism to Contracting Parties in completing national wetland inventories; and
- ii. request the Secretariat to pursue fundraising activities to amplify the development of the proposed national wetland inventories support mechanism.

Background

1. Since the Convention's first Strategic Plan for the 1997-2002 period, Contracting Parties have established as a priority area of focus improving implementation of the Convention's provisions on inventories of all wetlands. The fourth Strategic Plan for 2016-2024 includes a target specifically on national wetland inventories (NWIs), namely Target 8 "National wetland inventories have been initiated, completed or updated and disseminated and used for promoting the conservation and effective management of all wetlands", under Goal 3 "Wisely using all wetlands".
2. Since 2017 the Convention has, together with UNEP, been co-custodian of Indicator 6.6.1 "Change in the extent of water-related ecosystems over time". Measuring the Indicator using the Convention's National Reports and based on NWIs requires interoperable data based on common standards, including the Convention's definition of wetlands and Classification System for Wetland Type. This complements UNEP data¹.
3. However, progress on NWIs remains limited. Of Contracting Parties reporting to COP14, only 46% had completed an NWI and 52% provided data on wetland extent (SDG Indicator 6.6.1).
4. Paragraph 49 of Resolution XIV.6 on *Enhancing the Convention's visibility and synergies with other multilateral environmental agreements and other international institutions* encourages Contracting Parties to strengthen their efforts to complete their NWIs and to report on wetland extent as a contribution to SDG Indicator 6.6.1, and requests the Secretariat to continue

¹ UNEP is co-custodian of Indicator 6.6.1. UNEP provides earth observation data on lakes, rivers and reservoirs surface water extent, mangrove extent, vegetated wetland extent and water quality (using chlorophyll-a and turbidity as a proxy) for each of the United Nations Member States. For more details on the methodology: [Metadata-06-06-01a.pdf \(un.org\)](#); and to access the data: [SDG 6.6.1 \(sdg661.app\)](#). For more details on the Convention's methodology: [Metadata-06-06-01b.pdf \(un.org\)](#).

working with Contracting Parties to actively support these efforts. Resolution XIV.6 also recalls the importance for Contracting Parties to promote national level synergies and enhance cooperation, coordination and synergies among MEAs and other partners, as a means to enhance coherent national implementation of the Convention to support achievement of wetland-related goals and targets of the 2030 Agenda and the Global Biodiversity Framework.

5. Paragraph 16 of Resolution XIV.16 recommends that Contracting Parties conduct systematic NWIs, using the *New Toolkit for National Wetland Inventories* of 2020. It also recommends that Parties assess the status and trends of wetlands, analyse national needs and gaps in wetland conservation, and develop integrated, systematic, and adaptive conservation and restoration planning.
6. At its 62nd meeting (SC62), the Standing Committee in Decision SC62-34 took note of the Secretariat's proposed approach to address these gaps through five workstreams, presented in paragraph 15 of document SC62 Doc.9:
 - a. further identification of specific needs and key constraints, which Contracting Parties face in wetland inventory;
 - b. development of additional guidance;
 - c. capacity building including training courses and training materials;
 - d. implementation support, including institutional partnerships; and
 - e. resource mobilization.
7. Discussions during SC62 drew attention to the financial and capacity-building needs of countries that do not have a complete NWI. Some further developments were proposed by Contracting Parties, such as establishment of a roadmap and work plan to support Parties' activities, and increased regional support towards establishing NWIs, including capacity-building activities and establishment of partnerships. Parties also called for the development of guidelines regarding the use of new technologies, the development of regional case studies on positive experiences and the enhancement of existing regional inventories.

Consolidation of a support mechanism for Contracting Parties for completion of national wetland inventories

Further identification of specific needs and key constraints

8. In order to further identify specific needs and key constraints that Contracting Parties face in developing NWIs, the Secretariat conducted in-depth interviews with 13 Parties (five in Africa, two in Asia, three in Europe, and one each in Latin America and the Caribbean, North America, and Oceania) during November 2023, building on the assessment done in 2019. Contracting Parties were invited to express interest in being interviewed through regional meetings held prior to SC62. The objective of these interviews was to collect insights on the challenges and constraints faced by national authorities, and to identify new resources and material to support development of NWIs.
9. The interviews were focused on four main topics: why countries launch an NWI, that is, their initial goals and objectives; what supported them in the process, including guidance used and technical support provided; what obstacles they faced; and what products or outputs were produced. As agreed during the interview process, bilateral interview reports were shared only with interviewees to check the accuracy of the collected information. The Secretariat expresses its gratitude to the National Focal Points and other national experts who shared their time and experience in this regard.

