## CONVENTION ON WETLANDS (Ramsar, Iran, 1971) 36th Meeting of the Standing Committee Gland, Switzerland, 27-29 February 2008

DOC. SC36-11

Agenda item 12.4

# Wetlands and agriculture

**Action requested:** The Standing Committee is invited to note and comment on this aspect of the STRP's and related work, and to advise on the proposed provision of information on wetlands and agriculture issues to COP10.

### **Background**

- 1. This note provides a brief update on progress with several interrelated scientific and technical activities and products concerning wetlands and agriculture interactions, in follow-up to aspects of Resolution VIII.34 (2002). It notes the importance to the Ramsar Convention of addressing this issue in relation to the findings of the Millennium Ecosystem Assessment (MA) and the recently published 4<sup>th</sup> UNEP Global Environment Outlook (GEO-4), and it reports on proposals being developed through the Scientific and Technical Review Panel (STRP) to bring these matters to the 10<sup>th</sup> meeting of the Conference of the Contracting Parties (COP10). A verbal update on the outcomes on this topic from the STRP's forthcoming meeting will be provided by the STRP Chair.
- 2. In a mandate from COP9 (Resolution IX.2 Annex 1), the STRP was instructed to prepare guidelines during the 2006-2008 triennium on agricultural practices and policies for different wetland types, drawing on information provided by the Comprehensive Assessment of Water Management in Agriculture (CA), as well as other initiatives, and taking account of existing legal frameworks (STRP 2006-2008 Immediate Priority task 150). This task sought to implement action originally called for in COP8 Resolution VIII.34 on agriculture, wetlands and water resource management.
- 3. The STRP, at its 13<sup>th</sup> meeting in May 2006, discussed and developed a provisional plan for developing such guidelines. In doing so, the Panel also noted that there was insufficient capacity within the STRP to prepare the report on wetland-agriculture interactions as part of the International Water Management Institute (IWMI)-led Comprehensive Assessment (CA), as had been agreed at STRP12, the preparation of which formed part of Ramsar's endorsement of the work of the CA.
- 4. In parallel to the STRP discussions, a consortium has been developed to undertake a project entitled "Guidelines on Agriculture, Wetlands and Water Resources Interactions Project" (GAWI). This consortium comprises the UN Food & Agriculture Organisation (FAO), Wageningen University and Research (Netherlands), Wetlands International, IWMI, and the MedWet Initiative. This project has financial support from the government of the Netherlands and FAO and has the overall aim of responding to aspects of COP8 Resolution VIII.34, by:

- i) developing a supporting framework and associated guidelines for the sustainable management of different types of wetland-agriculture systems impacted by the full range of water resources, agricultural and wetland policies, systems, and practices;
- ii) building capacity to implement the guidelines; and
- iii) promoting the use of the guidelines.
- 5. At STRP13, building upon the provisional work plan and responding to the issues related to wetlands and agriculture, it was also agreed that the lead STRP member for wetlands and agriculture would review ways and means of establishing closer synergies between the STRP's work and the work of the GAWI partnership, in order to avoid any duplication of effort, since the GAWI project covers a large part of the task for STRP originally requested in Resolution VIII.34. Key members of the GAWI partnership have also been invited to participate in the STRP Working Group 5 on wetlands and agriculture, and STRP's lead member is participating fully in the GAWI work.
- 6. A further advantage from this arrangement is that it has enabled the STRP to turn its attention to completion of the requested "CA report to Ramsar", namely an assessment of wetland-agriculture interactions based on a set of questions provided by STRP12 for the Comprehensive Assessment. The "CA report" will complement the knowledge consolidation component of the GAWI proposal. It will also build on the Wetland Synthesis report undertaken as part of the Millennium Ecosystem Assessment, in which agriculture and water management were identified as the main drivers of adverse change in many wetlands, as well as on the relevant findings of the World Water Assessment Report.

#### Recent key findings on the importance of wetlands-agriculture interactions

- 7. The Millennium Ecosystem Assessment (MA) reported in 2005 that, of all ecosystem services it considered, freshwater (along with capture fisheries) is the service currently being most unsustainably exploited, and that on current trends this over-exploitation is expected to continue or increase. The majority of the abstraction of freshwater directly and indirectly from wetlands is for irrigated agriculture. Thus agricultural use of water is a major driver of change to wetlands and their capacity to deliver their range of ecosystem services to people.
- 8. A significant finding of the MA's synthesis report to the Ramsar Convention concerns the potential fate of wetland ecosystems under various sectoral and cross-sectoral scenarios for future decision-making, particularly in relation to achieving the UN's Millennium Development Goals (MDGs). The MA's analysis indicates that if the world continues to take a sectoral focus on, for example, climate change mitigation, or one or more of the MDGs such as food security or sanitation, our stock of wetlands and their continued delivery of ecosystem key services will continue to deteriorate.
- 9. Shifting, however, to a more cross-sectoral, ecosystem-based approach focusing on optimising multiple goals (including the delivery of commitments to the CBD and the Ramsar Convention), will lead not only to significantly better maintenance of wetlands and their services but will also contribute to achieving a number of the MDGs such as those on improved water supply and sanitation and on poverty reduction.
- 10. But the MA's analysis also recognized that under all scenarios the biggest challenge will be meeting the increasing demands for agricultural production to fulfill the MDG on food

