

Appendix 1: Resolution X.31 Enhancing biodiversity in rice paddies as wetland systems

1. RECOGNIZING that rice is grown in at least 114 countries worldwide and, as the staple diet for over half the world's population, has contributed to about 20% of the total calorie supply in the world;

2. AWARE of recent concern over global food supplies and costs and the need for increasing food production, and ALSO AWARE that Resolution X.23 on Wetlands and human health and well-being highlights the interdependencies between human health, food security, poverty reduction and sustainable wetland management and calls for Contracting Parties to "strengthen collaboration and seek new partnerships between the sectors concerned with wetland conservation, water, health, food security and poverty reduction";

3. RECOGNIZING that rice paddies (flooded and irrigated fields in which rice is grown), a typical agricultural landscape for a significant proportion of world rice cultivation, have provided large areas of open water for centuries in regions with a variety of rice-growing cultures, and, in addition to producing rice, also provide other animal and/or plant food sources and medicinal plants, thus acting as wetland systems and helping to sustain livelihoods and human well-being in these regions;

4. NOTING that rice paddies in many parts of the world support important wetland biodiversity, such as reptiles, amphibians, fish, crustaceans, insects and molluscs, and play a significant role in waterbird flyways and the conservation of waterbird populations;

5. FURTHER RECOGNIZING that aquatic biodiversity associated with rice paddies can make an important contribution to the nutrition, health and well-being of rural populations;

6. RECOGNIZING ALSO that in some particular regions, it is important that irrigated rice paddies remain connected to surrounding natural/semi-natural habitat, in particular to wetlands, for the sake of biodiversity;

7. RECALLING that "rice fields" are included in the Ramsar Classification System for Wetland Type as a human-made wetland ("Type 3 Irrigated land; includes irrigation channels and rice fields") and thus, where appropriate, may be designated as, or included in, Wetlands of International Importance (Ramsar sites), and that at least 100 designated Ramsar sites around the world include rice field habitats that play important ecological roles and support a range of biodiversity, including supporting internationally important populations of breeding and non-breeding resident and migratory waterbirds;

8. NOTING that some sites associated with rice paddies are or could be included in the Globally Important Agricultural Heritage Systems (GIAHS) Programme, which was initiated by the Food and Agriculture Organization of the United Nations (FAO) and promotes the dynamic conservation of areas important for indigenous techniques and cultural and biodiversity values, and RECOGNIZING that such sites could provide examples of wetland wise use;

9. CONCERNED about current and potential threats to the role of rice paddies as sustainable wetland systems, as well as about the potential and current impacts to the surrounding environment, caused by factors such as inappropriate agricultural practices relating to water management and change of natural flow, as well as introduction of new taxa, including invasive alien species, use of high levels of harmful agricultural chemicals, and the impact of inappropriate conversion of rice paddies to other land uses;

10. NOTING that some water management approaches, such as flooding of rice paddies when they are not in use for rice production, have been adopted in order to provide suitable habitat for some fauna, including migratory waterbirds, and to control weeds and pest insects;

11. ALSO CONCERNED that inappropriate conversion of wetland to paddy field may have potential negative impacts on local biodiversity and related ecosystem services, and AFFIRMING that this Resolution is not to be used to justify conversion of existing natural wetlands into human-made wetlands, nor to justify inappropriate conversion of land to human-made wetlands;

12. ALSO AFFIRMING that the focus of this Resolution is specifically on the maintenance and enhancement of the ecological and cultural role and value of appropriate rice paddies as wetland systems, consistent and in harmony with the Convention, internationally agreed development goals, and other relevant international obligations;

13. RECALLING that Resolution VIII.34 (2002) highlighted, inter alia, the importance of ensuring that agricultural practices are compatible with wetland conservation objectives and that sustainable agriculture supports some important wetland ecosystems, and AWARE of the work currently being undertaken in response to Resolution VIII.34 by the Scientific and Technical Review Panel (STRP) and the Guidance on Agriculture-Wetlands Interactions (GAWI) initiative with the FAO, Wageningen University and Research Centre, the International Water Management Institute

(IWMI), Wetland Action, and Wetlands International, including the preparation of a framework for guidance related to interactions between wetlands and agriculture; and

