Mediterranean wetlands monitoring situation and needs assessment

(March 2009 – June 2011)

By the Coordination Unit of the Mediterranean Wetlands Observatory

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FOREWORD

Monitoring and evaluation (M&E) is not an easy and stand-alone exercise. More and more, M&E is a key management step in programme, project and policy process. Since the last two decades, M&E concept in international development and conservation is progressively evolving from project to programme level, from result to impact, and from top-down sector to participatory integrated exercise. All about M&E is how results and lessons learned are disseminated and used for subsequent improvement of planning and actions, and how they are analyzed for improved impact pathway and up-scaling. Thus, to ensure usefulness and efficiency of monitoring and evaluation exercise, targeting of users as well as regular communication and feedback of results are mandatory elements of the concept. Usefulness and efficiency are also key to maintain interests of the M&E partners and users, and then its institutional, financial and technical sustainability.

The Mediterranean Wetlands Observatory (MWO), under MedWet initiative, has started its monitoring and evaluation implementation phase in 2010. The aim of this management tool is to contribute to wetlands protection and wise use by sharing and analyzing information. Results are specially targeted towards decision-makers and citizens. The MWO is one of the responses against the continuous degradation and decline of wetlands, their habitats and biodiversity. The implementation is based on an impact-oriented M&E framework build on participatory manner since 2007 with Mediterranean country representatives, and technical and institutional partners.

At the start of the MWO institutional building in 2009, the MWO coordination unit, country representatives and other partners have decided to launch this preparatory wetlands M&E situation and need assessment study in a sample of Mediterranean countries that will serve as initial regional reference and baseline for the future. The results of this study are providing updated inputs into the first MWO Mediterranean Wetlands Outlook report, to be published by 2012.

The study, supported financially by the French Government and MAVA Foundation, was implemented by the MWO Coordination Unit (based at the Tour du Valat) between October 2009 and June 2011. We hope this work will pave the way for a lasting regional wetlands M&E system. In the meantime, results may interest Mediterranean countries and sub-regions to consolidate their national and local protected areas and wetlands M&E systems.

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INTRODUCTION

The study on “Mediterranean wetlands monitoring situation and needs assessment” study had been planned since March 2009 in the Mediterranean Wetlands Observatory programme. This is an important step, at the start of the MWO implementation, to better understand the situation of wetlands in terms of monitoring and evaluation, as well as the M&E expectation and needs of MedWet countries. Results will be used to select appropriate sequences to better measure wetlands status and trends in the future. Field study and analysis of results were implemented in two phases: between October 2009 and March 2010 (10 countries) and between January and June 2011 (6 countries).

The survey is based on 60 interviews covering 16 countries (about 60% of the MedWet countries)*: Albania, Algeria, Bosnia and Herzegovina, Croatia, Egypt, France, Greece, Israel, Jordan, Lebanon, Morocco, Palestinian Authority, Spain, Syrian Arab republic, Tunisia and Turkey. For some components, the MWO coordination unit collected some information in Italy, Slovenia and FYR of Macedonia.*

The study is qualitative, based on limited number but relatively comprehensive questionnaires designed to cover most dimensions of wetlands monitoring and evaluation situation and needs. The study was conducted through a set of two open-ended and semi-directive questionnaires[1] for decision makers and for technical organizations or individuals involved directly or indirectly in wetlands. Interviews took between 1 and 2.5 hours per questionnaire.

The results of the study are, or will be incorporated in the strategic programme of MWO in order to take into account the monitoring and evaluation interest, priority, needs and expectations of the different countries. MWO will also try to adjust its service-oriented strategy by clusters of countries reporting similar interest.

[1] Annex 2

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MAIN FINDINGS AND FOLLOW-UP

Most responses from questionnaires are diversified and specific to persons interviewed[2]. Consequently, there are only few responses with shared view over the Mediterranean and country wetlands context and over their monitoring and evaluation.

Main findings

Policy/strategic level

1. **Wetlands are not high in political agenda.** However they are better integrated in policies and legal frameworks in the EU countries and EU-influenced countries (Balkans), thanks to the EU directives and operational instruments (incl. Natura 2000 and Emerald Network).

2. Only **25% of countries have both a wetland-specific policy/strategy document and an operational wetland inter-sector committee**. Whilst most Ramsar/MedWet focal persons are also involved in some cross-sector meetings and planning processes, they are not always in the most appropriate institution to really influence decisions towards wetlands.

3. **When coming together**, **political willingness** in including wetlands policy/strategy and committee in national agenda, **Ramsar, CBD, EU, OECD and UNESCO directives and instruments**, and **wetlands management plans**, provide **positive critical mass of decisional influence** or mutually reinforcing outcome over wetlands protection.

4. About **82% of stakeholders** (other than Ministries) involved in wetlands monitoring reported to **influence national policy**, either directly at the broad wetland scale or specific component such as water, birds, etc., or indirectly through training, capacity building, seminar, etc.

5. Since planning and monitoring of wetlands takes place mostly in protected areas, **wetlands management plans are usually not incorporated into the broader national and local development planning processes.** This leads to frequent cases of artificial segmentation in land use, social conflicts with local communities over access to natural resources, and opportunistic attitudes between the different planning processes, in which nature is usually the short-term looser.

6. **Ministries and NGOs work trustfully together only in sufficiently decentralized governance situations**, while in other countries, NGOs are left aside of the national programs and strategic discussions and are mostly active through internationally funded projects.

7. In less decentralized countries, there are less human and financial resources as well as complementarities to perform wetlands monitoring and analysis.

[2] Annex 1

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Wetlands monitoring systems

8. **Environmental monitoring systems that are in place are mostly attached to protected areas and not to specific ecosystems such as wetlands**. Consequently, wetlands-specific monitoring is mainly found in protected areas were wetlands are dominant or of special interest.

9. In line with the early bird-watching interest and the signing of Ramsar convention, major **wetlands have benefitted of some monitoring for the last 30-60 years**. Although usually patchy and irregular, this contributed to an increasing awareness on wetlands, and paying greater attention to them.

10. Monitoring wetlands takes place in protected areas, which represent 0.3% to 22% of each country surface. **There is almost no institutionalized monitoring of wetlands outside nationally protected areas**, except, in Europe, in areas that are designated or earmarked for the Natura 2000 and Emerald Networks.

11. There is generally a poor horizontal and vertical integration of wetlands-related data collected and poor/no correlation with other national sectors and regional experiences. **The current monitoring systems, rather sectoral and country/site specific, may not allow an easy comparison between countries and a good understanding of causes of trends in a broader context at site or country level.**

12. Most existing wetlands monitoring systems do not follow a real M&E framework, and have no, poor or very segmented assessment component, not very favorable to value data collected towards decision-making.

13. **M&E is not often part of the national programme cycle and therefore does not always influence the subsequent planning process through the incorporation of lesson learned.**

14. **Among the reported wetlands components monitored, 47% are related to biodiversity (Birds, fishes and plants mainly), 16.5% to water, 14% to pressures and local sector development and 13% on general conservation issues. Monitoring on habitat is done by only 2.4% of the respondents involved in monitoring.**

15. In the Maghreb and Middle-East countries, **water quantity /quality and land tenure are regularly monitored because of the political, social and economically sensitive dimension of water and land use in these water-poor countries**.

Stakeholders involved in wetlands monitoring

16. **Central and local governments are the key institutions that manage and maintain monitoring systems in wetlands, while universities, public and private institutes, NGOs, site-managers, rangers and volunteers are the key players in operational monitoring activities.** International funding agencies and conventions, through projects, studies, training and reporting requirements, are influential in supporting and encouraging monitoring activities, especially in non EU countries.

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17. **Due to the diverse interest and purpose of the various stakeholders, the approaches in monitoring wetlands are usually segmented**. Most protected areas are still considered as a mere field for studies and methodological tests by scientists, the wetland conservation world is still rooted in its initial ornithologists' background, whilst development agents focus their monitoring activities outside (or around) protected areas, with different methods and terminologies. **This segmentation seriously limits the final benefit for wetlands.**

18. **In countries with a more pronounced decentralized governance and planning process, the monitoring integration improves among stakeholders, partly from species/water entries to a more habitat/ecosystem approach. The EU habitat directives as well as Natura 2000 instruments have been instrumental to this trend.**

19. At the International level, **Ramsar is the key convention that encourages regular reporting and analysis of wetlands status and trends at national level**. National reports for the Ramsar COP are organized through the National Ramsar Focal Points, assigned in each country.

Use of monitoring and evaluation results

20. **Most monitoring systems do not use logical framework and remain relatively disconnected from programme and project cycles, resulting of several cases of "monitoring for monitoring".** Furthermore, most monitoring exercises remains result oriented instead of impact oriented, and poorly targeted in communication. Consequently, an important gap remains between the monitoring results obtained and their real use for decision-making. This leads to a low efficiency of monitoring towards improved planning and management of wetlands.

21. **The real users of wetland monitoring systems (at both national and site levels) are poorly identified and targeted**. However, in countries where the civil society actively participates, the monitoring needs and expectations are relatively well identified due to regular contact, joint work and informal feedback between stakeholders.

22. **Most results of ongoing monitoring systems are not reaching people beyond the conservation sector**. **This is due to several reasons: the persisting separation between the conservation and development and institutional networks (a situation which is however slowly improving), insufficient efforts in delivering communicative messages towards policy-makers and citizens, and poor feedback towards data collectors including site managers.** Furthermore, these results are rarely discussed in the course of national and local planning exercise. Because there are based on sectoral monitoring, they are usually difficult to adapt or adopt in a broader country political agenda and for scaling-up initiatives.

Prospect for Mediterranean wetlands monitoring and evaluation

23. Based on results of questionnaires, there is no real shared view at the country and Mediterranean scale on how to improve the wetland's decision-making process: responses are specific to each person interviewed and there is no generalization. In their proposed

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options to stop the degradation of Mediterranean wetlands, **monitoring and evaluation of wetlands is not a spontaneous demand nor a solution perceived as a priority**.

24. **However, when mentioning the MWO initiative, all interviewed persons are positive about the MWO initiative**. The six main priorities expected to be covered by MWO are: 1. monitoring to disseminate information and lessons learned; 2. monitoring wetlands status and trends; 3. management tool for planning; 4. enhance analysis and interpretation to explain changes in wetlands. The main expected benefits reported are: 1. mean to encourage national decision-makers towards wetlands; 2. improved wetland site management; 3. feeling part of the Mediterranean wetlands network; 4. improve knowledge and; 5. better project and programme planning by incorporating lessons learned.

25. Among reported monitoring themes to be covered by MWO, **the three main shared priorities at the Mediterranean scale are: conservation/development integration, explaining causes of changes in wetlands and monitoring water issues.** Monitoring ecosystem/habitat and biodiversity/species are reported as secondary priority: because without addressing first priority monitoring, second priorities often remains for the sake of monitoring without much benefit for wetlands. The analysis by sub-region shows that water issues and analysis of causes to explain wetland trends are particularly important for North Africa and Middle-East countries. Biodiversity (other than bird) monitoring is important for some Balkan countries involved in the ecological network process to survey and identify Natura 2000 sites. Integration of wetland management within national and local planning process is specially reported in EU and Balkan countries. Wetlands and ecotourism is a topic that interest countries developing the tourism sector such as Croatia, Israel, France and Morocco. At the local level, sustainable tourism including ecotourism is developed in almost all countries.

26. **Out of the monitoring themes already covered by MWO, conservation-development integration and ecosystem integrity score the highest interest, followed by biodiversity and drivers and pressures, and then ecological services and adaptation to global changes**. The analysis by sub-region show that Balkan and EU countries are specially interested by more integration between conservation and development, while North Africa and Middle-East countries have a more pronounced interest in developing monitoring on ecosystem integrity and drivers and pressure.

27. **For most countries represented in the survey, water is a key wetland component for decision making which will require special attention**.

Strengths in current monitoring and evaluation situation

28. Within the existing monitoring systems in use, **the main identified strengths are the availability of committed people – including bird watchers - in each country** (within public institutions, Universities, NGOs, associations, consultancies), willing to implement monitoring and to share results. **Most contracting parties of Ramsar prepare national reports** on wetlands that provide comparable updated wetlands situation in the region. **International and regional instruments, including EU directives** and legal frameworks oblige – or influence - national governments to progressively incorporate environmental and biodiversity monitoring within their development and conservation processes.

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29. It is widely recognized that since the last two decades, **awareness and education on environmental issues are improving overall among decision-makers and public at large.**

30. In about 40% of countries covered by the study, **there are cases of progressive adaptation of policy, strategic and regulatory mechanisms towards wetlands in some countries**.

31. **There is a clear interest of partners and users surveyed in participating in, and benefitting from a Mediterranean wetlands monitoring system**.

32. **Birds, and especially waterbirds, make-up the most robust and sustained biodiversity component monitored in Mediterranean wetlands**.

