



MedWet

L'initiative pour les zones humides méditerranéennes
The Mediterranean Wetlands Initiative
مبادرة المناطق الرطبة المتوسطية

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Item 8 - Work Plans and budgets 2016-2017 for MedWet and the MWO (Doc. MedWet/Com12 – 8)

Strategic Plan 2016-2020 and activities 2016-2017 of the Mediterranean Wetlands Observatory

I. General Objectives of the Mediterranean Wetlands Observatory

1. The regression and artificialisation of wetlands continue on both sides – north and south – of the Mediterranean Basin. This has an impact on biodiversity and on ecosystem services and function in general.
2. In the balance of power where stakeholders defend their visions of a territory and its interests, political arbitration increasingly favours the development of activities that make an impact on the environment (agriculture, urbanisation, infrastructure development involving the extraction of water and changes to water cycles). Priorities have to change, and this means improving the legal framework for wetlands and its enforcement at every level, including elected representatives, civil servants and all others responsible for the development of a territory.
3. The Mediterranean Wetland Observatory (MWO) was established in 1998 at the request of the Mediterranean Wetlands Committee (MedWet/Com) as a multi-partner project coordinated by Tour du Valat (TdV), the Research Centre for the Conservation of Mediterranean Wetlands. The main objective of the MWO is to act as a wetland management tool serving the MedWet Initiative's countries. The ultimate

aim of this regional tool is to help to improve political decisions regarding the conservation and sustainable management of wetlands, particularly in terms of legislation, governance and best practices.

4. The MWO works on several levels, from regional to national and local, in the entire Mediterranean Basin. The approach consists in preparing reports on the status (including the goods and services provided) and trends of Mediterranean wetlands through two key components: water and biodiversity, and to analyze them with regard to environmental and sustainable development policies.
5. This information is designed to influence decision-making processes in favour of wetland conservation and wise use. Together with partners (BirdLife International, Wetlands International, WWF-MedPO, etc.), the MWO has identified a series of subjects and indicators to help monitoring the status and trends of Mediterranean wetlands.
6. Despite the publication of three monitoring reports since 2012, as well as regular exchanges between the MWO and its partners, so far the impact on decision-making regarding wetlands has been limited. The recent restructuring of the MedWet Secretariat and the new dynamism of exchanges and communication with the individual countries, the Ramsar Convention, and the high-level decision-makers in the Mediterranean Basin should increase this impact.
7. Our proposal, therefore, is to reach these decision-makers through the Ramsar Convention and MedWet as well as other international agreements linked to water and biodiversity (such as the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) and the Mediterranean Action Plan (UNEP/MAP) and its regional activity centres. To this end, the MWO aims at finding the convergence between its indicators and those developed by the Ramsar Convention and the Convention of Biological Diversity (CBD), as well as those applicable to the Sustainable Development Goals 2015-2030.
8. In order to increase the level of ownership of MWO's results and recommendations by national stakeholders, where possible, the global analysis of the results will be broken down into sub-regional analyses. The stakeholders are a key target of the MWO; this group will be enlarged to the networks of local civil society organizations (CSOs) close to the ground, enabling them to influence the decision makers.
9. When necessary, and depending upon available resources and competences, the MWO will provide technical assistance for the development of national wetland strategies/ policies adopting an integrated management of water resources approach in order to ensure that the links between water management and wetland conservation, including governance issues, are better understood and taken into account.

II. The strategic plan 2016-2020

II.1 The general approach

10. The MWO approach consists of redefining, in conjunction with the MedWet Secretariat, the MedWet countries and the multilateral environmental agreements, the information on Mediterranean wetlands that is most relevant in terms of effectively influencing decision-making.

11. This approach, involving the dissemination and transfer of information, requires the production of new indicators, an improved use of those that already exist, and, in the case of subjects where information is already sufficient, the production of summaries.
12. With this perspective, the MWO will focus on:
 - a) the production of key scientific and technical information on Mediterranean wetlands, in collaboration with the relevant partners;
 - b) the development of these partnerships in order to assure the adequate and effective dissemination of this information; and
 - c) the promotion and management of the MedWet Scientific and Technical Network (MedWet STN) [subject to the approval of the MedWet/Com].
13. The MWO's Strategic Plan is in line with the 4th Ramsar Strategic Plan adopted by the Conference of the Parties in June 2015, and will directly contribute to the MedWet Work Plan 2016-2017.
14. Progress is currently being made with the MedWet Secretariat in order to reinforce the dissemination of the results of the MWO's research and analysis at both national and international levels.