14. NOTING that information and products related to rice paddy farming are available through the work and publications of the Organization for Economic Cooperation and Development (OECD) on agriculture and biodiversity, including agri-biodiversity indicators; that information on wetland, water and rice farming is available in the Comprehensive Assessment of Water Management in Agriculture (CA); and that the analyses of distribution and representativeness of Ramsar wetland types, currently being undertaken by the IWMI for the STRP, include, inter alia, rice paddies as human-made wetlands;

THE CONFERENCE OF THE CONTRACTING PARTIES

15. ENCOURAGES Contracting Parties to promote further research on flora, fauna and ecological functions in rice paddies and on the cultures that have evolved within rice-farming communities that have maintained the ecological value of rice paddies as wetland systems, in order to identify sustainable rice paddy farming practices that reinforce wetland conservation objectives and provide ecosystem services such as groundwater recharge, climate moderation, flood and erosion control, landslide prevention, provision of plant and or animal food resources and medicinal plants, and the conservation of biodiversity;

16. INVITES Contracting Parties to consider offering recognition and/or protection to such sites through, for example, their designation as Wetlands of International Importance and through mechanisms such as the FAO Globally Important Agricultural Heritage Systems Programme, and FURTHER INVITES Contracting Parties to disseminate and exchange information on these practices and sites amongst governments, farmers and conservation agencies, in order to support improvement of sustainable rice farming practices and water management;

17. ENCOURAGES Contracting Parties to:

- identify challenges and opportunities associated with managing rice paddies as wetland systems in the context of the wise use of wetlands, also paying attention to the concept of connectivity between rice paddies, natural wetlands and river basins, as well as to the promotion of sustainable agricultural practices, and furthermore to encourage conservation authorities to collaborate with agriculture authorities and those agencies responsible for rice production and disease prevention to identify and actively promote planning, farming practices, and water management in rice paddies that serve to enhance the natural biodiversity, ecosystem services, and sustainability of rice paddies, while also contributing to improved nutrition, health and well-being of farming household members and surrounding community members and to the conservation of waterbird populations;
- ensure that such planning, farming practices, and water management are implemented wherever applicable, making appropriate use of the Ramsar guidance on wetlands and river basin management adopted in COP10 Resolution X.19 so as to ensure that river basin processes and possible upstream and downstream effects of rice paddy farming are considered, while being conscious of the need for food production and the interests of local communities;
- ensure that planning, farming practices, and water management associated with rice paddies do not lead to loss of existing natural biodiversity and ecosystem services through inappropriate conversion of natural wetlands or other habitats to human-made wetlands; and
- consistent with the measures identified above, seek appropriate environmentally sustainable ways of minimising risks to human health associated with waterborne diseases, disease vectors (including Highly Pathogenic Avian Influenza), and excessive and inappropriate use of agricultural chemicals in rice paddies; and

18. REQUESTS the Scientific and Technical Review Panel, working with other interested organizations, to:

- prepare a technical report on the role of rice paddy in supporting the conservation of wetland biodiversity and the delivery of wetland ecosystem services, taking into account differences in the ways in which rice fields are managed, considering also the work of the GAWI partnership; and
- review, disseminate, and exchange available guidance and information related to rice paddy planning, management practices and training on sustainable rice farming that protect or enhance wetland biodiversity and ecosystem services while also supporting essential food production, in collaboration especially with FAO, IWMI, the International Rice Research Institute (IRRI), the Africa Rice Centre (WARDA), the GAWI partnership, and others.

Appendix 2: Resolution IX.19 The importance of regional wetland symposia in effectively implementing the Ramsar Convention

1. TAKING INTO ACCOUNT the need for the establishment of appropriate regional frameworks for fostering international cooperation amongst Contracting Parties and other organizations and stakeholders, in accordance with the Guidelines for international cooperation under the Ramsar Convention (Resolution VII.19);

2. RECOGNIZING the critical role of regional cooperation for promoting the aims and objectives of the Convention, as reiterated by the Regional initiatives for the further implementation of the Convention (Resolution VIII.30) and the establishment of regional initiatives in the framework of the Convention (Resolution IX.7);

3. CONSIDERING that such regional cooperation can be achieved through closer partnership between and among governmental and non-governmental sectors and scientific, technical and policy-making sectors in different regions of the world;

4. RECOGNIZING that the participation of local communities and indigenous peoples is essential for the conservation and wise use of wetlands, as embodied in the Guidelines for establishing and strengthening local communities' and indigenous people's participation in the management of wetlands (Resolution VII.8) and Resolution VIII.36;