- security whilst not further destroying the wetland systems and services needed to support that same goal through wetlands' key roles in water management.
- 11. The MA's clear messages on water, agriculture and ecosystems have been reinforced by the recently published UNEP GEO-4 report (October 2007). GEO-4 stressed that around 70% of available water from rivers and other wetlands is already being taken for agricultural irrigation, but that fully meeting the Millennium Development Goal (MDG) on hunger reduction will mean doubling food production by 2050, with the implication that demand for irrigation water will further increase significantly. Yet at the same time the availability of freshwater is declining, whilst water use is predicted to rise further by 2025, by 50% in developing countries and by 18% in the developed world. So the gap between supply and demand seems still to be widening, with the still largely sectoral-based global and national governance taking insufficient action to tackle this most fundamental of all challenges. The GEO-4 authors concluded that "the escalating burden of water demand will become intolerable in water-scarce countries".
- 12. The 2007 Comprehensive Assessment of Water Management in Agriculture (CA) also recognized these challenges, and it recommended a number of policy actions which together would contribute to addressing this increasing gap between water availability and demand and its impact on ecosystem services. These include that "good agricultural practice can enhance other ecosystem services. In agroecosystems there is scope to promote services beyond the production of food, fiber, and animal protein. Agricultural production does not have to be at the expense of other services that water provides in rivers and wetlands. But because of increased water and land use, and intensification, some ecosystem change is unavoidable, and difficult choices are necessary."
- 13. Thus the need for the Ramsar Convention to pay serious attention to issues of agriculture in relation to wetlands and water management, if it is to continue to secure the conservation and wise use of wetlands. The conclusions indicated by Ramsar Parties in Resolution VIII.34 have been reinforced by these subsequent ecosystem assessment reports.

#### Progress on the "CA report" on wetland-agriculture interactions to STRP and Ramsar

- 14. The work of the overall CA has now been completed, and a summary booklet of its conclusions has been issued and can be downloaded from <a href="http://www.iwmi.cgiar.org/assessment/">http://www.iwmi.cgiar.org/assessment/</a>.
- 15. The STRP lead member for agriculture and colleagues from IWMI are currently drafting the report to Ramsar ("An assessment of wetlands-agriculture interactions") based around the findings of the CA, for further consideration by STRP14 and subsequent publication as a *Ramsar Technical Report* during 2008.
- 16. The anticipated contents will be:

Preamble

Summary and recommendations

- 1. Introduction
- 2. Agriculture and the wise use of wetlands
- 3. Extent and status of wetlands

- 3.1 Global extent of wetlands
- 3.2 Regional extent of wetland types
- 3.3 Distribution and extent of Ramsar sites
- 3.4 Extent of agriculture in wetlands
- 4. Agriculture and wetland loss and degradation
  - 4.1 North America
  - 4.2 Neotropics
  - 4.3 Asia
  - 4.4 Africa
  - 4.5 Europe
  - 4.6 Oceania
- 5. Human well-being and wetlands
- 6. Trends in agriculture and food production
- 7. Policies and institutions for managing wetlands and agriculture
- 8. Conclusions

Acknowledgements

References

#### Progress in the preparation of the GAWI framework and guidelines

- 17. The first phase of the GAWI work has included the gathering of a range of case studies covering different types of agricultural practice in relation to different wetland types and parts of the world, then from analysis of these case studies to develop an overall framework for the scope and development of more specific guidelines on different aspects of the issue.
- 18. GAWI held a technical workshop to develop this framework further in October 2007, in which a number of STRP members, observers and invited experts participated, including the STRP lead member for agriculture Max Finlayson, STRP Vice-Chair Rebecca D'Cruz, and STRP Wetlands International representative Ritesh Kumar.
- 19. As a further STRP contribution to the GAWI work, the STRP Vice-Chair is also analysing and providing the GAWI group with information on response options from the work of the Millennium Ecosystem Assessment (MA) relevant to agriculture and wetlands, as part of another STRP priority task.
- 20. It is proposed that the GAWI framework document, including its case studies, will be published during 2008, resources permitting, as a joint FAO-Ramsar publication and thus will be available to participants at COP10.
- 21. Work by GAWI on drafting its planned guidelines is anticipated to commence during 2008, resources permitting, and the guidelines should be available for consideration, as appropriate, by COP11.

#### STRP14 consideration of wetlands-agriculture interactions

22. In addition to reviewing the draft "CA report to Ramsar" outlined above, STRP14 will also discuss the GAWI framework, including proposals to provide a summary of the framework as a COP10 Information Paper.

- 23. The October 2007 GAWI workshop also recommended that a draft Resolution for COP10 on wetlands and agriculture interactions should be prepared, as a follow-up to COP8 Resolution VIII.34, in view of the significant developments which have and are taking place in implementing aspects of that Resolution. It is anticipated that such a DR for COP10 would focus on reflecting these developments, including the findings of the MA, CA, and GEO-4 as well as the work of GAWI and the STRP and their products, and that it would seek to encourage GAWI and the STRP to continue collaboration on the development of implementation guidelines within the framework developed by GAWI. It is also anticipated that the draft Resolution would recognize the strong interlinkages between agriculture, livelihoods and poverty reduction as a focus for future activity.
- 24. The content of such a COP10 DR will be further considered by STRP14, before any transmittal to the 37<sup>th</sup> meeting of the Standing Committee for COP10 consideration.