



11th Meeting of the Conference of the Parties to the Convention on Wetlands (Ramsar, Iran, 1971)

“Wetlands: home and destination”

Bucharest, Romania, 6-13 July 2012

Resolution XI.15

Agriculture-wetland interactions: rice paddy and pest control

1. CONCERNED that, as indicated by the Millennium Ecosystem Assessment (MA), certain agricultural practices continue to be a major driver of the loss of, and change to, the ecological character of wetlands through *inter alia* direct wetland conversion for food production, abstraction of water for crop irrigation, and the impacts of the use of agro-chemicals, including fertilizers and pesticides, on water quality and wetland biodiversity;
2. RECALLING the recognition by the Rio +20 Conference (Brazil, 2012) of “the necessity to promote, enhance and support more sustainable agriculture, including crops, livestock, forestry, fisheries and aquaculture, that improves food security, eradicates hunger, and is economically viable, while conserving land, water, plant and animal genetic resources, biodiversity and ecosystems, and enhancing resilience to climate change and natural disasters” and to “also recognize the need to maintain natural ecological processes that support food production systems”;
3. NOTING the Decisions X/34 on agricultural biodiversity, X/28 (notably paragraphs 10e and 18) on inland waters biodiversity, and X/32 on sustainable use of the Convention on Biological Diversity, and the *Satoyama* Initiative;
4. NOTING that rice paddies are fundamental for many developing countries in terms of their contribution towards the achievement of economic and social development, poverty eradication, and food security;
5. RECALLING that Ramsar Resolution VIII.34 (2002) addressed the overall issue of agriculture and wetland linkages and interdependencies, and ALSO RECALLING that Ramsar Resolution X.23 (2008) called upon wetland managers to reduce and more precisely target the use of pesticides;
6. RECOGNIZING the relevance of the work of the “Guidelines in Agriculture, Wetlands and Water Resource Management Interactions” project (GAWI), designed to support implementation of Resolution VIII.34, summarized in COP10 DOC. 26 and available in the 2008 report *Scoping agriculture-wetland interactions. Towards a sustainable multiple response strategy* (available as FAO Water Report no. 33, www.fao.org/nr/water/docs/WaterReports33.pdf), and NOTING that the work of members of the GAWI consortium is

ongoing and covers different types of agriculture-wetland interactions, including those concerning rice cultivation;

7. RECOGNIZING that irrigated rice fields are a major wetland type under the Ramsar Convention which directly delivers food production from wetlands, and that consequently there is a particularly close relationship between the benefits of sustainable management of rice paddy for wetland biodiversity and the potential negative impacts on this biodiversity from aspects of unsustainable rice production practices, and AWARE that rice paddy is included as “rice fields” in the Ramsar Classification System for Wetland Type as a human-made wetland (“Type 3 Irrigated land; includes irrigation channels and rice fields”);
8. AWARE that in Resolution X.23 (2008) the Ramsar Convention has recognized the linkages between food security and human health, poverty reduction, and sustainable wetland management; AWARE, too, of the global importance of rice production in supporting over half of the world’s population and the dependence of many communities on reliable, safe and cost-effective food supplies, particularly in less developed regions; and ALSO AWARE of the importance to local livelihoods in some regions of fisheries in rice paddy;
9. NOTING that the Conference of the Parties to the Convention on Migratory Species (CMS) adopted Resolution 10.26 on *Minimizing the Risk of Poisoning to Migratory Birds* and that a working group has been set up under the Scientific Council to undertake a detailed assessment of the impacts of poisoning on migratory birds and recommend suitable responses to address this problem;
10. ALSO NOTING the concerns of the United Nations Food and Agriculture Organization (FAO) in relation to food security, the need to increase available supplies of food commodities, and the pivotal role of rice production in food security; AWARE of the challenges in selecting options for rice production that are also ecologically, socially, and economically feasible and sustainable; and ALSO AWARE that agriculture is dependent on biodiversity, and that cultivated systems provide food, feed, fibre and fuel, but that some unsustainable agricultural practices can affect other ecosystem benefits/services;
11. RECALLING that the 10th meeting of the Conference of the Parties (2008), in Resolution X.31, recognized the importance of the maintenance and enhancement of the ecological and cultural role and value of rice paddies as wetland systems, and the cultural, social and economic benefits of the sustainable use of rice paddies to communities, and that indigenous agricultural practices and cultural and biodiversity values relating to rice cultivation could provide examples of wetland wise use, while also recognizing the impact of inappropriate agricultural practices relating to water management and introduction of new taxa, use of high levels of harmful agricultural chemicals, and inappropriate conversion of rice paddies to other land uses; and RECOGNIZING the contribution of the report released at Ramsar COP11 on *Good Practices for Enhancing Biodiversity in Rice Paddy Ecosystem in Japan, Korea and Other Asian Countries*;
12. RECALLING Resolution X.19 on wetlands and river basin management, and RECOGNIZING that integrated river basin management needs to ensure not only that rice paddies are not degraded by upstream land uses and practices but also that rice farming practices should not negatively affect the ecological character of downstream areas, especially wetlands;