33. In general, **data collected for monitoring are reported to be of good to medium quality and usually good enough for decision-making.** Data storage seems to be handled successfully.

Weaknesses in current monitoring and evaluation

34. **Wetlands issues do not feature high on the political development and conservation agendas**, limiting the interest of decision-makers in supporting national wetlands M&E systems**.**

35. **All persons interviewed report general ongoing degradation/loss of wetlands in their countries, except for some large wetlands with strong protection status.** However, M&E is not mentioned as a powerful leverage to reverse the situation.

36. Even though respondents are interested in the MWO initiative, **the majority did not spontaneously mention a regional monitoring tool as a priority solution to limit the ongoing degradation of wetlands. Consequently, their participation and contribution to MWO may be relatively passive at the beginning.**

37. The **main bottlenecks** identified within the existing national wetlands monitoring systems in the Mediterranean are: 1) upstream, the **lack of an integrated and impact-oriented monitoring framework to help decision-making**; 2) downstream, the **poor communication and feedback of the current monitoring data and results**; 3) within the monitoring system, a) the **important unbalance in topic covered**, e.g. the deficit of data on wetlands ecosystems and habitats, biodiversity beyond birds and socio-economy; b) the **poor monitoring of wetland outside protected areas**, especially in non EU countries, and; c) the **poor and low/medium quality of data analysis and interpretation towards decision-making**.

38. There is a wide recognition that **positive trends and sometimes success in maintaining wetlands is usually linked to a narrow interest and need to keep most sensitive services for people such as water and regulation services against flood and not** for nature protection itself.

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39. **Most data collection is sector and component-based, poorly analyzed in a broader context, which does not allow mainstreaming wetlands into the local and national development context**.

40. There is a **limited dissemination and use of results and lessons learnt from current wetlands monitoring exercises, which impacts negatively the efficiency of monitoring and its usefulness for subsequent planning and decision-making.**

41. **In some countries** (31% of the countries covered by the study)**, there is limited confidence and synergies between stakeholders from public, private and NGO institutions working in wetland protection issues which impact negatively on work efficiency, results and critical mass of influence towards strategic and policy decisions.**

Follow-up by MWO

Wetlands monitoring and evaluation study

- The main findings and results of this study will be incorporated in the first MWO report to be produced early 2012. The MWO may conduct a similar exercise in a sample countries every 5 years to update the wetlands monitoring situation and needs and to analyze changes.

Wetlands monitoring and evaluation system and need

- Since the causes of changes in wetlands, diagnosis and analysis of data, targeting, communication and feedback are the reported weakest parts of the current national wetland monitoring systems, the MWO should concentrate on these dimensions to add value to the national monitoring systems;
- Results show that the analysis of data may be difficult without taking into account a broader context (policy, socio-economy, etc.). The MWO and MedWet secretariat may help, at the regional level first, to incorporate the main cross-cutting issues into the analysis of collected data at the wetland level.
- To enhance the efficiency and the sustainability of wetland's monitoring, the MWO may encourage national impact oriented M&E system as well as alliance and synergy between M&E stakeholders
- Since no national institution in the region has conducted a wetlands M&E needs assessment of their potential users, this MWO assessment may help the countries by providing them a regional reference that could be further detailed by country.
- Overall, freshwater is the most sensitive (at social and economic levels) wetlands component that fosters important political decisions. Special attention should be given to water issues, especially in water-poor countries.

Targeting

- A majority of the Ramsar/MedWet focal points are also involved in some national or sub-national planning processes. This situation is favorable because of the potential direct link between the decision making and the land use planning. In the other cases, the MWO may identify additional key stakeholders linked to Ramsar/MedWet focal persons to help in influencing Wetlands issues in intersector programme review and planning exercises.
- The sectorial Ministries/Authorities in charge of wetlands protection are not always involved in land-use planning and management decisions. In this case, the MWO –

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CU may identify, together with national Ramsar/MedWet focal persons, the persons involved in land issues and management and disseminate MWO monitoring results to help their decision making.

- In protected areas, the wetlands management plans, when implemented, are a practical tool to carry out conservation activities. The Observatory, with Ramsar and MedWet, may have a facilitating role to develop wetlands management plans for demanding countries.
- The local development plans realized at communal/municipality level are potentially more integrative plans taking into account environment, social and economic components, in particular in Morocco, Tunisia, Lebanon and in Balkan countries. Given the poor environmental knowledge of the teams guiding these planning exercises, the partner's members of MWO may invest more in environmental/wetlands training of these teams.
- The coordination unit of MWO and MedWet secretariat may encourage the development and update of realist national wetlands-related strategies and policies shared among key sectors, and help in monitoring their implementation.
- Results show that in several countries, there is a limited coordination between the different institutions directly or indirectly influential for wetlands protection, which may reduce the efficiency of monitoring. This situation confirms the need to identify key cross-cutting influential stakeholders, and to organize timely communication and feedback to help them in their decision making and planning process.
- Sustainable tourism including eco-tourism is considered an appropriate option to merge conservation and development issues in wetlands and to keep interest of decision-makers through the tourism value-chain. The MWO could facilitate the exchange of experiences and provide specific studies on this issue.

Monitoring harmonization and bridging gaps

- There is a relatively shared need in harmonizing monitoring and data collection methods and tools, on which the MWO may help in the process.
- Given the high number and diverging wetland's related components monitored (34 components in total) reported in the 16 countries, it is difficult to identify priorities in each country and by group of countries. For a more robust regional and sub-regional wetlands diagnosis and for a comparison between countries, there is a need to decide on the harmonization of priority components.
- The main reported gap in data and information are for ecosystem/habitat dynamic, analysis and interpretation of collected data, water quality as well as drivers and pressure explaining changes in wetlands. Based on these findings, interviewees have identified the themes that the MWO could monitor in priority; in particular ecosystems, drivers and pressures.

Communication

- Respondents reported that there are a total of 14 ways of accessing information. Among them, the MWO could have a comparative advantage in delivering data/information through a website and reports (periodic and thematic).
- Given the rather segmented information channels used by the different stakeholders, the MWO should pursue its effort to share information using most appropriate and wide audience channels.
- About 43% of respondents (other than Ministries) are involved in regular wetlands monitoring. The fact that 82% of these persons monitoring wetlands also influence directly or indirectly policies should be taken into account in the communication and working strategy of MWO, as bottom-up influence towards MWO objectives.

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I. Background information

In March 2009, in the course of the second International workshop of MWO, it was decided to launch a wetlands monitoring and evaluation situation and needs assessment amongst a sample of MedWet countries. This survey, mentioned by the participants as the first activity of the MWO calendar, aimed at two main results: **provide a reference of wetlands monitoring and evaluation situation at the start of the MWO implementation phase**; and **identify needs, expectations and priorities from partners and users of MWO**. Additionally, this survey also intended to inform on monitoring and evaluation communication, feedback as well as use of monitoring results.

The project proposal and the questionnaires (1 for decision-makers and 1 for other stakeholders involved in wetlands) were made between April and July 2009. Following the project approval by the French Government (previously MEEDDM, now MEDDLT) in November 2009, the first survey campaign was launched in Lebanon, Turkey, Egypt, Israel, Tunisia, Morocco, Algeria, Greece, Palestinian territories and Jordan. The second phase of the survey started in October 2010, supported by the French Government (MEDDLT) and analysis was completed in June 2011. This second phase covered Syria, Croatia, Bosnia and Herzegovina, Albania, Spain and France. All together, **the survey covers about 60% of the MedWet countries (16 out of 27 countries)**.

The 60 completed questionnaires include 22 decision makers, 4 financing agencies, 16 NGOs, 4 research and monitoring Institutes, 6 site managers of protected areas, 4 public agencies (water, environment), 1 independent expert, 1 project manager and 2 professors from University.

In the sample, most stakeholders not involved in political decision-making (NGOs, Institutes, site managers, experts, University and specialized agencies) are working both at national and site levels (52%), while 23% work at site level, 16% at sub-regional level, 3% at site, national and regional levels, 3% at national and international level and 3% in a specific national ecological zone.

These stakeholders reported **29 different specific levels of expertise**, the main ones being **Nature conservation/birds** (15% of cumulated responses), **education, awareness and training** (13%), **site management** (9%) and **conservation and development** (8%). The grouping of this expertise shows that conservation and development (25%) and planning, management and monitoring for conservation (24%) are the key professional areas covered, followed by communication and transfer of knowledge (13%), research (11%), policy and strategic support (5%) and ecotourism (4%). Other expertise (18%) gathers different topics representing less than 2% each. The analysis by sub-region show that there are much more diversified areas of expertise in EU and Balkan countries (27 types of expertise linked to wetlands) compared to the ones in North-Africa and Middle East (9 types of expertise). Awareness, training, education, planning, management and monitoring are key expertise reported by respondents in northern Europe, while nature conservation/bird, research on species and site management are common in the southern part of the Mediterranean basin.

Out of their **31 activities impacting on wetlands reported by these stakeholders**, the main specific activities are: **monitoring** (14% of cumulated responses), **site management** (8%), **conservation and development** (8%), **policy dialogue** (6%), **bird counting** (6%), **conservation of sites** (5%), **management planning** (5%) and **training** (5%). The grouping of these activities by broad theme show that wetlands management activities comes first

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(21% of respondents), then monitoring (15%), education, awareness and training (14%), conservation and development (14%), policy, strategy and advocacy (13%) and biodiversity and species (12%). The analysis by sub-region show that North Africa and Middle-East have a higher proportion of expertise on species/birds and site conservation while integrated conservation and development programmes, policy dialogue and training are more prominent in Balkan countries.

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II. Results of the survey

As mentioned before, most responses from questionnaires are diversified and specific to persons interviewed. Consequently, we have limited our interpretation and analysis of information collected when results were obvious for interpretation, through correlation of responses, and through triangulation of questions.

II.1. Reported wetlands situation and trends

Main shared concerns about Mediterranean wetlands situation

1. Keep wetlands and their biodiversity as well as their ecological services in the continuous demographic increase and socio-economic development are the main perceived challenges facing Mediterranean wetlands as reported by the interviewees.

2. Among the 18 country-specific challenges reported on wetlands, water scarcity, agriculture, overuse of resources, urbanization and land encroachment are of most concern.

3. Respondents reported, since the last few years, a relative decrease of international and/or national budget for environment. In some countries, causes are also due to budget drained for national security agenda and other priorities such as employment, poverty reduction, education and energy. The situation has worsened since January 2011 in line with the revolutions in some Arab states.

4. The wetlands or the components of wetlands are protected and managed most of the time if services are considered and perceived as strategic and beneficial for the countries and local communities: water (domestic water, irrigation, fisheries, industry, etc), income (eco-tourism, fish production, etc.) and employment (fish sector, gathering, tourism value chain, etc.). The future ecosystem approaches may take into account these development interests for policy influence.

5. In the Southern parts of the Mediterranean and in the Middle-East, water is the most sensitive component of wetlands ecosystem and an important parameter taken into account in decision-making.

6. Wetlands enjoys more protection, law enforcement and monitoring in formal protected areas under the Ministries and Authorities in charge of protected areas (0.3% to 22% of national territories depending of countries).

7. The main reported drivers impacting on wetlands changes are linked to demographic increase and economic development. Main related pressures are urbanization,

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infrastructures and agriculture sectors impacting most of the time negatively on wetlands surface as well as on quality of values and functions of their ecosystems.

8. Sustainable tourism including ecotourism in wetlands is rather perceived positively by all partners and users, including social and economic benefits along the tourism value chain. The development of this sector is also an entry to value local culture and to generate income for both communities and NGOs involved in this activity. However, tourism may take place in attractive wetlands only and the equilibrium between benefits and threats is usually very tight. Some countries such as France, Spain and Israel start to evaluate ecotourism impact on wetlands.

9. The Ramsar label is especially useful at site level for awareness, international image support, to feel part of an international network and to boost national agenda towards wetlands protection. Some stakeholders mentioned their interest in having more interaction, visit and exchange with Ramsar and Medwet staff.

10. Issues of climate change are known but these are not perceived as current major causes of concern in monitoring wetlands. The preventive actions against effect of climate change on wetlands are progressively taking place, especially in coastal areas (sea rise).

11. With increasing water scarcity, policy and regulatory mechanisms are progressively adapted. Sea water desalinization is seen as a solution by some countries to decrease pressure on wetlands freshwater. This option may pose the question of production cost, level of chemical involved and ecological side effects on site.

