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EXPERT GROUP ON OUTCOME-ORIENTED TARGETS FOR THE PROGRAMMES OF WORK ON THE BIODIVERSITY OF INLAND WATER ECOSYSTEMS AND MARINE AND COASTAL ECOSYSTEMS
Montreal, 25-27 October 2004

DRAFT OUTCOME-ORIENTED TARGETS FOR THE IMPLEMENTATION OF THE PROGRAMME OF WORK ON INLAND WATER ECOSYSTEM BIOLOGICAL DIVERSITY

Note by the Executive Secretary

I. INTRODUCTION

1. The present note presents, for the consideration of the Expert Group on Outcome-Oriented Targets for the Programmes of Work on the Biodiversity of Inland Water Ecosystems and Marine and Coastal Ecosystems, a draft proposal for outcome-oriented targets for the implementation of the elaborated programme of work on inland water biological diversity. The targets were originally developed in response to paragraph 4 (b) of recommendation VIII/2 of the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), in which SBSTTA requested the Executive Secretary to prepare a schedule of short, medium and long-term outcome-oriented targets and deadlines for implementation of the programme of work, for consideration by the national focal points and then the Subsidiary Body prior to the seventh meeting of the Conference of the Parties.

2. The proposed targets for the programme of work on inland water ecosystem biological diversity (UNEP/CBD/SBSTTA/9/14/Add.1) were discussed in depth at the ninth meeting of SBSTTA under a general agenda item on integration of outcome-oriented targets into the programmes of work of the Convention.

3. In its recommendation IX/13 of the ninth meeting of SBSTTA requested the Executive Secretary to further refine the proposed targets taking into account the following:

(a) The targets should be challenging but realistic, recognizing the constraints of Parties, especially developing countries, particularly the least developed countries and small island developing States among them, and countries with economies in transition;

(b) The global targets should be considered as a flexible framework, and their achievement will require additional financial and technical resources especially for developing countries, particularly the least developed countries and small island developing States among them, and countries with economies in transition;

(c) The total number of goals and targets should be manageable and developed as part of a strategic and coherent approach for all programmes of the Convention;

/…

(d) The development of goals, targets and subsequent identification of indicators should draw upon existing initiatives and those under development in other conventions and organizations;

(e) Legal implications in relation to the mandate of the Convention on Biological Diversity and the mandate of other relevant multilateral agreements.

4. At its seventh meeting, in decision VII/30 paragraph 12 (c), the Conference of the Parties requested the Executive Secretary to refine the proposals for outcome-oriented targets for the programme of work on the biological diversity of inland waters prepared in response to that recommendation (UNEP/CBD/COP/7/20/Add.4).

5. Decision VII/30, paragraph 12 (c), of the Conference of the Parties also requested that the integration of outcome-oriented targets into the programme of work on the biological diversity of inland water ecosystems proceed according to the framework in annex II of that decision and using the approach set out in annex III, identifying more precise targets, including, as appropriate, quantitative elements.

6. Therefore, as far as practical, the targets should adhere as closely as possible to those developed for the Strategic Plan – with minor re-wording as and where required and where feasible appropriate quantification. Specifically, the proliferation of targets for the programme of work should be avoided.

7. The targets developed should bear in mind that other conventions and processes have or may develop outcome oriented targets. These should be considered in relation to targets set under the Convention on Biological Diversity. In general, those conventions or processes that deal more specifically with inland water issues might be anticipated to have more specific targets. Particular note is made of the Ramsar Convention, which is the lead partner for the programme of work of the Convention on Biological Diversity on the biological diversity of inland water ecosystems. It is anticipated that the Ramsar Convention may set much more detailed targets which might function as "sub-targets" under the targets for inland waters of the Convention on Biological Diversity (similarly for marine and coastal wetlands). Such an approach would avoid "target proliferation" under the Convention on Biological Diversity.