13. AWARE of evidence from the FAO, the International Rice Research Institute (IRRI), the International Water Management Institute (IWMI) and others of continuing increases in the use, overuse, and inappropriate use of pesticides in some rice production regions as part of attempts to maintain and increase rice production;
14. RECOGNIZING that some countries have put in place mechanisms which are reducing levels of such pesticide usage, but CONCERNED that continuing patterns of pesticide use are threatening not only rice paddy ecosystem services and biodiversity, but also food security and human health and livelihoods, and may be creating potential adverse downstream impacts on wetland ecosystems through changes in water quality from pesticide run-off;
15. ALSO CONCERNED that in some rice-growing countries the regulation of rice pesticide use remains underdeveloped, the impacts of unsustainable pesticide usage are not adequately addressed, and the response strategies required are complex and wide ranging, and also that the risks of the overuse or inappropriate use of such pesticides to human health, rice pest control by natural predators, and overall wetland biodiversity, including that depended upon by local communities for their livelihoods, such as from fisheries, are not always well recognized or dealt with by stakeholders;
16. RECOGNIZING that there are alternative management systems to pesticide-only usage which may help to maintain biodiversity, such as integrated management of rice paddy biodiversity, and to enhance the natural conditions for the control of rice pests, including the use of conventionally-bred rice varieties that provide pest resistance within the context of considering potential negative impacts on biodiversity and ecosystem services and also the use of lower-risk pesticides, and ALSO RECOGNIZING that in natural wetlands, wild native plants can be a source of genetic resistance to mitigate the effects of viral agents, bacteria and insects arising from the crops and/or the transformation of the ecosystem; and
17. RECALLING the relevance to this Resolution of the objectives of the *Changwon Declaration on human well-being and wetlands* (Resolution X.3) which emphasized the need for engagement with audiences beyond the Ramsar Convention itself, as well as the key role of Ramsar Administrative Authorities (National Focal Points) in developing partnerships for the conservation and sustainable use of wetlands to support learning, collecting and sharing of knowledge;

THE CONFERENCE OF THE CONTRACTING PARTIES

18. CALLS ON Contracting Parties to seek to ensure that groundwater recharge and flood control services provided by rice paddies are fully considered in Integrated River Basin Management (IRBM) processes, including through the appropriate use of the Convention's guidance on wetlands and river basin management (Resolution X.19);
19. NOTES the need for Contracting Parties to consider the review, revision, and/or formulation, as appropriate, of national policies for the regulation and use of pesticides in rice production, taking into account the specific priorities, conditions and circumstances of developing countries in particular, and recognizing the need for policies that avoid the

negative impacts of their use on wetland biodiversity and ecosystem services, including through the development or application, where possible, of:

- i) national/local data collection and dissemination of good practice on managing rice paddy biodiversity for the control of rice crop pests, on rice production including pest and disease control;
 - ii) careful assessment of impacts of such policies, including monitoring, in order to ensure that their implementation does not also create negative impacts on wetland biodiversity and ecosystem services; and
 - iii) national/local training and capacity building programmes in pest control;
20. ENCOURAGES Contracting Parties to integrate relevant issues for addressing wetland biodiversity conservation and wise use related to pesticide usage in rice paddy into their national policies and strategies (or equivalent) for wetlands, their national biodiversity strategy and action plan (NBSAP), national agricultural policies and regulations, and national strategies for the implementation of other relevant multilateral environmental agreements (MEAs);
 21. ENCOURAGES Contracting Parties to work with research institutions and biodiversity and human health sectors, and REQUESTS rice and pesticide industries to address inadequate and inappropriate practices; eliminate perverse incentives; secure the provision of financial resources and technical assistance from developed to developing countries; and ensure exchange of knowledge in relation to rice pest management, taking into account the specific economic and social conditions; and to consider incorporating the use of integrated management of biodiversity in rice paddies, and the optimal time of planting, traditional breeding and varieties, and other farming practices which capitalize on the capacity of the environment of rice paddies as pest control strategies;
 22. ENCOURAGES Contracting Parties to maintain and protect wetland systems containing traditional and native rice species;
 23. URGES Contracting Parties to strengthen the role of communications, education, participation, and awareness (CEPA) in working with local communities to improve available information and enhance community understanding of the risks to wetland ecological character and ecosystem services from the unsustainable and other inappropriate use of pesticides; to raise awareness about the adverse effects of the use of pesticides in rice farming and of nature and biodiversity-based alternatives for pest control; and to recognize the value of the traditional agricultural practices and organic farming in pest control and raise awareness of avoiding the use of illegal/counterfeit pesticides;
 24. REQUESTS the STRP (including its IOP members), in collaboration with Contracting Parties, relevant UN organizations, and other MEAs and their initiatives including the working group on bird poisoning under the CMS, to compile and review information on the positive and negative impacts of agricultural practices on rice paddies as wetland systems in terms of enhancing their biodiversity and ecosystem services, and to prepare advice to the Convention on these matters.