Wetlands policies and strategic support

12. In the 16 Mediterranean countries covered, wetlands do not feature high on the political and strategic development and conservation agendas. This situation comes from a series of factors. 1. Main development and conservation policies and agenda as well as public institutional set-up are not based on specific ecosystem but on economic, social and environmental considerations; 2. Economic and social development are the driving agenda of most countries, with economic growth, employment, food security, poverty reduction and national security being the priorities; 3. Wetlands represent about less than 3% of the entire terrestrial surface of the basin, which represent a very small part in terms of land use and planning for decision-makers; 4. In most non EU countries, wetlands protection and wise use are still often understood as a Ramsar process for protected areas only, and then not known or poorly communicated outside the conservation network and in non Ramsar sites; 5. Nature is still considered, especially in southern countries, as a free capital in development options, and water component of wetlands captures high interest for irrigation, water supply, tourism, industry, etc.; 6. Ramsar focal points are not always visible, not institutionally strong or may be less involved in decision-making compared to EU, CBD, MDG and OECD focal points. However, considering the small percentage (less than 3%) of the Mediterranean areas covered by wetland, cumulated efforts since 1971 is bearing fruits. These results are recognized by most wetlands-related stakeholders involved at policy level: improved awareness; continuous increase of protected wetlands sites and areas; update and improvement

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of policy/strategic documents related to wetlands; increased capacity and participation of civil society in wetlands protection.

13. The political analysis by sub-region in relation with wetlands is difficult. Some elements can be extracted from the survey: Lebanon, Palestinian Authority and Israel put national security at the top agenda, decreasing the financial share for other sectors including environment. Since December 2010, security is an increasing concern in Tunisia, Libya, Egypt and Syria. In Egypt, Tunisia and Morocco, poverty reduction, including food security and employment is the driving agenda, done with a developing diversified fiscal base (tourism, industry, new technology, niche markets, agriculture, remittances, etc). In this agenda, conservation is considered if providing benefits to people. Algeria and Libya have policies based on narrow fiscal base from oil and gas, with still highly – while decreasing - subsidized economy. Environmental concerns are not really shared among sectors. Lebanon economic vitality and quick urbanization and infrastructure development is highly supported by efficient business structure, the large community of expatriates and by Arab and International funding agencies. This is done at the cost of the environment, benefiting of poor public support and penalized by the poor enforcement of environmental laws and regulatory instruments. Israel is interested in high education toward high technologies and skilled labor. Their remaining wetlands are mostly managed based on water availability/demand, including developing sea water treatment technologies. In Syria, food security, partially through irrigated agriculture, is high in agenda, with the consequence of high water exploitation index and decrease of water stock. In Turkey, while the Wetlands unit of the Ministry of Environment and Forestry is well staffed and motivated, higher political agenda is on economic development and preparation for the future, including high human-driven water consumption. EU countries and countries in EU accession process are following the EU directives. Their level of implementation depends on political will, natural capital base, and country economic situation (i.e. impact of the financial crisis). Croatia and Bosnia and Herzegovina are benefiting of a relatively favorable ratio of fresh water stock per capita that help to save wetlands in the current situation. However, hydro-electric potential is seen as a main asset for future national development, and implementation of hydro-electric projects may conflict with watershed approach, proposed Natura 2000 site process and management of protected areas if done without sufficient participation and selection of environmentally friendly measures and options.

14. National decision-makers reported 22 different cumulated policies/strategic documents supporting wetlands protection and wise use. Among them, the national policies, strategies and action plans for biodiversity are the most common policy frameworks supporting the protection of wetlands, especially in non EU countries. However, 44% of the respondents do not really know if these documents make specific references to wetlands. Only about 8% of them indicated that wetlands are mentioned in national wetlands management strategy. About 8% of them also indicate specific wetlands references in national water policy documents while 7% mentioned wetlands management plans. Only 5.6% of them mentioned wetland inter-sector/Ramsar committee, which is far bellow the current percentage of MedWet countries having a wetland committee (35%). Clearly, at the Mediterranean level, broader environmental policy framework (biodiversity) encompasses specific wetlands specific policy or strategy. Existing wetlands committees are not always operational and, alone, do not seem to foster large inter-sector audience. However, together, the Ramsar and MedWet guidelines, the wetlands technical committees, the

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wetland's strategies and management plans provide a critical mass of influence for wetland protection. Wetlands management plans are the most operational support to wetlands protection but reported only for some Ramsar sites.

15. The analysis by sub-region shows that in North Africa and middle-East countries, the national biodiversity policy, national wetlands strategy, site management plans, technical wetland committee and Ramsar/Medwet guidelines are the main decisional influencing factors when coming together. In Balkan countries, the national planning guidelines and process and the EU pre-accession instruments are keys in addressing wetlands. In EU countries, EU directives and instruments (Habitat, birds, water, Natura 2000), wetlands strategies and committees and cross-cutting programmes (i.e. sustainable agriculture) are keys in supporting wetlands matters in the respective nations.

16. Out of the 22 criteria that politicians/decision-makers have mentioned for the design of wetlands related policy, socio-economic development consideration and water issues are the most shared parameters. This result indicate the special attention given to the water component of wetland and the recognition that socio-economic development can not be addressed separately from wetlands protection and wise use (confirmed latter in other results). Status and trends of wetlands, threats, land tenure and use and Ramsar parameters are also reported in all sub-regions. Other criteria are more country specific. Criteria linked to international conventions and instruments (Ramsar, EU, CBD and IBA) are reported by 15% (cumulated) of the respondents.

17. Decision-makers informed that they access this above-mentioned information on those parameters mostly through internal public database and documents (23%), personal contacts (16%), documents on wetlands status (8%) decentralized government (8%), and university (8%). Other sources include NGO, direct data collection, financing agencies, bibliography, public statistics, experts, wetlands committee, Ramsar data base, site managers and public monitoring reports.

18. At the Mediterranean scale, there is no shared view among decision makers on types of additional policy, strategic and legal instruments needed to improve wetlands protection and wise use. In non EU countries, response ranges from basic official national definition of wetlands, to encourage Natura 2000 process, more management plans, budget line on wetlands, update of existing laws, increased awareness among policy-makers, etc. In EU countries, EU directives and instruments are the main drivers of improvement that are adapted in national contexts.

19. Implementation of wetland' related policies are reported as poor overall. About 40% of decision-makers report poor implementation while other 32% indicate implementation of mixed nature. About 16% of respondents indicated relatively favorable implementation of policy in case of political will and when it was linked to activities approved and budgeted in wetlands management plans. In some non EU countries, policies are mostly supported by international funding (Egypt, Morocco, Tunisia, Lebanon, and Syria) through government or NGO implementation. The cause of poor implementation are various, with main ones being: 1. Insufficient funding; 2. lack of mainstreaming of conservation in development agenda, 3. poor conservation priority in political agenda; 4. insufficient coordination; 5. long delay between policy its and implementation; 6. insufficient "conservation" authority of ministries in charge of conservation outside protected areas; 7. competing activities

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between sectors; 8. insufficient awareness and capacity. Conversely, successful implementation of policies is reported to be associated with appropriate and financial planning process, implementation of EU directives, implementation of ecological network process and appropriate legal framework.

20. About 50% of the interviewed decision-makers indicate some annual monitoring of wetland policy in protected areas, including measurement of outcome and impact indicators. However, the qualitative information show that systematic monitoring is taking place only in some protected areas and that most monitoring is not really at the outcome and impact levels but more at the status level, i.e. biodiversity (bird, fishes, plants) and abiotic component levels (water quantity and quality). The remaining 50% of the respondents indicate no monitoring or a monitoring system under construction. This result do not indicate that monitoring is taking place in only 50% of countries, but that only 50% of wetlands-related decision makers are aware of it. Qualitative information indicate that sometimes, results from field monitoring are not channeled up to policy level but remain at local government, NGO and university levels. The qualitative information also confirms that there is almost no institutionalized monitoring outside protected areas, except in Natura 2000 sites, during their identification process and when their management plans are implemented. Thus, the national wetlands monitoring systems in Mediterranean countries remain relatively attached to protected areas and not always available or known at policy level for decision making and subsequent improved wetlands planning.

21. About 26% of stakeholders aware of the wetlands monitoring report that results are effectively used by central and local governments to improve wetlands related policies and programmes. About 20% of respondents have no idea on the use of monitoring results while 18% believe they are used by universities, schools and NGOs. Only 5% of respondents think that monitoring results are used by site managers, and 4% by the end users. Overall, this result confirms the low efficiency of monitoring exercise for policy improvement, and the poor feedback of monitoring results down to field and grassroots' people.

22. Among other qualitative information gathered during the survey, some issues have or may have direct and indirect impact on wetlands. 1. The lack of law enforcement and control towards environment and nature is considered as one of the main causes of degradation of the natural and semi-natural ecosystems, especially in Lebanon, Albania, Bosnia and Herzegovina, Egypt and Syria; 2. the security situation and agenda (Lebanon, Israel, Algeria, and now Syria, Egypt, Tunisia and somehow in Morocco) may impact directly on natural assets or indirectly due to new priority agenda, military budget transfer, less control of protected areas, etc.; 2. Illegal hunting has been mentioned as one of the important threats for wetlands waterbird in Lebanon, Syria, Albania, Bosnia and Herzegovina, and Croatia; 3. The migration and expatriation of people, including displaced people from non secured areas, may impact – seasonally or temporarily - on natural resources of the recipient countries such as Tunisia, Egypt, Turkey and Lebanon.

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II.2. Wetlands monitoring and evaluation situation assessment

Stakeholders involved in wetlands monitoring process

23. At the Mediterranean level, rangers, site managers and decentralized line ministries staff are the key persons involved in monitoring of wetlands. The proportion of rangers and site managers involved in monitoring is higher in countries with relatively centralized governance while de proportion of decentralized ministries and NGOs involved in monitoring increases with decentralized governance (Europe and some Balkans countries, Israel). In Balkan regions, some countries such as Slovenia, Croatia and partly in Bosnia and Herzegovina, a state institute acts as implementing and monitoring agency of the Ministry in charge of wetlands. A similar system also exists in Tunisia.

24. At the country level, the ultimate responsible of the monitoring process of wetlands is most of the time (42%) the head of the department/Authority in charge of wetlands monitoring. In 26% of the countries, this task is divided between sector ministries, without real integration and analysis of the entire monitoring results. Monitoring is also organized at the decentralized government level, with consolidation at the central level (Spain) or without central consolidation (Bosnia and Herzegovina). About 15% of countries report no real monitoring or at best short-term project-based monitoring, either in protected and not protected areas (Bosnia and Herzegovina, Syria, Lebanon and Albania).

25. About 65% of NGOs, universities, institutes, site managers and experts involved in wetlands programme and involved in this study performs monitoring, either on regular basis (43%) or occasionally (22%).

26. Out of the 27 reported topics monitored, water, animal species and birds are the most monitored. Fishes, vegetation, conservation and biodiversity are less monitored. Clearly, monitoring of ecosystem, ecosystem services, pressures and socio-economic matters are very poorly covered.

27. A majority (76.5%) of the respondents from the Government influencing decision-making and involved in wetlands monitoring are also involved in national or sub-national planning process. Their involvement may cover the national planning exercise while in some cases, they only influence within the protected area planning. This connection between monitoring and planning is seen as very favorable to incorporate lessons learned in subsequent wetland planning process (this is key in programme cycle for the efficiency of the monitoring and evaluation exercises).

28. However, the sector Ministries/Authorities in charge of wetlands protection (Environment, agriculture, National Parks) are usually not the final authorities for land use planning and management decisions. Higher authorities are Prime Minister office, Ministry of Interior, Council of Ministers, Planning Ministry or Commission or Ministry of physical planning. However, in about 29% of countries, they can be part of the decision through an inter-ministry committee. This result indicates a potential discrepancy between the recommendations shared vertically within the Ministry in charge of Wetlands and their incorporation in subsequent land use/management planning of other sectors or in local planning process.

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29. In protected areas, the sector management plans (including wetlands management plans) are a practical tool to implement conservation activities. This tool concerns only a small portion of the protected areas (Protected areas cover about 7% of the national territories in average the Mediterranean basin, ranging from 0.3% (Bosnia and Herzegovina) to 25-28% (France, Italy)).

30. Respondents from government reported 15 types of institutions and other stakeholders most influential for wetlands protection. Most of the time, there is more than one influential institution by country (Two to six institutions by country having some power over land). The Ministry of Agriculture and the Ministry of Environment are key for wetlands-related issues in 42% of the countries. However, coordination between the two ministries is not always efficient when responsibility on wetlands is shared between these two ministries (Wetlands (not Ramsar) and Ramsar sites under different Ministries). In most countries, the Ministry of Interior, the local governments, the Ministry of planning, the Ministry of finance, the Prime Minister office are key with a horizontal mandate over sector Ministries on land, planning and budgeting issues. In Croatia and partly in Bosnia and Herzegovina, the Ministry of environment is also responsible for physical planning, that facilitate "institutionally" environmental integration at the planning stage. In decentralized countries, municipalities, local government, wilayas, mouhafaza, caza, have their own authority in land use and distribution. In some countries southern countries such as Algeria, Morocco, Lebanon, farmers, landlords, tribal committee, religious groups and local traditional management system (Hima (Lebanon), Touiza (Algeria)) may also be powerful in decision-making. In Lebanon, religious confessions linked to politics are also influential in land use and protection/development decision. In developing countries, funding agencies may also be influential through their conditions to access to aid. Influence is also strong in some countries such as Egypt and Algeria through rangers, local authority and police having the mandate of control. NGOs specialized in wetlands are either few and/not strong and not perceived influential by governments except in some countries like France, Spain, Italy, Jordan, Israel, Croatia and Tunisia. In other countries with political transition with laws poorly enforced such as in Bosnia and Herzegovina and Lebanon, few motivated NGOs maintain, with international support, conservation, development and monitoring activities in some wetlands. In conclusion, there are reported institutional and coordination discrepancy within the decision making process between sector ministries and their decentralized offices (vertical) in charge of wetlands, and horizontal ministries in charge of land, planning and finance. This discrepancy may reduce the efficiency of monitoring in the sense that the lessons learned and shared vertically may not influence the horizontal decision making process.

