CONVENTION ON WETLANDS (Ramsar, Iran, 1971)
43rd Meeting of the Standing Committee
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DOC. SC43-26

Rice paddy, wetlands and pesticides

Action requested. The Standing Committee is invited to approve the Draft Resolution on "Rice paddy, wetlands and pesticides" for COP11 consideration subject to any amendments agreed by the Committee.

Background

1. The Ramsar Convention's Resolution X.31 has been important in building understanding of eco-agricultural concepts, such as multi-functionality. Well-managed rice paddies can provide valuable habitat in landscapes where intensive and extensive agriculture has been responsible for the loss of wetlands, especially in highly developed regions. The benefits extend to communities, not only in terms of maintenance of biodiversity, but also in the conservation of cultural, social, and economic values.

2. Preferred practices include wise use principles, such as the management of water flows to allow for connectivity between paddy and natural wetlands, the minimization of chemical usage, and the protection of iconic species. Efforts have been made to document wise practices for the protection of rice biodiversity through workshops and meetings such as those held in Takashima, Japan (2010), and more recently in Sangju, Republic of Korea (2011).

3. Recent information suggests, however, the emergence of widespread, significant overuse of pesticides which may undermine not only rice paddy ecosystem services, but also food security, human health, livelihoods, and biodiversity.

Scientific and technical work supporting this Draft Resolution

4. The Convention's Scientific and Technical Review Panel (STRP) has been made aware by the leading international scientific organizations with responsibility for rice production (the International Rice Research Institute and the United Nation's Food and Agriculture Organization) of their urgent concerns surrounding pesticide over-use. Whilst such concerns are not entirely new, the scale of pest and disease outbreak as a result of pesticide over-use and diminished predator control is unprecedented and relevant ecotoxicological data on wetland impacts from over-use is limited.

5. In response to these concerns, the STRP, in collaboration with the Ramsar Regional Centre for East Asia and the Ministry of Environment Japan, organized an expert workshop in Singapore (March 2011) with leading international scientists to document the current understanding of pesticide over-use. Consensus was reached amongst the scientists that the issue was real, emerging and critical, and that a Draft Resolution should be prepared for consideration for adoption at the 11th meeting of the Conference of the Parties to the Ramsar Convention (COP11).

6. During a subsequent workshop in Sangju, Republic of Korea (August 2011), presentations were provided by IRRI and UN-FAO and the draft Resolution was discussed, and feedback was provided on drafts during and after the meeting by participants from various countries and scientific institutions.

Scope and purpose of this Draft Resolution (DR)

7. The DR recognizes the need for building strong partnerships not only with the agriculture, human health, and education sectors, but also with those with responsibility for rural livelihoods.

8. The DR targets the specific issue of pesticide over-use in rice cultivation and the negative feedback on wetlands and other sectors, including impacts on food security. It does not advocate for restrictions on specific pesticides or specific types of rice cultivation. Rather it seeks to promote better governance, education, and the wiser use of pesticides.

Draft Resolution XI.xx

Rice paddy, wetlands and pesticides

Prepared by the Scientific and Technical Review Panel, submitted by the Standing Committee

1. RECALLING that the 8th meeting of the Conference of the Parties to the Convention on Wetlands (2002) addressed the issue of agriculture and wetland linkages and inter-dependencies (Resolution VIII.34), and that the 10th meeting of the Conference of the Parties (2008) recognized the importance of biodiversity specifically within rice paddies (Resolution X.31), and AWARE that the 10th meeting of the Conference of the Parties to the Convention on Biological Diversity (2010) stressed the significance of agricultural biodiversity for food security and nutrition (Decision X/34);

2. ALSO AWARE of the importance of global 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, as well as the linkages between food security and human health, poverty reduction, and sustainable wetland management (Resolution X.23);

3. 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");

4. NOTING the urgent concerns of the United Nations Food and Agriculture Organization (FAO) in relation to global food security, the immediate need to increase available supplies of various food commodities, and the pivotal role of rice production;

5. RECOGNIZING that unsuitable agricultural practices continue to be a major driver of the loss of, and change to, wetlands through *inter alia* wetland conversion for food

production, abstraction of water for irrigation, and the impacts of agro-chemicals on water quality and wetland biodiversity;

6. AWARE of the challenge in selecting development options which increase rice production through both intensification and extensification but which are also ecologically, socially, and economically feasible and sustainable;

7. RECOGNIZING that rice farming varies with regard to the practices utilized and that rice can be grown in sympathy with wetlands, with associated benefits for biodiversity, local and national economies, and human populations;