10. A brief synthesis report that summarizes the main findings from these interviews has been published as information document SC63 Inf.2². Paragraphs 4 to 13 of the report outline the key lessons learned to guide NWI process. It identifies key orientations for the Secretariat's future actions, particularly for NWI training courses and guidance material. The report also presents challenges, constraints, and expectations and needs (see Tables 1 to 3). In addition to informing the Secretariat, this can also familiarize Contracting Parties that are yet to start their own NWI process with potential benefits, support available or pitfalls they may face.
11. The Secretariat will continue to investigate Contracting Parties' needs and constraints regarding NWI thanks to direct exchanges with Parties, discussions with partners and donors, and the use of NWI information that Parties will report through their National Reports to COP15.

Development of additional guidance

12. As indicated in document SC62 Doc.9, existing guidance material needs to be complemented with guidance addressing aspects such as institutional arrangements and the policy basis for wetland inventories. Discussions during SC62 also identified further needs in terms of the use of new technologies.
13. In reviewing existing NWI guidance and based on interviews with Contracting Parties, the Secretariat identified the need for additional guidance in three main fields (see information document SC63 Inf.2).
14. Firstly, there is a need for defining common elements of NWIs, including identifying core data/indicators as well as additional recommended data/indicators. While each NWI needs to be carefully framed by the national context, including institutional arrangements and policy objectives, this is crucial to ensure that the Convention's data and reporting mechanism enables tracking of relevant global indicators, such as those of the Kunming-Montreal Global Biodiversity Framework.
15. Secondly, additional guidance should aim to increase data quality, consistency and interoperability. This may encompass guidance on recommended data collection methods and data protocols, drawing upon internationally used data principles³ and references, as well as experiences of Contracting Parties. Guidance on the appropriate use of technologies such as remote sensing will be specifically addressed in this work.
16. Thirdly, the Secretariat identified the need for improved process guidance for NWIs, encompassing planning, data collection, data use and data update phases with clear division of roles and responsibilities, including designing countries' own technical support mechanisms for the data collection teams at national and subnational levels.

² See <https://www.ramsar.org/document/sc63-inf2-national-wetland-inventories-synthesis-13-depth-interviews-further>.

³ The international research community developed the FAIR guiding principles for scientific data management to provide guidelines to improve the Findability, Accessibility, Interoperability, and Reuse of digital assets (<https://www.nature.com/articles/sdata201618>). The TRUST principles provide a framework to facilitate the implementation of best practices in digital preservation relating to Transparency, Responsibility, User focus, Sustainability and Technology. While the FAIR principles focus primarily on aspects of metadata, including persistent identifiers, the TRUST principles focus on curating and preserving data and related resources (Lin et al., 2020, <https://www.nature.com/articles/s41597-020-0486-7>).

17. The Secretariat will work in close consultation with the Scientific and Technical Review Panel (STRP), partners and donors to update and further develop guidance, also drawing upon the experiences of countries that have successfully developed an NWI, and experiences from efforts focusing on other ecosystems/biomes.

Capacity building

18. The initial focus of the Secretariat's capacity building related to NWIs is with those Contracting Parties without an ongoing NWI process (26% of the 122 Parties that reported to COP14 have either not undertaken an NWI or only planned it, see document COP14 Doc.9.1). This aims to support countries to gain knowledge and know-how on how to undertake an NWI within an appropriate policy, scientific and technical framework. This will ultimately contribute to better capacity to implement the 2030 Agenda, and specifically the achievement of SDG Goal 6 and tracking of SDG Indicator 6.6.1, as well as support effective management of wetlands to fulfil their commitments under the Convention and under other global goals (biodiversity, climate, land degradation neutrality, etc.).
19. A three-year programme consisting of annual training courses and associated training materials in the three official languages of the Convention is being developed. Three training modules will be organized between 2024 and 2026, with the following focus:
 - Module 1: Introduction to national wetland inventories;
 - Module 2: Earth observation techniques and knowledge: Best practices to support national wetland inventories; and
 - Module 3: Long-term ecological knowledge: Managing and updating national wetland inventories.
20. The Secretariat has joined in partnership with the United Nations Office for Sustainable Development (UNOSD) to implement the training programme in English for ten Contracting Parties. The first course (Module 1) will take place at the National Institute of Ecology in Seocheon, Republic of Korea, from 9 to 13 September 2024. The objective of Module 1 is to guide national authorities in elaborating a robust NWI development process, including collection and management of data, and an action-oriented data-flow approach with appropriate policy linkages, including with other MEAs' global goals.
21. Module 1 will be conducted in person in French and Spanish, in 2024 or 2025, thanks to financial support provided by the Government of Norway. Hosting arrangements are to be determined. Additional financial resources are required to implement the full training programme in Spanish and French, and to increase the number of participants in the training programme.
22. The Secretariat will issue a call for applications to participate during the spring of 2024, with selection criteria. Participants will be required to enrol for three on-site training modules over three years. This will allow participants to progressively deepen knowledge and action on NWIs. Participants will be given some form of homework between the on-site sessions, to ensure their continued engagement.
23. The Secretariat plans to seek national experts and STRP members and observers to act as instructors for these three modules. It will also draw upon existing national or regional resources, such as the ones mobilized for low-cost GIS-based wetland inventories in Myanmar