Monitoring systems in use

31. As general statement, there is a poor horizontal and vertical integration of wetlands-related data collected and poor/no correlation with other national sectors and regional monitoring systems. The current national wetlands monitoring systems, rather sector and country/site specific, may not allow an easy comparison between countries and a good understanding of causes of trends in a broader context at site or country level.

32. Only 26% of institutions involved in wetlands monitoring use a monitoring framework linking data collection to results to be achieved, conservation objective and vision of

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the institution. About 17% of institutions have no monitoring framework but rely on component specific protocol defined by national or international organizations. Field staff (site managers, NGOs, experts) report that without integration of socio-economic and major cross-cutting dimensions (policy, governance, food security, etc.), wetlands-related diagnosis and analysis remain too sectoral and not mainstreamed in the overall development agenda. Most monitoring exercises remains result (component) oriented instead of impact (conservation, socio-economy) oriented, and poorly targeted in communication. Consequently, there is an important gap between monitoring results and their use, explaining a low monitoring efficiency towards improved planning and management of wetlands.

33. When a monitoring framework is used, a total of 18 monitored topics have been reported. The most shared themes are water and biodiversity (species, birds, fishes and plants mainly). There are no or almost no monitoring on wetlands ecosystems, human development of communities linked to wetlands, agriculture and threats impacting on wetlands.

34. Within the existing monitoring systems, the main identified strengths are the availability of committed people – including bird watchers - in each country (within public institutions, Universities, NGOs, associations, consultancies), willing to implement monitoring and to share results. International and regional instruments, including CBD, Ramsar and Barcelona conventions, MedWet and IBA, provides guidelines and inputs towards a more harmonized, centralized and comparable monitoring. In the northern side of the Basin, the EU directives and legal frameworks oblige – or influence - national governments to make more efforts in incorporating environmental and biodiversity monitoring within their development and conservation processes.

35. The main bottlenecks identified within the existing national wetlands monitoring systems in the Mediterranean are: 1) upstream, the lack of an integrated and impact-oriented monitoring framework to help decision-making; 2) downstream, the poor communication and feedback of the current monitoring data and results; 3) within the monitoring system, a) the important unbalance in topic covered, e.g. the deficit of data on wetlands ecosystems and habitats, biodiversity beyond birds and socio-economy; b) the poor wetland monitoring outside protected areas, especially in non EU countries, and; c) the poor and low/medium quality of data analysis and interpretation towards decision-making.

Monitoring sites

36. Among the 85% of countries reporting regular wetlands-related monitoring activities, all of them implement activities in protected areas (National, regional and nature Parks, and reserves), mostly in some large and internationally important wetlands with labels (Ramsar, MaB and World Heritage), representing in average less than 1% of the national terrestrial territories. In other wetlands in and outside protected areas, some monitoring takes place in the European Union in line with Natura 2000 instrument, EU directives and environmental legal framework attached to development sectors (agriculture, urbanization, water, etc;). Balkan countries (Croatia, Macedonia, Albania, etc.) are influenced by the EU directives and apply EU instruments including the ecological network concept to identify future Natura 2000

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sites. In developing countries, environmental monitoring activities outside protected areas takes place only in response of specific problem reported by other sector ministries (i.e. Egypt, Algeria, Albania), or complain channeled through the civil society.

37. Field monitoring takes place through public decentralized structures (park office, rangers, etc), NGOs and universities, usually in the most attractive sites because of their biodiversity, international recognition, landscape, eco-tourism attraction.

Data access and collection

38. It was found that the categories of data collectors monitoring wetlands are country specific. In relatively centralized countries of the southern and eastern parts of the Mediterranean, site managers, rangers, public agencies and laboratories form the bulk of collectors. In more decentralized countries, there is higher proportion of NGOs, experts, universities, researchers and volunteers formally involved in data collection. In some Balkan countries such as Croatia and Bosnia and Herzegovina, state agencies implement or coordinate monitoring for their Ministry. Overall in the sixteen countries studied, out of the 11 categories of data collectors reported, NGO staff, experts/private consulting firms, university/Institute researchers and students, volunteer, site managers, rangers and public agencies are the most common collectors (89% of the collectors).

39. All respondents have reported a total of 14 ways for accessing data, including through public sources (15.6% of cumulated responses), web sites (14.3%), NGOs (13.1%), universities (9%), researchers (8.5%), experts (8.5%), report (7.8%) and personal contact (7.8%).

40. Only one third of the institutions surveyed have organized or are part of a formal and open network of stakeholders for data collection and access, while 29% have a restricted network (internal or on request). The remaining 27% of institutions have not developed a formal network of stakeholders to access and share data.

41. Most NGOs in the Mediterranean Basin have developed an internal and relatively open system and network to access and share monitoring data and information. Most public institutions, especially in North Africa and Middle-East, have a more restricted network and system (within the public services), a network under construction or no network. About 60% of the respondents are not satisfied or not completely satisfied by the efficiency of these systems and by the level of data that they can access. Systems and network developed by NGOs are reported to be the most efficient.

42. Among the reported wetlands components monitored, 47% are related to biodiversity (Birds, fishes and plants mainly), 16.5% to water, 14% to pressures and local sector development and 13% on general conservation issues. Monitoring on habitat is done by only 2.4% of the respondents involved in monitoring.

43. The main biodiversity data collected is bird (counting, ringing, nesting, study, migration), followed by fishes and plants. Others are amphibians, reptiles, invertebrates, bat, butterflies, dragonflies, plankton, etc.

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44. In Maghreb and Middle-East countries, water quantity and quality and land tenure are regularly monitored because of the political, social and economically sensitive dimension of water and land use in these water-poor countries. Water monitoring may be done by several institutions (Ministry of irrigation, Ministry of water resources, Ministry of Health, Public water agencies, Universities, etc.). Water is monitored for medium and long term purposes or for quick decision-making process in specific sites (i.e. Hula (Israel), Ichkeul (Tunisia), Aammiq (Lebanon), Camargue (France)).

45. There are 32 specific categories of data and information reported to be insufficient or missing at national and/or site level. When grouping these categories, main reported deficiencies are reported for environmental monitoring, including data analysis and interpretation (20.5% of respondents), biodiversity (19%), ecosystem/habitat dynamic (14%), water quality (12%), drivers and pressure explaining changes and status of wetlands (6%). Other missing components are country and institution specific and can not be analyzed at this stage. An analysis by sub-region shows that water, ecosystem dynamic, data analysis and socio-economy are the most needed in North Africa and Middle-East. In Balkan countries, there is an increasing need to build environmental monitoring system and biodiversity data base in line with Natura 2000 preparation and EU accession. Socio-economic data are often incorporated in environmental monitoring in some Balkans countries because institutional set-up encourages sustainable development in conservation. In Europe, responses about the missing data are more country specific. For the 16 countries covered by the study, about 30% of respondents reported that they could not access this missing information through external sources while 40% could have access to some information through public sources (12.5% of cumulated responses), projects (12.5%), NGO (9.5%), expert (9.5%) and universities (6.2%).

46. About 33% of NGOs and Institutes integrate the socio-economic and local communities' components in their programme, but almost none of them, except in some Balkan countries (Croatia, Slovenia), collect socio-economic data on regular basis. However, most of these NGOs and Institutes are convinced that a priority in additional data collection and monitoring should allow measuring more food and socio-economic indicators.

47. In most countries, national wetlands inventories are not completed or not updated. Respondent indicates that wetlands inventory and wetlands status are information needed to formulate wetlands policies and strategies.

Data quality control and storage

48. Overall, quality of data collected is reported to be good to medium. The quality is perceived good enough for use for biodiversity and water components but sometimes questionable for habitats and ecosystems. The quality of data collected is reported to be dependent of capacity of staff time/human resources and dependant of the component to be monitored. Some respondents indicated that in fact, they are good in some protected areas only, or good but not regularly collected, or not in sufficient quantity for robust interpretation and use. The analysis by sub-region show that in countries with important participation of the civil society (i.e. EU countries, Croatia, Israel, Turkey), good quality data are collected by a wide range of stakeholders

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including NGOs and private experts and Institutes. In Lebanon, the environmental sector including wetlands remains segmented between public institutions, NGOs and universities that are still working in parallel with a project based approach, with different methods, largely financed by international organizations. It is then difficult to know if these data are controlled and if they can be compared between each source. In less democratic countries, NGOs are not always recognized by the public institutions (government and universities) for quality data collection. This is a partly the consequence of the governance system and then the difficulty of NGOs to develop their expertise and professionalism under this condition (i.e. Egypt, Algeria, Syria).

49. Historical and current data are usually stored and available, but often in different format and software and then difficult to compare, analyze and correlate together. The survey could not assess if data are regularly kept along with staff turn-over, computer breakdown or changes, and institutional changes. Security of storage of data is usually a serious issue in several developing countries in Africa and Asia.

50. Data quality control is not systematic and depends of three main factors: 1. the level of interest and use at national level; 2. the level of professionalism of institutions involved in data collection; 3. The governance system to incorporate civil society and private sector to contribute to it. Institutes and Universities are usually recognized for their serious quality control. In EU countries, most specialized NGOs are recognized for their professionalism while in less decentralized countries, they are only recognized for good bird data quality control. Site managers and ecologists assigned to protected areas are usually involved, amongst other duties, in water, land tenure/use and experimentation data control.

51. In most countries, free access to data is usually limited to the network of the institution collecting data. Most data systems are not totally open to public. The system is more open in Europe and OECD countries compared to other countries, partly due to their more decentralized governance and directives to encourage free and transparent public assess to data.

Data diagnosis, interpretation and analysis

52. Overall, respondents reported poor or medium-poor diagnosis/analysis of data collected, due to a mix of several factors. Among them, the most shared are: 1. the continuity of traditional result-based and sector monitoring systems not conducive to policy-decision; 2. lack of time and capacity of human resources; 3. lack of appropriate monitoring and assessment framework; 4. difficulty to analyze data without monitoring the main other contextual elements (threats, socio-economic development, policy, regional context, etc.); 5. too sectoral diagnosis for robust analysis and recommendations; 6. not timely interpretation, usually too late for real action; 7. when human resource is limited, priority is given to data collection. An analysis by sub-region show that some good diagnosis and interpretation takes place in EU and Balkan countries, because of the availability of financial and human resources, the quality of experts, university staff and sometimes NGOs. In Maghreb countries, respondents indicated that data diagnosis is usually narrow because of the segmented approach. Furthermore, there is not enough human and time resources

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for data analysis, partly due to the poor encouragement for the civil society to be part of the process and then to help the public sector in this task.

53. Clearly, out of the eight categories of persons involved in diagnosis and analysis, NGOs, experts, Universities/Institutes and public agencies are recognized for their expertise (76% of resources for diagnosis and analysis).

54. The quality of data diagnosis and analysis for species (especially birds) is reported to be medium. However, diagnosis and analysis of data are far from being regular and are usually taking place in a course of a project or special event. In general, NGOs, Institutes, individual experts and projects are providing most of the sector (species) analysis.

55. The quality of wetlands ecosystem and local territory diagnosis and analysis of data are poor or non existent du to lack of medium-term vision monitoring framework, poor vertical and horizontal integration of information and data, lack of strong indicator and lack of time, finance and capacity.

56. Within the current wetlands-related monitoring systems, analysis of data is reported to be one of the main bottlenecks. Consequently, most data are kept stored without real use and power for decision-making.

Targeting, dissemination of information, feedback and use of information

57. Almost no institution has conducted a proper wetlands monitoring and evaluation needs assessment of the M&E operator and of expectations from their potential users. About 15% of the respondents have spontaneously indicated that they have no idea of who is really using their results and findings. However, most of them declare having a relative good understanding of client expectation through regular contact and informal feedback. Keeping this in mind, other respondents reported a list of 15 probable users, including Government and decentralized bodies (37%), university and school (15%), NGO network (12%), site mangers (5%), media, end users, donor, experts, state agencies and Ramsar secretariat (about 3% each).