II.II Main priorities for 2016-2020

15. Among the set of indicators defined by the MWO, five areas have been identified as shown in the following box:



Wetland ecological services in the Mediterranean region. In this project the MWO will analyze the ecosystem services related to a) the production of resources and tourism attraction (in relation with the Biodiversity sub-project); b) the production of freshwater; and c) the regulation of the water cycle (with the Water sub-project).

Monitoring biodiversity in Mediterranean wetlands. Biodiversity is a central issue in Mediterranean wetlands and provides important resources to human societies. The status of biodiversity results from the direct and indirect management impacts,

notably hydrological changes, eutrophication, harvest of populations and climate change.

Water. Water is a key resource for wetlands and human societies. The information on water and wetlands will be synthesized in relation to the analysis of the ecological services and biodiversity.

National and local wetland observatories. Both local and national observatories will receive support when they provide data to the MWO and/or contribute to the conservation and wise use of Mediterranean wetlands.

Wetlands and sustainable development. Governance indicators and the socio-economic characteristics of countries will be compiled and made available to other researchers as variables that can help explain the indicators linked to biodiversity and water. Country and subregion-based studies will focus on the causes of the pressures on wetlands in order to identify means to influence decisions.

Synthesis of results. Capitalizing on the results in each of these areas, crosscutting analyses and comprehensive reports and syntheses will be prepared and disseminated widely.

Database management and web mapping. The Department is creating a bank of spatial databases and making the links between them to facilitate their use for the purposes of comparative analyses. Web mapping will be developed so that the main comprehensive data on wetlands in the Mediterranean Basin are available to a wide audience on the Internet.

II.III Transfer

16. The transfer activities will be developed in close collaboration with the MedWet Secretariat, and will make an important contribution to synthesizing information on wetland conservation and policies, notably through the MedWet Country Profiles, and to enhancing the advocacy activities that are part of the TdV's communication strategy.
17. Within the current context of different governance arrangements in the Mediterranean Basin, characterized by diversified levels of decentralization and the promotion of a participatory approach for development and conservation, a wide range of stakeholders now influences conservation and development decisions. Given the current crises affecting some countries of North Africa and the Middle East, the future developments of governance systems remain uncertain. However, when possible, the MWO's priority targets will be:
 - a) the international and regional organisations and conventions (notably Ramsar and MedWet, the CBD, AEWA and the Barcelona Convention); and
 - b) the national and international NGOs, if they are able to adapt the MWO's results to their specific contexts, disseminate them to their target audiences, and use them for their conservation activities.
18. Research centres are important partners for the MWO's activities, both for the scientific validation of its results and for increasing its capacity to deliver new results. More contributions from a revived MedWet SNT will be sought.

III. The MWO course of action for 2016-2020

III.I Ecosystem services in Mediterranean wetlands

19. The objectives are:
 - a) to produce knowledge and accurate indicators at the Mediterranean scale on the importance of wetlands for society; and
 - b) to use this knowledge and these indicators to advocate for the sustainable management of wetlands. The MWO methodological choice is to work only on the biophysical evaluation of services.
20. **The work planned for 2016-2017** includes several projects centered mainly on exploring the links between wetland biodiversity and the production of ecological services, as follows:
 - a) the analysis in four sites of the role of wetlands in adapting to climate change in the Mediterranean region, a project piloted by the Blue Plan (2016-2017);
 - b) the search for potential links between biodiversity status and the emergence of the West Nile Virus in the Mediterranean region; (2016-2017);
 - c) the contribution to a publication on the results of the initial qualitative assessment of ecological services in the Mediterranean basin. This project is part of the Mediterranean Ecosystem Services Working Group of the Ecosystem Service Partnership headed by Ilse Geijzenborffer (IMBE, Marseille University) and Emmanuelle Cohen-Shacham (IUCN) (2016-2017);
 - d) defining trend indicators for services linked to hunting and tourism based on waterbird data (project funded by Fondation Total) (2016-2017); and
 - e) further testing, at a pan-Mediterranean scale, an indicator for cultural services provided by Mediterranean wetlands based on the number of visitors to nine sites studied during previous years. A briefing note for decision-makers and natural area managers will be published (2016-2017).
21. The participation in the working groups on ecosystem services will be continued and communication actions will be carried out when opportunities arise (2016-2017).