or Bhutan (see *2020 New Toolkit for National Wetlands Inventories*), or in Africa (Global Wetland Africa Toolbox).

24. Online training material based on the above training programme will be prepared to be publicly available on the Convention's website. This will allow all Parties to the Convention to access the main substance of the training programme.

Implementation support

25. A number of key constraints and needs in the development of NWI and their use in monitoring, assessment and reporting can be addressed through development of an initiative dedicated to Earth observation (EO) support.
26. The Secretariat continues to engage with the GEO Secretariat in relation to the development of an online "Global Ecosystem Atlas" based on the IUCN Global Ecosystem Typology. A proof-of-concept product is envisaged to be presented at COP16 of the Convention on Biological Diversity (CBD) in Cali, Colombia, from 21 October to 1 November 2024.
27. Further to this, the Secretariat identified the possibility to develop an initiative drawing on models provided by existing GEO Flagships (e.g. the GEO Land Degradation Neutrality Flagship (GEO-LDN)). This may, for example, provide access to curated global data on ecosystem extent and change that Contracting Parties may draw on for their national inventory; strengthen inventory of wetland types for which inventory remains limited or challenging; develop technical, methodological, and other tools and guidance; and provide a community of practice. The Secretariat will explore such an initiative in close consultation with the STRP, and in collaboration with relevant partners, including through a feasibility study.
28. In addition, some Contracting Parties in Africa will benefit from direct technical support that will be provided in the NWI training course 3-year intersessional period. The technical support activities will align with the guidance and capacity-building programmes and will target the group of African Parties selected for the training course. The objective is for these Parties to receive concrete support to implement the NWI structured process that will be presented in Module 1 of the NWI training course, and to use the NWI common elements (core data sets) and the data management protocols that will be defined within the new guidance material (see the section on additional guidance above). This dedicated support to NWI implementation will mobilize available resources in national departments, agencies and universities that will be identified by the selected Parties to ensure local appropriation of the NWI process. Existing initiatives and regional resources will be duly consulted, and further institutional arrangements will be concluded, such as with Digital Earth Africa. This technical support activity will be conducted thanks to financial support provided by the Flemish Region in Belgium.

Resource mobilization

29. Existing secured financial resources allow the Secretariat to undertake several activities of the NWI support mechanism during the upcoming years (see Table 1 below). Further development and implementation of the Secretariat's support to Contracting Parties in developing NWI will require additional financial resources, including in relation to development of guidance and training materials, expanding of the number of Contracting Parties supported through in-person training, and offering of support in all three languages of the Convention. The table below offers an indication of the funding requirements from 2025 to 2029. At this stage, these financial requirements are broad estimations that will need further refinements.

Table 1: NWI support mechanism – estimation of funding requirements for 2025 to 2029

| | Aim | Deliverables | Secured funding (in CHF) | Funding requirements for 2025-2029 (CHF) |
|------------------------|--|--|---|---|
| Guidance material | Increase policy and institutional relevance of NWI process | Definition of common elements of NWI, including core data/indicators | 40,000 | |
| | Increase NWI data quality, consistency, and interoperability | NWI data management protocols guidance | 40,000 | |
| | Strengthen roles and responsibilities in NWI process | NWI structured process guidance | | 50,000 |
| Capacity building | Strengthen capacities to develop a complete NWI process | Module 1 in-person training course | 60,000 for EN session 120,000 for FR and SP sessions | |
| | Increase appropriate use of EO techniques | Module 2 in-person training course | 60,000 for EN session | 120,000 for FR and SP sessions |
| | Improve updates of NWI | Module 3 in-person training course | 60,000 for EN session | 120,000 for FR and SP sessions |
| | Develop knowledge on NWI process development | Online training material | 20,000 | 20,000 |
| Implementation support | Support NWI data collection for Parties | Feasibility study and consultation for an initiative dedicated to Earth observation (EO) support | | 40,000 |
| | Accompany African Parties to design and complete a NWI process | Technical support to NWI process in selected African countries | 135,000 | To be determined according to countries' new requests |