58. Ministries/departments in charge of wetlands monitoring tend to share information only within the Government sphere, within the ministry in charge of the monitoring (40%), down to decentralized line ministries (16.7%) among intersectoral committees/boards (6.7%), and rangers (12.5%). Public and NGOs are specifically informed in 12-20% of the cases, especially in countries where NGOs are active in monitoring wetlands. NGO get recognized weigh and voice in the most democratic countries and where they unite their strengths (UE, Croatia, and Israel). Conversely, when NGOs work independently (Lebanon, Egypt, Algeria, Syria), they are less sustainable and get a limited negotiation power with public partners. An analysis by sub-region show that in EU and Balkan countries, there is a higher proportion of information shared vertically between central and local government as well as with the public compared to the southern countries of the basin. In North Africa and middle-East, inter-sector committees, either linked to wetlands or not, are the main mean used to share information when these committees are operational. In some countries like Egypt, Tunisia, Morocco and Albania, the environmental thematic groups and the environmental donor group meetings (established in line with the

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Paris Declaration) are also means to share environmental information between government and the donor community.

59. About 82% of stakeholders (other than Ministries) involved in wetlands monitoring reported to influence national policy, either directly at the broad wetland scale (50%, mostly NGOs) or specific component (7%) such as water, birds, etc., or indirectly (25%) through training, capacity building, seminar, etc. In EU and some Balkans countries, direct and indirect influence may also take place at local government level. In Bosnia and Herzegovina with three country political entities, influences takes place at local level. The other 18% of stakeholder have no policy influence.

60. For the stakeholders (other than Ministries) involved in monitoring wetlands, their main reported levels of policy influence are: central and local levels (28%), and national policy and strategic level for specific subject matter (water, pollution, etc.) (15%). This is done through the presentation of results in protected areas, projects, seminar and committees. The main inputs provided influencing policies are: data, advice, negotiation, follow-up, communication, committee, board, expertise, planning, capacity building, advocacy, networking, strategic and policy orientation, expert opinion, letter to government and international bodies (Ramsar, CBD, European Commission), campaign, consultation, studies, success stories, methodology, guidelines, presentation in workshop and seminar. The analysis by sub-region show that means for policy influence are more diversified in more democratic countries, especially in the EU and Balkans regions. In EU countries and in Balkan countries involved in the EU accession process, the European commission – and somehow UNESCO (MAB and World Heritage) are seen as efficient means to report complains and to influence national decisions. On the contrary, NGOs indicates the insufficient feedback from international conventions such as CBD and Ramsar. In less decentralized countries, the civil society is less – or even not – encouraged to participate in the policy and strategic discussion process.

61. Stakeholders involved in monitoring and influencing policies report 24 types of policy and strategic impacts. The most common impacts of their influence are in awareness, ecotourism/economic services, site conservation, transfer of knowledge, wetland and water management, change of attitude and practices, planning process and influence against infrastructure and industry projects. On the contrary, they have no or poor influence on agriculture practices, coordination, methodology and site identification. In some Balkans and Middle-East countries, NGOs are usually not recognized by government as potential players in national strategic and policy orientation.

62. While most data collection and processes are bottom-up, systematic feedback from headquarter to data collectors is very weak and is reported in less than 12% of the cases. This result, as for data analysis and interpretation, is seen as one of the main weaknesses in the current monitoring systems. The insufficient feedback does not encourage data collector in improving their tasks and in delivering further down information to the field.

63. Stakeholders have reported 30 ways of communicating their activities and results. Subject matter reports, internet/website and annual reports are the main supports in all countries (40% of the respondents), followed by meeting and conferences, brochures, leaflets, articles for the media, education/awareness, publication and newsletter. There are more diversified means of communication reported in EU and

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Balkan countries compared to the southern countries of the Mediterranean basin, with a more pronounced efforts through conferences, TV, media, newsletter and tourist centers.

64. In North Africa and Middle-East countries, there is a poor dissemination of collected data due to the restriction of data access outside de collecting institution, poor/no analysis and restricted dissemination within their network. In EU and Balkan regions, the civil society is more prominent and organized to disseminate messages, even if more efforts are still needed.

65. In North-Africa and Middle-East countries, due to limited analysis, dissemination and feedback, there is a reported limited use of data, results and lessons learned from the monitoring process to improve subsequent planning of action. In EU and Balkan countries, the monitoring results are somehow made available for decision making at planning level, due to a more conducive governance and institutional set-up towards vertical share of information from local to central levels.

66. In some countries (i.e. Croatia, France, Spain, Israel), lessons learned have been incorporated to design a national wetlands strategy or action plan.

II.3. Wetlands monitoring and evaluation needs assessment

67. Decision makers from the 16 countries directly or indirectly involved in wetlands reported 22 categories of challenges facing wetlands at the Mediterranean level. Only two challenges were reported by more than 10% of respondents: "*keep wetlands and their biodiversity*" and "*adaptability to climate change*". Based on these results, there is no shared view on wetlands-related challenges at the Mediterranean wetlands level. This may be translated into diverging purposes or interpretation of monitoring results towards country-specific vision. The grouping of responses show that reported challenges are linked to worry about trends of wetlands status (29.7%), to direct human pressures on wetlands (27.7%), political, institutional, educational and communication causes (25.6%), and climatic conditions (17.2%).

68. Most decision-makers indicated that they perceive a general degradation and decrease of wetlands at the Mediterranean level. They mention that the situation depends of policy decisions and that awareness has improved over the last decades. The human pressures reported are fragmentation of ecosystems, security, drainage (agriculture), tourism and urbanization.

69. At the national level, decision-makers clearly indicate the following human pressures as the main causes explaining the wetlands degradation and decrease of surface: water demand, overuse of resources, agriculture, urbanization, hunting, land encroachment and reclamation, demography growth, aquaculture, pollution, wetlands used as waste pit, etc. The main positive trends or potential positive trends for wetlands status was reported in line with Natura 2000 and Ecological network process (EU, Croatia, Bosnia and Herzegovina), with good protection of large protected wetlands (France, Spain, Croatia, Algeria, Tunisia, Morocco).

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70. There is no real shared view at the country and Mediterranean scale on how to improve the wetland's decision-making process. The 30 categories of responses obtained are largely influenced by the institutional mandate of respondents. However, more political willingness to integrate civil society in national wetlands programmes, increased awareness, participation and communication, improved management capacity of ministries and improved law enforcement are the main shared solutions perceived by respondents. Monitoring activities are not spontaneously seen as a major mean to influence policy. However, results show that communication, awareness and capacity buildings have a mutually reinforcing effect to influence policy (25% of cumulated responses). The responses confirm that M&E alone may not have a great influencing power at policy level. It will be useful to quickly add value to M&E activities in wetlands by boosting the interest of countries towards MWO services. This may be done by responding to priority needs and expectations and in entering into national and local land use/management planning networks to ensure that lessons learned and experiences found in M&E are known and then potentially taken into account for subsequent wetlands programmes.

71. Monitoring and assessing wetlands is not spontaneously mentioned as a major option to improve the situation of wetlands at the Mediterranean and national levels. Based on this result, MWO would probably not get a strong participation of the countries in the short term. It will be necessary to motivate their interest and need for this M&E solution by responding to their priority expectations for wetland protection.

72. Using semi-directive questions on level of interest and needs for a Mediterranean Wetlands monitoring and assessment system, all interviewees gave a positive answer for both benefiting and participating to this initiative.

73. Out of the 26 categories of responses, the main reasons reported for building a regional wetlands monitoring system were : need to exchange more at the Mediterranean level (18% of cumulated responses), need feedback and lessons learned for their job (14%), need to harmonize monitoring methods and tools (11.5%), exchange within sub-regions (11.5%), useful regional system to influence national wetlands agenda and get more sub-regional (Maghreb, Middle-East, Balkan, West Europe) references and lessons learned with countries having similar eco-climatic and cultural characteristics (8.5%). It is interesting to note that this system is seen as a regional tool to influence national agenda, not only for NGOs and Institutes, but also for decision makers wishing influencing their superiors. These reported national expectations are key for MWO strategy: boost regional communication, implement monitoring with sub-region disaggregation of information, practical lessons learned and harmonization of monitoring methods.

74. Out of the 34 reported priority objectives/mandate expected to be handled by a Mediterranean wetlands monitoring and assessment system, the six main priorities are: 1. monitoring to disseminate information and lessons learned; 2. monitoring wetlands status and trends including with inventories; 3. management tool for planning; 4. enhance analysis and interpretation to explain changes in wetlands. These expectations confirm the current gap in monitoring integration, analysis (causes-effects) and feedback to better integrate the past experiences. It should be noted that the other priorities may be country specific (certain components of water, management of irregular phenomena), emerging (evolving monitoring systems from sector to integrated approach) or linked to a deficiency of information (ecosystem,

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biodiversity, habitat, threats) or lack of national or regional integration (wetland in national planning process, methods, national monitoring systems) and should be assessed country by country in analyzing MWO priorities.

75. There is no shared view – at regional, sub-regional and national levels - among respondents on the type of services they expect from a regional wetlands monitoring system. Out of the 30 reported types of expected practical services, the most shared responses are: exchange of information and lessons learned, standardized procedures and methods for monitoring, wetland management models, regional communication tool (meeting, conference, reporting, website, etc.), and improved access to data base. It is worth noting that about 50% of expected services are directly or indirectly related to communication/exchange of information.

76. Out of the 24 types of reported benefits that interviewees have identified from a possible regional wetlands monitoring system are: 1. mean to encourage national decision-makers towards wetlands (21.4% of cumulated responses); 2. improved wetland site management (11.9%); 3. feeling part of the Mediterranean wetlands network (8.3%); 4. improve knowledge (7.1%) and; 5. better project and programme planning by incorporating lessons learned (7.1%). This information confirms previous responses showing the regional effect expected from MWO to influence national decision-making and to federate groups of national stakeholders. It also confirms the need to monitor for better planning within national programme and project cycles. The analysis by sub-region show that North Africa, Middle East and Balkans countries are interested in using MWO results for their national decisions on wetlands and for better wetlands management. North Africa and Middle-East countries are particularly interested by sub-regional analysis and lessons learned as well as by awareness and training programmes, knowledge enhancement and harmonization of monitoring methods.

77. The responses from an open question on "*Priority themes and indicators respondents would like a regional wetlands monitoring and assessment system to tackle*" indicate that expectation are very country and site specific: there are 34 types of responses with only one response shared by more than 10% of respondents "*quantity and quality of water*" (14.1% of cumulated responses). The other responses shared by more than 5% of respondents are: monitoring the causes of biodiversity and ecosystem trends; monitoring biodiversity (other than birds); monitoring the integration of wetlands with land use/territorial management, and; wetlands management system. For all countries represented in the survey, water is a key wetland component influencing decision making which will require special attention from MWO.

78. The grouping of the 34 types of responses above-mentioned show the interest of the stakeholders in monitoring conservation/development integration (19.4% of cumulated responses), in explaining the causes of changes in wetlands (18.1%), in monitoring water issues (18%), in monitoring ecosystem/habitat (13.4%) and in biodiversity/species (6.8%). These responses are coherent with previous responses, showing a relatively advanced biodiversity (birds, fishes and plants mainly) monitoring compared to other components monitored in wetlands, the importance of water component in wetlands, and the recognition that monitoring should be enhanced for human socio-economic development and pressure on wetlands. The analysis by sub-region shows that water and analysis of causes to explain wetland trends are

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particularly important for North Africa and Middle-East countries. Biodiversity (other than bird) monitoring is important for some Balkan countries involved in the ecological network process to survey and identify Natura 2000 sites. Integration of wetland management within national and local planning process is specially reported in EU and Balkan countries. Wetlands and ecotourism is a monitoring activity that interest countries developing the tourism sector such as Croatia, Israel, France and Morocco. Monitoring for subsequent wetlands planning and management is specially reported by EU and Balkan countries, while this seems to have less weight in North Africa and Middle-East countries having their management system in protected area relatively more sectoral and less participatory. These results are to be taken into account by the MWO in its Mediterranean and sub-regional monitoring and service-oriented strategy.

79. When question was related to the six priority themes identified by the MWO in 2009, responses were similar to the ones obtained through open question. However, is it difficult to analyze priority needs and expectations because responses are again very country and person specific. Overall, themes on conservation-development integration and ecosystem integrity get the highest interest, followed by biodiversity and drivers and pressures, and then ecological services and adaptation to global changes. The analysis by sub-region show that Balkan and EU countries are specially interested by more integration between conservation and development, while North Africa and Middle-East countries have a more pronounced interest in developing monitoring on ecosystem integrity and drivers and pressure.