8. ALSO RECOGNIZING that responsible river basin management is required to ensure that rice farms are not degraded by upstream land uses and practices and, equally, that rice farms should not affect downstream areas, especially wetlands;

9. AWARE of recent sharp increases in the availability and use of pesticides, particularly in rice production as part of attempts to increase food supplies, the impacts on wetland predators from pesticide over-use, the risk of resistance in pest populations, and the increased occurrence of major pest and disease outbreaks across a widening region of the world;

10. CONCERNED that the negative feedback between pesticide over-use and i) food security (pest and disease outbreaks), ii) human well-being and health, and iii) wetlands (ecotoxicology) will undermine the resilience of rural communities and livelihoods and of ecosystems and their biodiversity;

11. ALSO EXPRESSING CONCERN that the governance of rice pesticide usage is largely inadequate, that many chemicals and practices are poorly regulated, and that farmers' awareness and education is mostly insufficient, especially in relation to maintaining ecosystem services to control pests and diseases, and NOTING that there are effective alternative management systems such as Integrated Pest Management (IPM);

12. AWARE of the work of the International Rice Research Institute (IRRI), the UN Food and Agriculture Organization (FAO), the International Water Management Institute (IWMI), universities and national research institutes, and community-based organizations on rice in the context of pesticides, pest and disease outbreaks, wetlands and ecotoxicology; and

13. ALSO AWARE of the objectives of the *Changwon Declaration on human well-being and wetlands* (Resolution X.3) and 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 with other relevant sectors, such as agriculture, human health, and education;

THE CONFERENCE OF THE CONTRACTING PARTIES

14. RECOGNIZES that excessive use of pesticides within the rice industry is resulting in the greater probability of pest outbreaks, because of impacts to the pest control provided by wetland ecosystems (e.g., predators), and that off-site migration of pesticides (e.g., through

runoff) which exceeds environmental guidelines is occurring and is likely to have adverse effects on downstream wetlands;

15. FURTHER RECOGNIZES that pesticide usage should be effective and rational in relation to pest control and that wetlands, food security, and human health should not be jeopardised thereby, and NOTES that in situations of pesticide over-use, this may indicate a need for reduced use, no use, or alternative non-pesticide pest control methods;

16. URGES Contracting Parties to consider the risk to regional food security from major pest and disease outbreaks, which are often transboundary and attributed by rice experts to pesticide over-use and the wider availability of pesticides in rice farming;

17. ENCOURAGES Contracting Parties to formulate policies for the appropriate governance, regulation and use of pesticides in rice production, recognizing the need for accelerated implementation of policies that can minimize the negative impacts of their use on wetlands, human health and food security, including the development/application of:

- risk assessment procedures for rice pesticides before release/usage;
- labelling/packaging which clarifies the adverse impacts of usage on biodiversity;
- certification and training for retailers to provide relevant advice on pesticide application;
- reporting mechanisms for rice pesticide usage at local and national scales;
- coordination mechanisms among government agencies responsible for rice pesticides and environment, human health, agriculture, and economics;
- regulations which harmonize rice pesticide use across countries, e.g., the GHS (Global Harmonizing System) for chemical trade; and
- monitoring programmes for the impact of rice pesticide use on wetland biodiversity and the evaluation of the effectiveness of regulations;

18. ALSO ENCOURAGES Contracting Parties to work with the rice and pesticide industries to review market conditions which promote poor practices, eliminate perverse incentives, and develop financial mechanisms which support responsible practices in pesticide use, and to promote the use of rice pesticides which, through strengthened development cooperation, help to transfer new pesticide technologies and support greater information exchange;

19. URGES Contracting Parties to strengthen the role of Communications, Education, Participation, and Awareness (CEPA) as an effective mechanism for improving available information and enhancing community understanding of this emerging problem and for raising awareness of the need for the judicious use of pesticides in rice farming;

20. REQUESTS the Scientific & Technical Review Panel (STRP), working with UN-FAO, IRRI, the Convention's International Organization Partners (IOPs), and other interested organizations to:

    i) review the adequacy of available guidance and governance for pesticide usage in rice farming, with particular emphasis on food security, human health, and wetland biodiversity;

ii) benchmark best practice guidance and governance systems for rice pesticide usage in relation to wetlands and, where appropriate, develop such guidance and systems in collaboration with other relevant international organizations; and

iii) inform the Standing Committee and Conference of the Parties of its findings; and

21. ENCOURAGES Contracting Parties to conduct deeper study and analyses to assess the potential impacts, benefits and risks of rice pesticides affecting Ramsar Sites and other wetlands and to communicate such findings to relevant platforms and fora, including to the STRP.