IV. Monitoring biodiversity in Mediterranean wetlands

22. This project has three objectives:
 - a) to undertake a more precise assessment of biodiversity status and trends thanks to the update of the Living Mediterranean Wetlands Index and the development of a new index addressing more closely threatened species;
 - b) to assess threats and the effectiveness of conservation measures for waterbirds; and
 - c) to produce and transfer syntheses and information that are useful to decision-makers. There is an urgent need for the MWO to communicate its key messages in the form of indicators and recommendations that are more in line

with the expectations of decision-makers and/or international conventions. The MWO communication will be based on validated scientific results, in particular through publications in highly ranked international journals. In addition to these publications, short-format communication methods will be prioritised (e. g., brochures, indicator files, web pages, articles in the press).

23. The MWO Work Plan 2016-2017 includes:
- a) updating the database on biodiversity in Mediterranean wetlands and updating the Living Mediterranean Wetlands Index;
 - b) developing the Red List Index for the Mediterranean region in order to broaden the analysis to other groups than vertebrates and to address threatened species more closely;
 - c) studying the relationships between demographic trends in waterbirds and the trends of natural and artificial wetlands, climate change, the designation of protected areas, and hunting pressure. This will be done through a doctoral thesis in partnership with the French National Museum of Natural History;
 - d) producing scientific papers for validating the results;
 - e) making recommendations for the better conservation and management of the biodiversity of Mediterranean wetlands partly based on those results; and
 - f) producing documents targeting different publics, including decision-makers.

V. Water

24. Water is an essential resource for wetlands and for human societies. Information on water and wetlands will be summarised as part of the analysis of ecosystem services and biodiversity.
25. The objective of this project is to set up water monitoring programmes based on a few components, which: a) are compatible with the globally-coordinated systems such as UN Water and the World Water Council, or currently taking shape (Ramsar, CBD); and b) also allow explanatory analyses carried out in combination with the MWO data on biodiversity and ecosystems services.
26. Several approaches will be tried out, including: a) gathering available information on water resources; b) developing remote sensing indicators on water resources; and c) developing Water Footprint Indicators in the Mediterranean region.
27. The work planned for 2016-2017 includes:
- a) analyzing the evolution of the “wetland flooding extent” using satellite images, based upon the results of the project GlobWetland2;
 - b) feeding into the “water” aspect of the Mediterranean Wetlands Observatory’s spatial database (cf. “transfer of results”) ;
 - c) setting up a project on the Water Footprint Indicators in partnership with the Water Footprint Network, MedWet, EMWIS, etc.;
 - d) keeping up with and contributing to the development of indicators for water monitoring by Ramsar, the CBD, the SDGs, etc.;

- e) within the framework of the SWOS externally-funded H2020 project, selecting, testing and monitoring the water-related indicators. and
- f) mapping and quantifying the surface area flooded in 2015 in the Mediterranean coastal region using satellite images and testing some parameters of water quality in a few large waterbodies.

VI. Local and national wetland observatories

- 28. The objective of the project is to help local/national wetland observatories to reach their specific targets with information on the status and trends in “their” wetlands, so as to facilitate beneficial changes in attitude in the Mediterranean Basin.
- 29. More specifically, the project should help with the setting up of such wetland observatories (or observatories with a “wetlands” component), which are as compatible with / similar to the MWO as possible: consistent framework; clarification of objectives; indicators identical to those of the MWO, etc.
- 30. The work planned for 2016-2017 includes:
 - a) providing technical assistance to existing National Wetlands Observatories (NWO), including development and calculation of indicators, publication of thematic reports and of a new series of NWO leaflets. Further, partnership requests from other parts of the Mediterranean region will be assessed and, where possible, joint work will be undertaken; and
 - b) implementing a training programme for the network of NGOs under the MAVA-funded project “Maghreb Wetlands Sentinels” on applying and analysing a monitoring protocol for a small set of indicators. The data gathered by the NGOs will be compiled, analysed and presented to the national and international bodies concerned (MedWet, Ramsar National Focal Points, etc.).

