

Human health and wetlands interactions



Issues for healthy wetlands and healthy people in the future



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« Healthy wetlands, healthy people »



CONVENTION ON WETLANDS
CONVENTION SUR LES ZONES HUMIDES
CONVENCIÓN SOBRE LOS HUMEDALES
(Ramsar, Iran, 1971)



"Healthy Wetlands, Healthy People"

- COP10 theme
- Great slogan – catchy and conveys a vivid social message
- But not unproblematic: what is wetland health, and who are these 'healthy people'?



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What is health?



- *Health is a complete state of physical, mental and social well-being and not merely the absence of disease and infirmity.*

World Health Organization (WHO)
Constitution



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Wetlands and human well-being



- Health is a component of human well-being (MA, 2005)
- Healthy wetlands support human well-being through the provision of ecosystem services: food security; water security; “insurance” value through the formation of natural buffers; and spiritual, recreational, educational value, etc.



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Benefits of wetlands to human health



| | |
|---------------------|---|
| Food | People in Cambodia obtain about 60–80% of their total animal protein from the fishery in Tonle Sap; in Malawi, 70–75% of the total animal protein for both urban and rural low-income families comes from inland fisheries. |
| Storm buffer | Coastal wetlands, coastal river floodplains, and coastal vegetation, reduce the impacts of floodwaters produced by coastal storm events. |





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Examples of wetland ecosystem-related consequences for human health



| Health issues | Health effects | Relevant wetland ecosystem services as determinants of health |
|----------------------|---|--|
| Nutrition | Malnutrition, stunting, obesity, diabetes | Water, food provision Soil, sediment and nutrient retention |
| Infection | Water-borne diseases Vector-borne diseases (+emerging, re-emerging) | Drinking water Biological control agents Systemic consequences |

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- A thick, wavy orange line that spans across the top of the slide.
- Over 1 billion people lack access to safe water supplies; 2.6 billion people lack adequate sanitation. This has led to widespread microbial contamination of drinking water.

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- A thick, orange, wavy line that spans across the top of the slide, positioned above the main text.
- Water-associated infectious diseases claim up to 3.2 million lives each year, approximately 6% of all deaths globally. The burden of disease from inadequate water, sanitation and hygiene totals 1.7 million deaths and the loss of more than 54 million healthy life years.

Economic values and incentives



- Disruption and/or loss of wetland ecosystem functions impose huge economic costs.
- Application of economic valuation techniques have yielded useful economic estimates of the contribution of wetlands towards health objectives to guide sound decision-making.

Global trends affecting human health



- Many of the current and continuing pressures on wetlands and driving trends in human health occur largely through issues of changing (often decreasing) water availability and quality.



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Global trends affecting human health



- Climate change has exacerbated, and is expected to continue to exacerbate, health impacts in relation to wetlands and water, both by affecting the wetlands themselves, and by affecting disease burdens.



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What is wetland health?



- 'wetland health' is a negotiated outcome involving the wetland, water and health sectors, community and others, in a collective determination of desirability* and limits of acceptable change.

*in two ways: a) evaluative approach to health, b) desirable behaviour in and around wetlands



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Responses and interventions



- Wetland management actions can result in positive or negative consequences for human health.



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Responses and interventions



- Wetland managers need to engage actively with the health sector at the local and national levels.
- Many of the possible response options for addressing ecosystem change and human well-being lie primarily outside the direct control of the wetland sector, or even the health sector.



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Responses and interventions



- One valuable strategy to achieve cross-sectoral action may lie in using human disease burden data as a bio-indicator to help target and prioritise wetland remediation.



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Responses and interventions



- Wetland managers need to be involved in building coping capacity in human communities, and to recognize that these responses will need to operate at local, national, or regional levels.



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Responses and interventions



- Where interventions or responses involve tradeoffs, it is important to understand the consequences of taking one path in preference to another.



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Responses and interventions



- Managing wetland ecosystem services to improve human health will help achieve the Millennium Development Goals.



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Recommendations



- Identify and implement interventions that benefit both wetland ecosystem health and human health *concurrently*.
- In the first instance target wetlands that are high on the priority list for *both* their conservation value *and* their human health benefit.



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Recommendations



- Encourage strengthened collaboration and seek new partnerships between the sectors concerned with wetland conservation, water, health, food security and poverty reduction within and between governments, non-government organizations, and the private sector.



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Recommendations



- Make the interrelationship between wetland ecosystems and human health a key component of national and international policies, plans and strategies.



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Recommendations



- When making decisions on co-managing wetlands and human health issues, take into account current understanding of climate change-induced increases in health and disease risk, and maintain the capacity of wetlands to adapt to climate change and continue to provide their ecosystem services.



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Recommendations



Wetland authorities, working with their health sector counterparts and others, should seek to:

- i) be vigilant for the emergence or re-emergence of wetland-linked diseases;
- ii) act preventively and proactively in relation to such diseases; and
- iii) develop scientifically-based responses taking into account current good practices, where instances of such diseases are identified.



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Recommendations



- Dedicate resources to building capacity for more integrated approaches to wetland and water management and health, including the application of local and traditional knowledge.



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- Adopting this theme therefore has multiple and beneficial messages:
 - It allows wetland ecosystem assessment to enhance our understanding of ecological character;
 - It embraces ecosystem services more fully;
 - It recognises the centrality of the link between wetlands and human well-being; and
 - It ensures a systems approach to wetland management.



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