8. Targets must be verifiable. Therefore, viable indicators should exist for each target set and there should be in existence a reporting (monitoring) system for the provision of indicator data. Whilst indicators are to be finalised subsequent to the development of targets, all three elements (targets, indicators, reporting/monitoring) must be considered in relation to each other.

II. VISION, MISSION, GOALS AND TARGETS OF THE PROGRAMME OF WORK ON INLAND WATER ECOSYSTEM BIOLOGICAL DIVERSITY

A. Vision

9. The overall vision to which the revised programme of work on inland water ecosystem biological diversity makes a contribution is to sustain inland water ecosystem biological diversity and its capacity to sustain life on earth and the ecosystem goods and services it provides.

B. Mission

10. Consistent with the mission of the Strategic Plan of the Convention, the mission of the programme of work on inland water ecosystem biological diversity is to significantly reduce the rate of loss of inland water ecosystem biodiversity by 2010 at the global, regional and national level as a contribution to poverty alleviation and to the benefit of life on earth.

C. Goals and targets

11. Ten long-term goals, each with one to three related outcome-oriented targets for 2010, are proposed in annex I to this note. They address the status and trends of, and threats to, the components of inland water ecosystem biological diversity, within the scope of the programme of work.

III. RELATIONSHIP BETWEEN THE PROGRAMME OF WORK ON INLAND WATER ECOSYSTEM BIOLOGICAL DIVERSITY AND OTHER RELEVANT PROCESSES

A. Millennium Development Goals

12. The relationships between the programme of work on inland water ecosystem biological diversity and the Millennium Development Goals is explored in more detail in the note by the Executive Secretary on the subject prepared for the seventh meeting of the Conference of the Parties (UNEP/CBD/COP/7/20/Add.1).

13. The implementation of the revised programme of work on inland water ecosystem biological diversity makes a direct contribution to the achievement of the Millennium Development Goals (MDGs), and more specifically to targets 9 (To integrate the principles of sustainable development into country policies and programmes and to reverse the loss of environmental resources) and 10 (To halve by 2015 the proportion of people without sustainable access to safe drinking water).

14. Furthermore, through the provision of more sustainable goods and services derived from inland water ecosystem biological diversity, such as the promotion of more sustainable fisheries and aquaculture, it contributes indirectly or potentially to MDG target 2 (To halve, between 1990 and 2015, the proportion of people who suffer from hunger). It also contributes indirectly or potentially, through the increased control of pathogens and vectors of water-borne or water-based diseases to MDG target 8 (To have halted by 2015 and begun to reverse the incidence of malaria and other major diseases).

15. There are linkages to other MDGs which are discussed further in the note by the Executive Secretary on the programme of work of the Convention and the Millennium Development Goals (UNEP/CBD/COP/7/20/Add.1).

B. Plan of Implementation of the World Summit on Sustainable Development

16. The revised programme of work on inland water ecosystem biological diversity makes a direct contribution to the Plan of Implementation of the World Summit on Sustainable Development (WSSD) including, *inter alia*:

(a) Paragraphs 8 and 25: Halve, by the year 2015, the proportion of people who are unable to reach or to afford safe drinking water, as outlined in the Millennium Declaration, and the proportion of people without access to basic sanitation;

(b) Paragraph 26: Develop integrated water-resources management and water-efficiency plans by 2005, with support being provided to developing countries;

(c) Paragraph 31 (a): Maintain or restore indigenous wild-capture fisheries stocks to levels that can produce the maximum sustainable yield with the aim of achieving these goals for depleted stocks on an urgent basis and where possible not later than 2015;

(d) Paragraph 31 (d) as pertaining to inland water ecosystem biological diversity: Urgently develop and implement national and, where appropriate, regional plans of action, to put into effect the international plans of action of the Food and Agriculture Organization of the United Nations, including: the International Plan of Action for the Management of Fishing Capacity by 2005 and the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing by 2004; Establish effective monitoring, reporting and enforcement, and control of fishing vessels, including by flag States, to further the International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing; 1/

1/ These initiatives are focused primarily on coastal, marine and high seas fisheries but it is assumed for the purposes of this document that they are applicable, where necessary and appropriate, to inland waters – but the significant difference between exploitation patterns and methods between inland and marine fisheries are noted. The FAO Code of Conduct for Responsible Fisheries is another appropriate framework promoting improved management of fisheries, including for inland waters.