VII. Wetlands within the framework of sustainable development in the Mediterranean.

- 31. The objectives of the project are;
 - a) to identify indicators for the Mediterranean countries and sub-regions on the causes of pressure on wetlands and on responses; and
 - b) to calculate and update these indicators in order to allow correlation with the indicators developed by the MWO.
- 32. The work planned for 2016-2017 includes:
 - a) verifying and updating the list of macro-indicators potentially relevant within the DPSIR framework (Driving forces, Pressures, States, Impacts, Responses) and checking their coherence and complementarity with the other MWO indicators. Those of the new SDG indicators that are relevant to the monitoring of wetlands will also be incorporated, in coordination with the MedWet Framework for Action;
 - b) gathering and compiling existing data on these indicators for Mediterranean countries, and initiating the development of a database;

- c) devising a forward-looking analysis framework, based on trends, alternative or abrupt-change scenario methods. A review will be carried out of the wetlands and policy issues of each country, the development models selected, and the available macro-economic indicators. The aim of the analysis will be to correlate this information with wetland status indicators;
- d) seeking partnerships with institutions such as the Plan Bleu, the Mediterranean Agronomic Institute, the Institut de Recherche pour le Développement (IRD), and the Institute for Sustainable Development and International Relations (IDDRI);
- e) responding to requests from the teams working in the other research areas for correlations with biodiversity, water, and ecosystem services indicators; and
- f) organizing a workshop with our partners to present and discuss the analytical framework and the set of indicators.

VIII. On-going funded projects

- 33. The MWO will also participate in other externally funded projects being implemented by TdV.
- 34. **Satellite imagery monitoring projects: the Satellite-based Wetland Observation Service (SWOS, Horizon 2020) and the Ramsar France wetland mapping project (Ministry of Ecology).** The objectives of the SWOS project are:
 - a) to develop a standard, operational tool for monitoring wetland ecosystems to better promote their inclusion in decision-making processes linked to their protection, conservation, and restoration;
 - b) to set up a single point for accessing information in order to guarantee better access and inter-operability between geo-spatial databases linked to wetlands;
 - c) to develop new possibilities for using SENTINEL images to guarantee continuous monitoring of wetland ecosystems with already existing sources of data (Landsat, MERIS, MODIS, etc.);
 - d) to develop technological tools for monitoring wetland ecosystems and make them available to the different communities of users; and
 - e) to develop technological tools in close collaboration with the users in order to guarantee that those tools effectively respond to their needs.
- 35. The work planned for 2016-2017 includes to:
 - a) to finalise the study for all pilot sites in order to test the SWOS approaches and develop the software;
 - b) to finalise the user needs analysis (after questionnaires having been returned), and write the report that will be used as the basis for the methodological development and for defining the technical specifications;
 - c) to organise a first international workshop (2016) to present the initial versions of the tools developed and run a first training session for the users;
 - d) to define and calculate the SWOS indicators that will be derived from the maps produced (based on user recommendations and technical specifications). This work will be coordinated by the TdV (a workshop with all SWOS partners will be organized in 2016);

- e) to finalise the study for all remaining sites using the methodology developed according to users' requirements;
 - f) to organise a second international workshop in 2017 with the users community and present the results for all test sites (and organise a second training session for the users);
 - g) to participate in other international events (e.g., the ESA's Living Planet Symposium in May, 2016); and
 - h) to develop a SWOS web portal to disseminate results and promote the tools that will be developed.
36. **The ECOPOTENTIAL ecosystem services project (H2020).** The objective of the project is to make significant progress in terms of the utilization of earth observation data combined with field data, so as to create a unified framework for the study of ecosystems and the management of ecological services in protected areas.
37. The project focuses on 22 internationally recognized protected areas found in different biogeographic zones. Modelling tools will be used in each protected area (retrospectively and with forward-looking scenarios) in order to integrate the results at the European level. In the framework of the project (included in the MWO project on "Ecosystem Services"), the objectives are to participate in the work on ecosystem services and to ensure that capacity building and knowledge exchange activities relating to this project are conducted.
38. The work planned for 2016-2017 includes:
- a) participation in the coordination of the project (four meetings of the coordination team per year and an Annual General Meeting per year);
 - b) coordination of a sub-project (Work-Package 12, WPI2 (summer schools, production of a communication and project dissemination plan), in close relation with other work-packages;
 - c) involvement of the MWO in a citizen science sub-project (WPI2). The MWO will try to determine the target group and begin developing the programme and the practical tools needed to implement it; and
 - d) involvement in the assessment of ecosystem services in protected areas.