Table of result – by sub-region and at the Mediterranean basin scale (in percentage of cumulated responses)

Identified theme	*Europe*	*Balkan*	*North Africa and Middle-East*	*Total*
- Biodiversity components	17.5	12.5	14.5	16.6
- Ecosystem integrity and health	17.5	14.35	23.0	19
- Drivers and pressures on wetlands	14.8	16.15	22.6	18.6
- Capacity of adaptation to global changes	14.8	11.54	9.5	11.3
- Integration of environment in development process	24.06	26.5	17.2	20.1
- Ecological services	11.3	18.85	13.2	14.4

This result is of special interest since the majority of respondents are from the conservation side and working mainly in protected areas with limited experience and knowledge about the socio-economic development process. They however acknowledge the insufficient conservation-development integration and monitoring of this integration, in which Nature is usually the short-term looser.

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Annex 1
Table of results

I. Wetlands monitoring and evaluation situation assessment

Questions to Decision Makers or key institutions influencing decision-making

(Ramsar and MedWet focal points, Planners in Ministries, Heads of units in charge of international conventions on conservation and development, financing agencies)

I.1. Issues of Mediterranean wetlands

I.1.1. In your opinion, what are the challenges facing Mediterranean wetlands?

47 responses	Percentage
Keep wetlands and their biodiversity	12.8%
Climate change	12.8%
Ensure ecological services	6.4%
Pollution	6.4%
Demography	6.4%
Lack of integrated management	6.4%
Lack of information, awareness, communication	6.4%
Overuse of wetlands	6.4%
Lack of coordination within the country	4.2%
Drought	4.2%
Wetland is not a priority agenda	4.2%
Quantity and quality of water	2.1%
Coastal erosion	2.1%
Sedimentation	2.1%
Investment projects	2.1%
Pressure from hydropower energy sector	2.1%
Lack of integrated territorial planning	2.1%
Human activities around wetlands	2.1%
Salt intrusion	2.1%
Change of habitat pattern in wetlands	2.1%
Illegal hunting	2.1%
Lack of capacity in wetland protection and management	2.1%

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I.1.2. In your opinion, what are the evolution outlooks of Mediterranean wetlands?

34 responses	Percentage
Degradation and decrease of wetlands	35.3%
Depend on policy decisions	11.8%
Better awareness	8.8%
No idea	5.9%
Good protection of main wetlands	5.9%
Fragmentation of ecosystem	3%
Change of natural dynamic	3%
Security situation	3%
Drainage issue	3%
Scarcity of water	3%
Not enough long term vision	3%
Pressure from tourism	3%
Pressure from urbanization	3%
To be preventive against climate change	3%
Competition for water	3%

I.1.3. What is the specific situation of wetlands in your country?

75 responses	Percentage
Water demand, water scarcity	9.3%
Overuse of resources	8%
Agriculture	6.7%
Decreased wetlands	6.7%
Urbanization	5.3%
Hunting	5.3%
Decrease of small and marginal wetlands	5.3%
Ongoing opportunity through Natura 2000	5.3%
Land conservation, reclamation, encroachment	4%
Good protection of main wetlands	4%
Security	2.7%
Demography	2.7%
Conservation lead by development objectives	2.7%
Aquaculture	2.7%
Sea rise	2.7%
Wetlands used as waste pit	2.7%
Irrigation	2.7%
Illegal fishing	2.7%
Drought	1.3%
Rehabilitation of wetland ecosystem	1.3%
Poor awareness	1.3%
Keep biodiversity	1.3%
Pressure from hydropower sector	1.3%
Flooding and erosion	1.3%
Pollution	1.3%
Sewage	1.3%

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Stabilization of wetlands due to policy actions	1.3%
Eutrophization	1.3%
Change in vegetation pattern	1.3%
Lack of priority policy and implementation	1.3%
Invasive species	1.3%
Lack of management	1.3%

I.2. Policies/measures impacting directly or indirectly on wetlands

I.2.1. What are the wetland-related policies / programmes in your country that may support your work and objectives?

72 responses	Percentage
National policies, strategies and actions plan for biodiversity	20.8%
National wetlands strategy	8.3%
Water policy	8.3%
Site management plan	6.9%
Technical committee including Ramsar committee	5.6%
Ramsar and MedWet guidelines and methods	5.6%
Sustainable Poverty reduction and socio-economic development framework	4.2%
Establishment of protected areas	4.2%
Regulatory mechanisms	4.2%
Right of nature for water	4.2%
Physical planning process from main planning ministry	4.2%
Water basin strategy	2.8%
EU pre-accession framework	2.8%
Hunting law	2.8%
Sector policies having some references to wetlands	2.8%
OECD policy guideline	1.4%
No policy	1.4%
Decentralized field team to ensure conservation	1.4%
International conventions (Ramsar, CBD)	1.4%
Natura 2000 in EU	1.4%
Protected areas	1.4%
Legal instruments	1.4%

I.2.2. What are the parameters taken into account in their design?

45 responses	Percentage
National needs in priority socio-economic development	15.6%
Water quality and quantity	11.1%
Status and trends of wetlands	8.9%
Land issue	8.9%
Ramsar parameters	6.7%
Watershed	4.4
Legal framework	4.4%

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No idea	4.4%
In line with CBD guidelines	4.4%
Agriculture	4.4%
Wise use of wetlands	2.2%
Capacity building	2.2%
Pressure of visitors (ecotourism, school)	2.2%
Allocation of financial resource between sectors	2.2%
Ecological network process (Natura 2000)	2.2%
Value of wetlands	2.2%
Zoning	2.2%
Penalties	2.2%
IBA criteria	2.2%
Pollution	2.2%
Hunting	2.2%
Human uses around wetlands	2.2%

I.2.3. Do they make any specific reference to wetlands?

24 responses	Percentage
No idea	44.4%
In national biodiversity strategy	20.8%
Not very specific	16.5%
In wetland management plan	12.5%
In national wetland strategy	12.5%
In protected area law	12.5%
In urban planning	4.2%
In hunting law	4.2%

I.2.4. In your opinion, are these policies implemented with success? Please, explain the causes of success and/or failure?

25 responses	Percentage
Mixed nature	32%%
No because no political conservation priority	16%
In general, yes, in line with policy	12%
No, because lack of budget to implement them	12%
Not really but improving	8%
High delay between policy and implementation of policy	4%
Yes, for short term wetlands management plan	4%
Not really because environmental issue not mainstreamed with development sectors	4%
Limited due to lack of regional and local planning	4%
Lack of capacity and training	4%

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Causes of poor policy implementation: lack of funds, lack of mainstreaming of conservation in development agenda, authority only in protected area, poor conservation priority in political agenda, other competing activities, lack of coordination, delay between policy and implementation, lack of awareness, lack of capacity

Causes of success: strong planning process, EU directives, ecological network process, legal framework

I.2.5. Are the outcomes and impacts of these policies / measures monitored, how, by whom and at which frequency?

19 responses	Percentage
Yes, annually in protected areas	47.4%
No, or under construction	47.4%
Only in case of reported problems	5.2%

I.3. Monitoring and evaluation process and use

I.3.1. Who is involved in wetlands related activity/component monitoring

18 responses	Percentage
Rangers	22.2%
Site managers	22.2%
Decentralized units	16.7%
State agency	5.6%
Ministries for some components	11.1%
NGO	11.1%
No monitoring	11.1%

I.3.2. Who is ultimately responsible for this monitoring? who participates in the monitoring process?

19 responses	Percentage
Persons in charge in environmental department, authority, Ministry dealing with wetlands	42.1%
Divided between departments	26.3%
No monitoring	15.8%
Decentralized government	10.5%
State agency	5.3%

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I.3.3. With which stakeholders are monitoring results shared?

30 responses	Percentage
Within Ministries/decentralize ministries in charge of monitoring	40%
Decentralized bodies	16.7%
Public (website)	10%
Ministries, public and NGOs	10%
Board, committee, inter-sector ministry	6.7%%
Feedback to data collectors	6.7%
International convention (Ramsar, CBD)	6.7%
Not shared	6.7%
Universities, Institutes	3.3%

I.3.4. Are representatives from institution involved in wetlands monitoring also involved in the national and/or sub-national development planning process?

17 responses	Percentage
Yes (mainly for protected areas)	76.5%
No	23.5%

I.3.5. In national and sub-national land-use and land management planning processes, who are the main stakeholders involved (at central, regional and local levels)?

37 responses	Percentage
Governorate/Municipalities/counties	18.9%
Ministry of agriculture	16.2%
Inter-ministry committee	13.5%
Prime Minister office	8.1%
Ministry of Interior/Land Management authority	8.1%
Ministry of environment	8.1%
Ministry of regional development	8.1%
Ministry of environment and physical planning	5.4%
Sector management plan	2.7%
Ministry of public work	2.7%
Ministry of economy	2.7%
Ministry of Tourism	2.7%
Ministry of irrigation	2.7%

I.3.6. In your opinion, who are the most influential ones for wetlands protection and improved impact on wetlands (including Ramsar sites, MAB and World Heritage)?

33 responses	Percentage
Ministry of Agriculture/DGF	24.2%
Ministry of Environment	18.2%
Ministry of interior	9.1%

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Municipalities/local government	9.1%
Farmers/Landlord	6.2%
Ministry of irrigation	6.2%
Ministry of Finance	3%
Local rangers in protected area	3%
Local authority/police	3%
Ministry of Forest and desertification	3%
Ministry of environment and physical planning	3%
NGO	3%
Ministry of public work	3%
Ministry of economy and energy	3%
Decentralized government	3%

I.4. Information required to elaborate policies and programmes relevant to or impacting to wetlands

I.4.1. Which type of information is usually taken into account during the design of policies /programmes?

31 responses	Percentage
Status and trends of wetlands	12.8%
Water quality	12.8%
Socio-economic benefit	9.7%
Water quantity	9.7%
Poverty/employment	6.5%
Threats	6.5%
Ecological services	6.5%
Usage	6.5%
Biodiversity, species	6.5%
Law	6.5%
Flagship species	3.2%
Land consideration	3.2%
Lessons learned	3.2%
Habitats	3.2%
Based on complain from communities	3.2%

I.4.2. How do you access the information for this purpose?

26 responses	Percentage
Internal public database	23.1%
Status of wetlands	7.8%
Personal contact	15.5%
Data collection	3.8%
UNDP	3.8%
NGO	3.8%
University	7.8%
Bibliography	3.8%

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Decentralized administration	7.8%
Public statistics	3.8%
Experts	3.8%
Wetlands committee	3.8%
Ramsar	3.8%
Site Managers	3.8%
Public monitoring report	3.8%

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Questions to stakeholders involved in wetlands programme and project implementation, management, research and monitoring
(Site managers, NGOs, Experts, Institutes, Universities)

I.5. Information about your organization

I.5.1. What are your areas of expertise?

84 responses	Percentage
Nature conservation/bird	15.4%
Conservation/development	8.2%
Research	4.7%
Education, awareness, training	13%
Site management	9.4%
Research and monitoring	7%
Research management	3.7%
Planning, management and monitoring	9.7%
Ecotourism	3.7%
Management plans in protected areas	1.2%
Energy (hydropower development)	1.2%
Climate change	1.2%
Public participation	1.2%
Integrated management of coastal zones	1.2%
Transposition of international agreements (Ramsar, CBD, etc.) in national system	1.2%
Inventory of biodiversity and landscape	1.2%
State of nature	1.2%
National projects	1.2%
Estate regulation	1.2%
Green and sustainable development	1.2%
Freshwater management	1.2%
Assessment of public service for environment	1.2%
Financial institution monitoring (Bank watch)	1.2%
Waste management	1.2%
Strengthening protected areas	1.2%
Regional strategy, guidelines, methods	1.2%
Environmental policy	1.2%
Ecology of invasive species	1.2%
Study on arid land/water, soil, plant, animal	1.2%

I.5.2. What is the geographic coverage?

31 responses	Percentage
Country and site	51.6%
Site	22.6%
Sub-region	16.3%
Site, country, region	3.1%
Specific ecological zone of country	3.1%

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National and international	3.1%

I.5.3. What are your actions related to, or impacting wetlands?

113 responses	Percentage
Monitoring	14.2%
Site management	8%
Awareness	8%
Bird counting	6.2%
Policy dialogue	6.2%
Management planning	5.4%
Conservation of sites	5.4%
Training	5.4%
Conservation/development/socio-economy	4.4%
Ecotourism	4.4%
Ringing programme	3.5%
Integrated management	3.5%
Research	3.5%
Law enforcement	3.5%
Reintroduction of species	1.8%
Protection against flood	1.8%
Advocacy	1.8%
Implementation of international laws in national context	1.8%
Expertise	0.8%
Natural resources management	0.8%
Remote sensing	0.8%
Feeding animal	0.8%
Impact of grazing	0.8%
Rehabilitation of site	0.8%
Education Master/Student	0.8%
Public participation	0.8%
Campaign	0.8%
Coordination of management plan	0.8%
Interface ministry – field	0.8%
River basin approach	0.8%
Oasis, water management	0.8%

I.6. Monitoring and evaluation of wetlands

I.6.1. Do you monitor wetlands or wetland-related activities?