(e) Paragraph 32 (c) as pertaining to inland water ecosystem biological diversity: Develop and facilitate the use of diverse approaches and tools, including the ecosystem approach, the elimination of destructive fishing practices, the establishment of marine protected areas consistent with international law and based on scientific information, including representative networks by 2012 and time/area closures for the protection of nursery grounds and periods, proper coastal land use and watershed planning and the integration of marine and coastal areas management into key sectors; 2/

(f) Paragraph 44: The achievement by 2010 of a significant reduction in the current rate of loss of biological diversity;

(g) Paragraph 58 (g), indirectly or potentially: Develop community-based initiatives on sustainable tourism by 2004 and build the capacities necessary to diversify tourism products, while protecting culture and traditions and effectively conserving and managing natural resources.

C. Biodiversity-related conventions and United Nations organizations

17. The current note has been prepared, as a working draft, in collaboration with the Convention on Wetlands in the continuing effort to further streamline and co-ordinate activities, where relevant, between the two conventions. The revised programme of work on inland water ecosystem biological diversity is fully compatible with the provisions of the Convention on Wetlands (Ramsar, 1971) and several of its elements and activities are also reflected in the third joint work plan (2002-2006) between the Convention on Biological Diversity and the Convention on Wetlands (UNEP/CBD/COP/6/INF/14). This has included reference to Ramsar Resolution VIII.26, annex I, which refers to the 2003-2005 global implementation targets for the Convention on Wetlands which are arranged under 20 operational objectives. Those targets and objectives are largely process oriented and form a solid framework upon which activities to achieve the global targets set here may be operationalized. The two conventions are also continuing their collaboration on the important subject of harmonizing reporting.

18. The Scientific and Technical Review Panel (STRP) of the Convention on Wetlands has also recently undertaken reviews of a number of related subjects (e.g., wetland inventory and assessment; wise use concept and guidelines; water resource management; Ramsar site designation; managing Ramsar sites; communication, education and public awareness; and peatlands). Working Group number 6 on assessing the effectiveness of implementation of the Ramsar Convention is particularly relevant. The report of that group will be presented to the Standing Committee (of the Ramsar Convention) in January 2004 (ref. doc. SC30-7). This notes that the Ramsar Convention has not yet established global outcome-oriented targets and as a surrogate the paper takes the pillars of the general objectives in the strategic plan as interim global targets (i.e., wise use, wetlands of importance, international cooperation, implementation capacity, membership). The current development of global outcome-oriented targets under the Convention on Biological Diversity, therefore, presents an opportunity for the two conventions to further develop targets in synergy. In particular, the Ramsar Convention may wish to develop more specific targets for inland waters (and marine and coastal wetlands), which compliment those set under the Convention on Biological Diversity.

19. The Secretariat of the Ramsar Convention on Wetlands, and the STRP, have also undertaken a significant amount of work on indicators which will be utilised fully when indicators are developed for the current targets, including consideration of harmonising and minimising reporting requirements.

20. Furthermore, elements of the current document are variously relevant to provisions of other conventions, including in particular the Convention on Migratory Species (CMS), the World Heritage Convention (WHC), the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the International Plant Protection Convention (IPPC), the United Nations Framework Convention on Climate Change (UNFCC) and the United Nations Convention to Combat Desertification (UNCCD).

2/ It is assumed for the purposes of this document only that these goals in principle also apply to inland waters, as appropriate.

21. The outcome-oriented targets presented are consistent with the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO) as it relates to inland water ecosystem biological diversity.