5. ALSO RECOGNIZING that the Asian Wetland Symposia (AWS) held in 1992 (Japan), 2001 (Malay-

sia), and 2005 (India) and organized through the leadership of the Ramsar Center Japan (RCJ), a non-governmental organization (NGO) based in Japan, have contributed substantively to enhancing effective regional cooperation and networking in Asia;

6. UNDERSTANDING that these Symposia provide a single platform for discussions among various sectors including, inter alia, national and local governments, NGOs, scientific experts, the private sector, and local and indigenous peoples engaged in wetland management, and that their recommendations embodied in the Recommendation of the Asian Wetland Symposium (1992), the Penang Statement (2001) and the Chilika Statement (2005) have been reported to Ramsar COP5, COP8 and COP9 respectively;

7. MINDFUL that the Asian Wetland Symposia, and a series of local workshops organized by the Ramsar Centre Japan, have been successful in the Asian region in promoting public awareness of the aims and objectives of the Ramsar Convention, and accession thereto; have encouraged Contracting Parties to identify and designate Ramsar sites; and have promoted participation of local communities and indigenous peoples in the management of wetlands in the context of attaining sustainable development including economic growth and poverty reduction;

8. RECOGNIZING that Ramsar Regional Meetings and Conferences of the Contracting Parties

(COPs) focus increasingly on policy and administrative issues, so that the Asian Wetland Symposium series provides an increasingly valuable complementary forum for the discussion of scientific and technical issues and priorities for the conservation and wise use of wetlands in the Asia region;

9. ALSO RECOGNIZING that financial support for the Asian Wetland Symposium series has come from a wide variety of donors, including central and local governments, business entities, academic institutions, international organizations including UN bodies, and international NGOs, and that these contributions have been invaluable to securing the continuity of the Asian Wetland Symposia, as well as the series of local workshops, leading to the establishment of effective, diverse and vibrant networks on wetland conservation and wise use in the Asian region; and

10. NOTING that the fifth meeting of a biennial International Symposium on Wetlands was held in Zapata Swamp, Cuba, with the participation of scientists and wetland managers of different countries from the Americas region;

THE CONFERENCE OF THE CONTRACTING PARTIES

11. ENCOURAGES all Contracting Parties and non-Contracting Parties in the Asia Region to give full recognition to the Asian Wetland Symposium (AWS) as an effective forum for information exchange and as a source of good practical advice for the conservation and wise use of wetlands in Asia;

12. ENDORSES the continuation of the periodic Asian Wetland Symposia;

13. REQUESTS Contracting Parties, in cooperation with the Ramsar Secretariat and international NGOs, to facilitate the support to and participation in the Asian Wetland Symposia by a wide range of stakeholders, including but not limited to local governments, NGOs, the private sector, and local communities, noting that this will not have any financial implications for the Convention's core budget;

14. REQUESTS the Ramsar Secretariat and the Standing Committee to encourage and develop linkages between Ramsar Regional Meetings, including subregional meetings, and such regional wetland fora, so as to ensure that the outcomes of the fora are made fully available to Contracting Parties and governments in support of their implementation of the Convention through exchange of experiences and innovative practices discussed at such fora; and

15. RECOMMENDS that Contracting Parties, international NGOs, and other relevant scientific and technical organizations consider the usefulness of establishing similar periodic regional scientific and technical fora where they do not already exist, drawing on the experiences of the Asian Wetland Symposia, as a means of increasing scientific and technical support for the implementation of the Convention including, inter alia, any regional initiatives established under the Convention.

Appendix 3: Ramsar Classification System for Wetland Type

The codes are based upon the Ramsar Classification System for Wetland Type as approved by Recommendation 4.7 and amended by Resolutions VI.5 and VII.11 of the Conference of the Contracting Parties. The categories listed herein are intended to provide only a very broad framework to aid rapid identification of the main wetland habitats represented at each site.

To assist in identification of the correct Wetland Types to list in section 19 of the RIS, the Secretariat has provided below a tabulations for Marine/Coastal Wetlands and Inland Wetlands of some of the characteristics of each Wetland Type.

Marine/Coastal Wetlands

A Permanent shallow marine waters in most cases less than six metres deep at low tide; includes sea bays and straits.

B Marine subtidal aquatic beds; includes kelp beds, sea-grass beds, tropical marine meadows.