32 responses	Percentage
Yes	43.2%
No	34.8%
Yes, occasionally	22%

Main components monitored: mostly birds, water and biodiversity

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Other components monitored: soil, fish, plant, mosquito, grazing, butterfly, bat, meteo, discharge, coral, underground water, pollution, bird flu, insect, reptile, habitat, traditional domestic breeds, cultural assets, habitats, tourism flux.

I.6.2. If yes, can you explain the monitoring framework?

23 responses	Percentage
No real framework	47.8%
Yes	26.1%
No framework but protocol for each component	17.4%
No idea	8.7%

I.6.3. If yes, what are the monitoring themes covered?

85 responses	Percentage
Water	16.5%
Species (count)	11.8%
Bird	10.6%
Fish	8.2%
Vegetation	7.1%
Conservation	5.9%
Biodiversity	4.7%
Nesting	4.7%
Impact of grazing	4.7%
Soil	3.5%
Ecology	3.5%
Invasive species	3.5%
Threats	2.4%
Pesticide	2.4%
Agriculture	2.4%
Habitat	2.4%
Human development	1.1%
Meteorology	1.1%
Phytoplancton, zooplankton, macrophyte	1.1%
Legal process	1.1%
Domestic breeds	1.1%

I.6.4. Who is collecting data?

70 responses	Percentage
NGO	20%
Expert/private consulting firm	20%
University/Institute	18.6%
Volunteer	8.7%
Site managers	7.1%
Rangers	7.1%
Public agency	7.1%

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Researchers	5.7%
Ecologists	2.9%
Bird group	1.4%
Laboratory	1.4%

I.6.5. Who is interpreting and analyzing data?

38 responses	Percentage
NGO	26.4%
Expert/private consulting firm	21%
Institute/university	18.4%
Public agency	10.5%
No interpretation	10.5%
Site manager	5.3%
Headquarter	5.3%
Volunteer	2.6%

I.7. Influence in wetlands policy level

I.7.1. Is your organization involved in any policy-level activity related to wetlands

28 responses	Percentage
Yes (mostly NGO)	50%
Not directly but indirectly	25%
No	17.9%
Yes, for specific matters	7.1%

I.7.2. At which level of the decision making process do you intervene?

54 responses	Percentage
Central and local levels	27.7%
Policy and strategy for specific components	14.7%
In protected areas	13%
Through project	13%
Through committee	9.3%
Field level	5.6%
By providing data	3.7%
Donor and thematic group	3.7%
Through consortium	3.7%
International, national and local	3.7%
Ramsar	1.9%

Inputs provided: data, advice, negotiation, follow-up, communication, committee, board, expertise, planning, information on wetland status, preparation of wetlands management strategies, capacity building, advocacy, networking, strategic and policy orientation, expert opinion, letter to government, letter to international bodies (Ramsar, CBD, EU), campaign,

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consultation, studies, success stories, methodology, guidelines, presentation in workshop and seminar.

I.7.3. In your opinion, what is the impact of your input in decision-making

84 responses	Percentage
Awareness	13%
Ecotourism – economic services	9.4%
Site conservation	8.3%
Transfer of knowledge	7.1%
Water management	7.1%
Wetlands management	7.1%
Change of attitude and behavior	6%
Planning	6
Influence against non environmental-friendly infrastructure/industry projects	6%
Education	4.8%
Agriculture management	3.6%
Coordination	3.6%
Policy, legal and strategic influence	3.6%
Confidence building field – policy levels	2.4%
Wetland strategy	2.4%
Volunteer work	1.2%
Flagship species creation	1.2%
Site identification	1.2%
Science-policy communication interface	1.2%
Process and methodology	1.2%
Sustainable development model	1.2%
Reintroduction of species	1.2%
ICZM protocol – process and results	1.2%
Justice	

I.7.4. In your opinion, how could wetland conservation/wise use be improved in the decision-making process?

70 responses	Percentage
More political will to involve/integrate NGO in wetlands programme	10%
Awareness	10%
More participation	7.1%
More communication	5.7%
Better management in Ministries	5.7%
Law enforcement	5.7%
Better integration of wetlands in administrative planning	4.3%
More meetings	4.3%
More funding and investment for wetlands	4.3%
Sea water desalinization to decrease pressure on wetlands	2.9%
Incorporation of lessons learned	2.9%

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Better understanding of community needs	2.9%
More political will	2.9%
More efficient coordination	2.9%
Better harmonization of laws	2.9%
Less hunting	2.9%
Ecotourism	2.9%
Capacity building	2.9%
Pressure from media	1.4%
More transboundary initiatives	1.4%
Increased feedback and information from public institutions	1.4%
Water recycling	1.4%
Water management	1.4%
More use of scientific knowledge	1.4%
More update of data to help decision making	1.4%
Follow EU directives	1.4%
Influence more policy makers	1.4%
Financial compensation	1.4%
More detailed and updated national policies and strategies	1.4%
Better valorization of wetlands resources	1.4%

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Questionnaire common to all interviewed stakeholders

I.8. Data access

I.8.1. Do you have an internal system and network to access the required information?

35 responses	Percentage
Yes, open (mostly NGOs)	42.9%
Yes, internal (mostly public)	25.7%
No, or not operational	31.4%

I.8.2. If yes, do you have a network of stakeholders (NGOs, associations, managers of natural areas) that collects data and allows you to get field information?

41 responses	Percentage
Yes	34.1%
No	26.8%
Yes, on request/permit	17%
Yes, within public system	12.3%
Yes, but poor	9.8%

I.8.3. How do you access information?

76 responses	Percentage
Public source (including annual report)	15.6%
Website	14.3%
NGO	13.1%
University	9%
Researchers	8.5%
Expert	8.5%
Report	7.8%
Personal contact	7.8%
Institute	3.9%
Bibliography	3.9%
On request	2.6%
Volunteer	2.6%
Email	1.3%
Congress	1.3%

I.8.4. In your opinion, is this internal information system efficient or not?

32 responses	Percentage
Yes, (mostly through NGO)	31.2%
Not optimum, to be improved	28.1%
No (public)	28.1%
Yes, for some components	9.4%
Limited dissemination	3.2%

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I.8.5. In your opinion, are collected data of good, medium or bad quality?

47 responses	Percentage
Good	25.5%
Good-medium	21.3%
Depend of component monitored (good for bird and water, poor in habitat, ecosystem)	12.8%
Medium	8.5%
Poor-medium	8.5%
Good in protected areas	8.5%
Good but not regular	6.4%
Good but few	4.3%
No idea	2.1%
No data	2.1%

I.8.6. In your opinion, are the diagnosis and analysis of wetland status and trends based on data collected are of good, medium or bad quality?

41 responses	Percentage
Medium – poor (North Africa, Middle-East)	36.6%
Poor	14.7%
Good but not complete	12.2%
Good-medium (EU, Balkans)	12.2%
Medium (EU, Balkans)	9.8%
Limited quality	7.3%
Good, for abiotic element	2.4%
Too sectoral	2.4%
Not timely	2.4%

Reasons reported: 1. limited or lack of resources, 2. too sectoral – but also lack of skills, lack funding, lack capacity, lack of time, priority given to data analysis.

I.8.7. Which kind of information is currently missing?

83 responses	Percentage
Quality of water	8.3%
Ecosystem dynamic and causes of change	7.1%
Lack of monitoring	7.1%
Analysis, interpretation	6%
Socio-economic data	6%
Habitat	6%
Outside protected areas	6%
Inventory not completed	4.7%
Biodiversity, drivers, pressure data	4.7%
Species data	4.7%
Lack of standardized method	3.5%

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Missing data in different protected sites	3.5%
Fish	3.5%
Vegetation coverage	2.4%
Water management	2.4%
Do not know, no synthesis of data available	2.4%
GIS, map	2.4%
Status and assessment of wetlands	2.4%
Historical data	1.2%
Amphibian, reptile data	1.2%
Impact of grazing	1.2%
Land use	1.2%
Birds	1.2%
Marine habitats	1.2%
Water bodies	1.2%
Feedback from monitoring results	1.2%
Some invertebrate	1.2%
Monitoring network	1.2%
Mushroom	1.2%
Moses	1.2%
Meteo data in arid areas	1.2%
Cultural data	1.2%

I.8.8. How could you get it?

32 responses	Percentage
No access	31.3%
Through public	12.5%
Through project	12.5%
Through NGO	9.4%
Through Expert	9.4%
Need more human resources	9.4%
University	6.2%
International expertise	6.2%
Meteo station	3.1%

I.8.9. In your opinion, are the monitoring results (lessons learned) effectively used to improve wetland-related policies and programmes?

82 responses	Percentage
Government and decentralized public bodies in charge of wetlands	25.6%
No idea because no study	19.5%
By universities and schools	11%
By NGO network	7.3%
At the level of site managers	4.9%
Through Media	3.7%
By end users (farmer, irrigation, etc.)	3.7%

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By donors and embassies	3.7%
By Ramsar secretariat	3.7%
Using EU ecological network instrument	1.2%
By projects	2.4%
General public	2.4%
By conservation organization	2.4%
By stakeholders involved in building and implementing wetlands strategy, through lessons learned	2.4%
By committee Government – NGO	1.2%
Partly, yes	3.7%
No	1.2%

I.8.10. How do you communicate, feedback your results

141 responses	Percentage
Sector report	14.8%
Internet/website	13.6%
Annual report	12.8%
Meeting, conference	10.6%
Brochure/leaflet	5.6%
Media	5.6%
Education, awareness, lecture	4.2%
Publication	4.2%
Newsletter/bulletin	4.2%
Tv	2.8%
Scientific article	2.1%
Ramsar day	2.1%
Training	2.1%
Through tourist center/info center	2.1%
Lobbying policy makers	1.4%
Radio	1.4%
Committee	1.4%
Movie	0.7%
Festival	0.7%
Report to supervisor	0.7%
Singer	0.7%
School children	0.7%
Coast day	0.7%
Email	0.7%
Through Natura 2000 network	0.7%
NGO network	0.7%
Through tourist guides	0.7%
Through local social events	0.7%
Through green telephone	0.7%
Study tours	0.7%

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II. Wetlands monitoring and evaluation needs assessment

II.1. Level and nature of interest in a Mediterranean Wetlands monitoring system

II.1.1. In view of the challenges facing Mediterranean wetlands, do you think there is a need to develop a wetlands monitoring and assessment system at the Mediterranean Basin level?

51 responses	Percentage
Yes	100%
No	0

II.1.2. Why?

130 responses	Percentage
To exchange at the Mediterranean level	17.6%
For feedback and lessons learned	13.8%
For better standardization of methods and tools	11.5%
Sub-region exchange	11.5%
Because will influence national decision	8.5%
To inform about specific subject such as migratory birds	6.1%
For better wetlands management	5.4%
Access wetlands trends	4.6%
For a more broaden view	2.3%
Because same watershed into Mediterranean sea	2.3%
Formulate best practice	2.3%
For water issue	1.5%
For species	1.5%
Simple and harmonized set of indicators	1.5%
Scientifically isolated	0.8%
Wetlands to be integrated in territorial planning	0.8%
Interface science – policy communication	0.8%
Appropriate technical expertise	0.8%
Issue of climate change	0.8%
Wetlands inventory	0.8%
Comparison between wetlands	0.8%
Seek synergies	0.8%
To help seeking international funding	0.8%
More awareness on the values of wetlands	0.8%
Speed-up wetlands protection where there are only few	0.8%
Transboundary wetlands corridor	0.8%

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II.1.3. In your situation, what should be the priority objective of this system?

133 responses	Percentage
Monitoring to be informed of lessons learned	12.9%
Sharing information	10.6%
Management tool for planning	7.5%
Inventory update	6%
Assessment and analysis of data	5.3%
Status of wetlands	4.5%
Trends of protected areas	4.5%
Information on water quantity	3.8%
Information on water quality	3.8%
Simple monitoring tool	3.8%
Help protecting administrative territory (integrated planning)	3.8%
Help protecting wetlands	3%
Trends of habitat	2.3%
Capacity building to help implement Ramsar convention	2.3%
Integration national and regional actions	2.3%
Information on change in biodiversity	2.3%
Ecological services	1.5%
Bird management	1.5%
Trend of species	1.5%
Fish monitoring	1.5%
Threats	1.5%
Timely feedback	1.5%
Less sectoral indicator and analysis – more global approach	1.5%
Bird count	1.5%
Help building national monitoring system	1.5%
Protect at least some wetlands in each arid country	1.5%
Exchange of methodologies	1.5%
Awareness/capacity building	0.7%
Monitoring irregular phenomena	0.7%
Identify hotspot	0.7%
Help funding	0.7%
Mediation	0.7%
Harmonization of data	0.7%
Prediction model	0.7%

II.1.4. Which type of services and products would you expect from such a system?