22. The implementation of the revised programme of work on inland water ecosystem biological diversity, and progress made towards its related goals, targets and provisions will contribute to the ongoing assessment of the World Water Assessment Programme (WWAP) and will be reflected in the next phase of the World Water Development Report (WWDRII).

Annex I

DRAFT GLOBAL OUTCOME-ORIENTED TARGETS FOR THE PROGRAMME OF WORK ON INLAND WATER ECOSYSTEM BIOLOGICAL DIVERSITY

The following goals and targets are based upon those for the implementation of the strategic plan of the Convention as detailed in decision VII/30 annex II (see annex II of this current document). Those targets are quoted *verbatim* here as **Overall Targets**, which are then applied to the programme of work on inland water ecosystem biological diversity and where necessary re-worded to make them more appropriate to that context.

A. Protect the components of biological diversity

Goal 1: Promote the conservation of the biological diversity of ecosystems, habitats and biomes

Overall Target 1.1: *At least 10 per cent of each of the world's ecological regions effectively conserved.*

Application to inland water ecosystem biological diversity:

This target can be applied directly to inland water ecosystem biological diversity.

Technical rationale

The target already exists in the Global Strategy for Plant Conservation (target 4), and is proposed to be integrated into the programme of work on inland water ecosystem biological diversity. "Ecological region" is understood to mean major groupings of inland water ecosystems by major regional and biological category (e.g., neotropical floodplain rivers, African Great Lakes, etc.). However, for inland water biological diversity the term is currently not well defined. There is a need to undertake an inventory of ecoregion types, locations and area in order to address requirements to meet this target.

Overall Target 1.2: *Areas of particular importance to biodiversity protected.*

Application of the target to inland water ecosystem biological diversity:

- ***Protection of 50 per cent of the most important areas for inland water ecosystem biological diversity assured.***

Technical rationale

This will also require an ecosystems based approach in order to ensure that areas are fully "protected". This target refers to the identification and conservation of sites/areas of particular importance for inland water ecosystem biological diversity (for example, "hot spots" within ecological regions). A report on the elaboration of the indicative list of categories of components of inland water ecosystem biological diversity important for its conservation and sustainable use, in relation to Annex I of the Convention, was presented to the eighth meeting of SBSTTA (UNEP/CBD/SBSTTA/8/INF/4). A workable classification system for inland water ecosystems has also been developed under the Convention on Wetlands (Ramsar). In paragraph 7 (a) of its recommendation VIII/2, SBSTTA recommended that the Conference of the Parties request those Parties to which this is appropriate, to adopt the Ramsar classification of wetlands as an interim classification system.

Depending upon the nature and size of the particular area, it is normally necessary not only to conserve the area itself but also to maintain connectivity between areas which have natural ecological linkages. For example, at the river basin level, a network of small protected areas in strategic places can be a significant benefit but the necessary connections between them (normally through river channels) must be maintained if ecological integrity is to be sustained. For example, for migratory species of fish, it is necessary to protect feeding grounds (often in the lower course of the river) and breeding grounds

(often in upper reaches) and the ability of fish to move freely between these. For migratory water birds, for example, this requirement can often apply between continents.

Goal 2: Promote the conservation of species diversity

Overall Target 2.1: *Restore, maintain, or reduce the decline of populations of species of selected taxonomic groups.*

Application of target to inland water ecosystem biological diversity:

This target can be applied directly to inland water ecosystem biological diversity without modification.

It is assumed that "population" means both absolute number (abundance) of individuals and the number of distinct populations (and sub-populations) of individuals.

The target can be further refined and quantified in relation to specific taxa. This should be feasible for at least many waterbirds, some groups of freshwater fish, aquatic mammals, most amphibians and many reptiles.