C Coral reefs.

D Rocky marine shores; includes rocky offshore islands, sea cliffs.

E Sand, shingle or pebble shores; includes sand bars, spits and sandy islets; includes dune systems and humid dune slacks.

F Estuarine waters; permanent water of estuaries and estuarine systems of deltas.

G Intertidal mud, sand or salt flats.

H Intertidal marshes; includes salt marshes, salt meadows, saltings, raised salt marshes; includes tidal brackish and freshwater marshes.

I Intertidal forested wetlands; includes mangrove swamps, nipa swamps and tidal freshwater swamp forests.

J Coastal brackish/saline lagoons; brackish to saline lagoons with at least one relatively narrow connection to the sea.

K Coastal freshwater lagoons; includes freshwater delta lagoons.

Zk(a) Karst and other subterranean hydrological systems, marine/coastal

Inland Wetlands

L Permanent inland deltas.

M Permanent rivers/streams/creeks; includes waterfalls.

N Seasonal/intermittent/irregular rivers/streams/creeks.

O Permanent freshwater lakes (over 8 ha); includes large oxbow lakes.

P Seasonal/intermittent freshwater lakes (over 8 ha); includes floodplain lakes.

Q Permanent saline/brackish/alkaline lakes.

R Seasonal/intermittent saline/brackish/alkaline lakes and flats.

Sp Permanent saline/brackish/alkaline marshes/pools.

Ss Seasonal/intermittent saline/brackish/alkaline marshes/pools.

Tp Permanent freshwater marshes/pools; ponds (below 8 ha), marshes and swamps on inorganic soils; with emergent vegetation water-logged for at least most of the growing season.

Ts Seasonal/intermittent freshwater marshes/pools on inorganic soils; includes sloughs, potholes, seasonally flooded meadows, sedge marshes.

U Non-forested peatlands; includes shrub or open bogs, swamps, fens.

Va Alpine wetlands; includes alpine meadows, temporary waters from snowmelt.

Vt Tundra wetlands; includes tundra pools, temporary waters from snowmelt.

W Shrub-dominated wetlands; shrub swamps, shrub-dominated freshwater marshes, shrub carr, alder thicket on inorganic soils.

Xf Freshwater, tree-dominated wetlands; includes freshwater swamp forests, seasonally flooded forests, wooded swamps on inorganic soils.

Xp Forested peatlands; peat swamp forests.

Y Freshwater springs; oases.

Zg Geothermal wetlands

Zk(b) Karst and other subterranean hydrological systems, inland

Note: "floodplain" is a broad term used to refer to one or more wetland types, which may include examples from the R, Ss, Ts, W, Xf, Xp, or other wetland types. Some examples of floodplain wetlands are seasonally inundated grassland (including natural wet meadows), shrublands, woodlands and forests. Floodplain wetlands are not listed as a specific wetland type herein.

Human-made wetlands

1 Aquaculture (e.g., fish/shrimp) ponds

2 Ponds; includes farm ponds, stock ponds, small tanks; (generally below 8 ha).

3 Irrigated land; includes irrigation channels and rice fields.

4 Seasonally flooded agricultural land (including intensively managed or grazed wet meadow or pasture).

5 Salt exploitation sites; salt pans, salines, etc.

6 Water storage areas; reservoirs/barrages/dams/impoundments (generally over 8 ha).

7 Excavations; gravel/brick/clay pits; borrow pits, mining pools.

8 Wastewater treatment areas; sewage farms, settling ponds, oxidation basins, etc.

9 Canals and drainage channels, ditches.

Zk(c) Karst and other subterranean hydrological systems, human-made

Appendix 4: Criteria for Identifying Wetlands of International Importance

Adopted by the 7th (1999) and 9th (2005) Meetings of the Conference of the Contracting Parties, superseding earlier Criteria adopted by the 4th and 6th Meetings of the COP (1990 and 1996), to guide implementation of Article 2.1 on designation of Ramsar sites.

Group A of the Criteria. Sites containing representative, rare or unique wetland types

Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.

Group B of the Criteria. Sites of international importance for conserving biological diversity

Criteria based on species and ecological communities

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of

a particular biogeographic region.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Specific criteria based on waterbirds

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Specific criteria based on fish

Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of indige-

nous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.

Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

Specific criteria based on other taxa

Criterion 9: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of wetland-dependent non-avian animal species.