107 responses	Percentage
Exchange of information and lessons learned	15.9%
Procedure for monitoring	7.5%
Standardization of methods	6.6%

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Model of management	6.6%
Annual meeting, conference, workshop and study tour at regional level	5.6%
Regional communication tool	5.6%
Access to data base	5.6%
Reporting	4.7%
Capacity building/training	4.7%
Survey of biodiversity	2.8%
Maps	2.8%
Expert network at regional level	2.8%
Website	2.8%
Sub-region information	2.8%
Method to evaluate value of ecosystem	2.8%
Link conservation and socio-economic development	2.8%
Test and adaptation of monitoring method	1.9%
Case studies	1.9%
Linked to Natura 2000	1.9%
Public awareness materiel	1.9%
Help funding	1.9%
Encourage inter-sector monitoring of wetlands	0.9%
Information on migratory birds	0.9%
Results of projects	0.9%
Regional indicators	0.9%
Targeted to site managers	0.9%
Taxonomic research	0.9%
Studies	0.9%
Involvement of local communities in monitoring	0.9%
Appropriate use of natural resources	0.9%

II.1.5. How would you use these services and products, for which benefit in your professional duties?

84 responses	Percentage
Use of this regional tool to encourage national decision making	21.4%
For better management of sites	11.9%
To feel part of a regional monitoring network	8.3%
Improved knowledge (especially on migratory birds)	7.1%
Better planning of project and programme	7.1%
Awareness	5.9%
Apply new method	5.9%
Better integration development – environment	4.7%
Communication tool	4.0%
Follow-up	3.6%
Monitoring of Ramsar sites	3.6%
Lessons learned	2.3%
Allow to position our work in a more wide (Mediterranean) context	2.3%

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Law enforcement	1.2%
Water management	1.2%
To help NGO interested in working in wetlands	1.2%
Quick assessment for decision	1.2%
Methodology for valuation of cultural value	1.2%
Help implementing international monitoring requirements	1.2%
Feedback to local communities	1.2%
Valuation of wetlands for development models	1.2%
Access to socio-economic data	1.2%
Funding implementation	1.2%
To improve national policy and legal framework	1.2%

II.2. Priority themes to be considered by the Observatory

II.2.1. In your situation, what are the most important wetland-related themes that an Observatory should tackle?

78 responses	Percentage
Quantity and quality of water	14.1%
Causes to explain trends	9%
Biodiversity (other than birds)	7.7%
Integrated management of land use – territorial management	7.7%
Management system	6.4%
Bird indicator	4.0%
Integration – coordination between stakeholders	4.0%
Management of wetlands in extreme condition, climate	2.5%
Conservation status	2.5%
Rehabilitation of water system	2.5%
Habitats	2.5%
Development of ecotourism	2.5%
Impact of visitors – ecotourism	2.5%
Wetlands ecosystems	2.5%
Food production – wetlands	2.5%
Local behavior of local communities	2.5%
Socio-economic data	2.5%
Drainage	1.3%
Hunting	1.3%
Climate change	1.3%
Restoration of wetlands – strategy	1.3%
Ecosystem function	1.3%
Invasive species	1.3%
Urbanization	1.3%
Small and marginal wetlands protection	1.3%
Public participation in wetland management	1.3%
Use and efficiency of public services	1.3%
Land use	1.3%

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Fishing	1.3%
Availability of data	1.3%
Communication and network	1.3%
Best practices	1.3%
Pollution	1.3%
Emblematic species	1.3%

II.2.2. Among the tentative themes identified by the workshop participants in March 2009, in which order of priority would you list them for your country, given its commitments to international and regional conventions and commitments? (Scale 1 to 6 - 1 being the most urgent to address in terms of monitoring, 6 the least urgent).

Identified theme	*Europe*	*Balkan*	*North Africa and Middle-East*	*Total*
- Biodiversity components	17.5	12.5	14.5	16.6
- Ecosystem integrity and health	17.5	14.35	23.0	19
- Drivers and pressures on wetlands	14.8	16.15	22.6	18.6
- Capacity of adaptation to global changes	14.8	11.54	9.5	11.3
- Integration of environment in development process	24.06	26.5	17.2	20.1
- Ecological services	11.3	18.85	13.2	14.4

II.3. Follow-up and feedback

II.3.1. Level of participation to the MWO

Are you interested in	**Yes**	**No**
Benefiting from information including feedback produced by the Observatory?	100%	0%
Being part of the Observatory structure?	85%,	15%,
Providing data to the Observatory?	91%	9%
Other (explain)		

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Annex 2
Questionnaires

Participatory questionnaire for decision-makers

I. Objective of the questionnaire

Estimate the potential interest of wetlands-related stakeholders in participating in a Mediterranean wetlands monitoring system or/and in using monitoring results.

Participatory questionnaire for decision-makers

1. **Function and contact of the respondent**

   1.1. Name, organization, function and responsibilities related to wetlands

   1.2. Web site, email and tel. contact

2. **Issues of Mediterranean wetlands (regional level)**

   2.1. In your opinion, what are the **challenges facing Mediterranean wetlands**?

   2.2. In your opinion, what are the **evolution outlooks of Mediterranean wetlands**?

   2.3. What is the **specific situation of wetlands in your country compared to other Mediterranean countries**?

3. **In your country, what are the policies/measures impacting directly or indirectly on wetlands**

   3.1. What are the **wetland –related policies, strategies and programmes** in your country that may support your work and objectives?

   3.2. What are the **parameters and issues taken into account in their design**?

   - Do they make any **specific reference to wetlands** ?

   3.3. In your opinion, are these **policies implemented with success**? Please, explain the causes of success and/or failure?

   3.4. In your opinion, there are any **policy, strategic or legal instruments** needed to increase success?

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3.5. Are the outcomes and **impacts of these** policies / measures monitored, how, by whom and at which frequency?

3.6. Who is ultimately **responsible** for this monitoring? **who participates** in the monitoring process ?

3.7. With which stakeholders are **monitoring results shared**?

3.8. In your opinion, are the **monitoring results (lessons learned) effectively used to improve wetland-related policies and programmes**?

3.9. If yes: Are **representatives from your institution involved in the subsequent national and/or sub-national development planning process**? On which basis are the **recommendations for better wetlands protection incorporated in it**?

3.10. In **national and sub-national land-use and land management planning processes**, **who are the main stakeholders involved (at central, regional and local levels)?**

3.11. In your opinion, who are the **most influential ones for wetlands protection** and improved impact on wetlands (including Ramsar sites, MAB and World Heritage)?

4. Information required to elaborate policies and programmes relevant to or impacting to wetlands

4.1 Which type of information is usually taken into account during the design of policies /programmes?

Why?

4.2. How do you access the information for this purpose?

4.3. Do you have an internal system and/or network of resource persons/partners to access the required information?

Yes/No

Explain the system

Is the system strong enough and efficient: Why (3 times)?

4.4. If yes, do you have a network of stakeholders (NGOs, associations, managers of natural areas) that collects data and allows you to get field information?

Explain who and how,

Is the network strong enough and efficient: explain Why (3 times)?

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4.5. I your opinion, are **collected data** related to wetlands of good, medium or bad quality? (Why 3 times)

4.6. In your opinion, are the **diagnosis and analysis** (interpretation of data) of wetland status and trends based on data collected are of good, medium or bad quality? (Why 3 times)

4.7. Which kind of information is currently missing?

how could you get it ?

5. Level and nature of interest in a Mediterranean Wetlands monitoring system

5.2. In view of the challenges facing Mediterranean wetlands, do you think there is a **need to develop a wetlands monitoring and assessment system at the Mediterranean Basin level**?

Why ?

5.3. In your situation, what should be the priority objective of this system for the benefit of wetlands?

5.4. Beside the objectives, which type of services and products would you expect from such a system?

5.5. How would you use these services and products?

What would be the benefits for your daily professional duties?

6. Priority themes to be considered by the Observatory

6.2. In your situation, what are the most important wetland-related themes and indicators that a Mediterranean Wetlands Observatory should tackle ?

Why?

6.3. Among the tentative themes identified by the workshop participants in March 2009, in which order of priority would you list them for your country, given its commitments to international and regional conventions and commitments? (Scale 1 to 6 - 1 being the most urgent to address in terms of monitoring, 6 the least urgent).

Identified theme	*Your priority (1-6)*
- Biodiversity components	
- Ecosystem integrity and health	
- Drivers and pressures on wetlands	
- Capacity of adaptation to global changes	
- Integration of environment in national development process	
- Ecological services	

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6.4. Any other theme you would like to include in the Observatory

7. Follow-up and feedback

Are you interested in	Yes	No
Benefiting from information including feedback produced by the Observatory (newsletter, website, minutes of workshop, etc.?		
Being part of the Observatory structure?		
Be partner of the Observatory		
Providing data to the Observatory?		
Other (explain)		

7.2. Besides your organization, who else would you suggest as potentially interested in getting regular information and feedback from the Mediterranean Observatory in your country? Name, institutions?

Why ?

7.3. Who else would you advise us to meet as potential decision-makers and data providers, for completing the need assessment in your country?

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Participatory questionnaire for stakeholders involved in wetlands related programme implementation

I. Objective of the questionnaire

Estimate the potential interest of wetland-related stakeholders in participating in a Mediterranean wetlands monitoring system or/and in using monitoring results.

Participatory questionnaire for stakeholders

1. Function and contact of the respondent

1.1. Name, function and responsibilities, and name of the organization / project / NGOs / Associations / others

1.2. Web, tel. and contact email

2. Better knowledge of your organization

2.1. What is the main goal of your organization?

2.2. What are your areas of expertise?

2.3. Geographic coverage and targeted users?

2.4. What are your actions related to, or impacting wetlands?

2.5. Have you been and/or are you involved in “wetlands management plan” design or implementation?

2.6. Do you monitor wetlands or wetland-related activities?

2.7. If yes, can you explain the monitoring framework?

2.8. If yes, what are the monitoring themes covered?

2.9. Who is collecting data?

2.10. Who is interpreting and analysing data?

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3. How does your organization access wetland-related information sources and disseminate data and information?

3.1. How do you communicate/feedback your results?

3.2. In your opinion, who are the potential users of the information you disseminate ?

3.3. In your opinion, who are the current real users of these data?

3.4. Do you know the respective expectations of your targeted users?

3.5. Can you assess whether the data provided corresponds to their expectations?

3.6. Do you use other sources of information and how do you access it?

3.7. Do you have an internal system and/or resource network for accessing the information needed and disseminating the required data and information?

3.8. If yes, do you have a network of partners (NGOs, associations, managers of natural areas, others) that collects data and enables you to obtain other field information?

3.9. In your opinion, is this information system efficient?

Please explain why?

3.10. In your opinion, is the quality of data collected good, medium or bad?

Why?

3.11. In your opinion, is the quality of data interpretation and analysis good, medium or bad?

Why?

3.12. Which kind of information is currently missing?

How could you get it?

4. Is your organization involved in decision-making on wetlands?

4.1. Is your organization involved in any policy-level activity (related to wetlands)?

- If yes, please explain how and when?

4.2. At which level of the decision-making process do you intervene?

Which kind of input do you bring into it?

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4.3. In your opinion, what is the impact of your input in decision-making?

Then, give list of impacts due to recognized contribution of your organization since the last 3 years.

4.4. In your opinion, how could wetland conservation / wise use be improved in the decision-making process?

5. Perception of the intended goals and services of the Observatory

5.1. In view of the challenges facing Mediterranean wetlands, do you think there is a need to develop a wetland monitoring and assessment system at the Mediterranean Basin level?

Why?

5.2. In your situation, what should be the priority objective of this regional monitoring system for wetlands?

5.3. What type of services and products do you expect from this system?

5.4. How will you use these services and products, for which benefit in your job?

6. Priority themes of the Observatory

6.1. In your situation what are the most important wetland-related themes to be tackled by the Observatory?

Why?

6.2. Among the tentative themes identified by the workshop participants in March 2009, , in which order of priority would you list them for your country, given its commitments to international conventions? (Scale 1 to 6 - 1 being the most urgent to address in terms of monitoring, 6 the least urgent).

Identified theme	*Your priority (1-6)*
- Biodiversity component	
- Ecosystem integrity and health	
- Drivers and pressures on wetlands	
- Capacity of adaptation to global changes	
- Integration of environment in development process	
- Ecological services	

6.3. Any other theme you would like to include in the Observatory ?

7. Possible collaboration

7.1. Do you see any possible collaboration between your organization and the Observatory partnership?

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How?

7.2. Do you see any possibility/interest for your organization to be a full Partner within the Observatory initiative?

If yes, on which themes, data, indicators, others)?

Are you interested in	**Yes**	**No**
Benefiting from information produced by the Observatory ?		
Being part of the Observatory structure ?		
Providing data to the Observatory ?		
- Other (explain)		

8. Other national stakeholders

8.1. Besides your organization, who else would you suggest as potentially interested in getting regular information and feedback from the Mediterranean Observatory in your country ? Name, institutions?

8.2. Who else would you advise us to meet as potential decision-makers and data providers, for completing the need assessment in your country?

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