Technical rationale

Although data on trends in species for inland water ecosystems are generally very difficult to obtain, and often inaccurate, reasonable to good data do exist for certain taxa. The "sample of species" can be based on these existing sources of data but it will be biased. A particular problem is that good data are often available for those taxa that are popular with special interest groups (and especially birds). Whilst this is a benefit, knowledge is often absent for taxa that can be important for livelihoods, particularly of the rural poor, and therefore considerations of sustainable use. One problem is the very poor quality and quantity of global data at the species level for fisheries in inland waters. 3/

Overall Target 2.2*: status of threatened species improved.*

Application of target to inland water ecosystem biological diversity:

- ***Target 2.2.1 a [significant] improvement in the threatened species of plants and animals dependent upon inland water ecosystems***
- ***Target 2.2.2[80%] of the world's known threatened species of plants and animals dependent upon inland water ecosystems conserved in situ.***

Technical rationale

It is noted that this target refers to the status of *known* threatened species – that is, for example, as per the IUCN Red List. 4/ The target for plants is 60 per cent. However, the number of inland water species listed is very likely a small fraction of those actually threatened. There is also a strong argument that if a species is known to be under threat then something should be done to improve its conservation status. Therefore, the higher target of 80 per cent is suggested here, and there is justification for a 100 per cent target.

References to the conservation of species *ex situ* (e.g., for plants) is not considered feasible for most inland water ecosystem biological diversity (except certain plant groups – which are assumed to be considered under the Global Strategy for Plant Conservation). Although *ex situ* conservation techniques for other taxa (e.g., fish) are emerging (e.g., cryopreservation), the technology is more complex and there is limited confidence that *ex situ* conservation is sustainable for large numbers of taxa.

3/ As acknowledged by the FAO itself (www.fao.org)

4/ When using the IUCN red-list data they should be corrected for "inland water dependency" – for example for fish the categorisation "freshwater" v. "marine" is based upon taxonomic not ecological criteria.

Goal 3: Promote the conservation of genetic diversity

Overall Target 3.1: ***Genetic diversity of crops, livestock, and of harvested species of trees, fish and wildlife and other valuable species conserved, and associated indigenous and local knowledge maintained.***

Application of the target to inland water ecosystem biological diversity:

- ***Prevent further significant losses of known genetic diversity of harvested species of fish and other valuable species that are dependent upon inland water ecosystems, and associated indigenous and local knowledge maintained.***

Technical rationale

Knowledge of genetic diversity of inland water ecosystem biological diversity is very poor but it is available for a limited number of taxa. Therefore, the proportion of genetic diversity where data are available is very small. The commitment to prevent significant further loss, therefore, applies to a relatively small number of taxa. For plants, the commitment is to conserve 70 per cent of genetic diversity but a larger number of taxa is involved due to the better knowledge of the genetic diversity of crops and other commercial groupings.

The target refers to "harvested species" but it is assumed that this includes their wild relatives. This is important. For example, much wild genetic diversity is not harvested directly but can be impacted by farming and other activities using commercial domesticated strains.

More specific outcome oriented targets with indicators can be developed and applied at the regional and national levels. These might include, for example: data on status and trends of wild salmonid (salmon and trout) genetic resources. Also, a number of process indicators will help to identify progress towards conserving genetic diversity in situations where more direct outcome-oriented targets (with quantifiable indicators) are difficult to apply. For example: adoption and implementation of policies and procedures for the conservation of genetic diversity by the aquaculture and other relevant sectors (including monitoring implementation of the Code of Conduct for Responsible Fisheries of the FAO and application of the Addis Ababa principles and guidelines for sustainable use). 5/

B. Promote sustainable use

Goal 4: Promote sustainable use and consumption

Overall Target 4.1: Biodiversity-based products derived from sources that are sustainably managed, and production areas managed consistent with the conservation of biodiversity 6/

Application of the target to inland water ecosystem biological diversity:

- ***Target 4.1.1: At least [80/50 per cent] of products from inland water ecosystem biological diversity derived from sustainable sources***
- ***Target 4.1.2: [At least 50] per cent of aquaculture areas in inland water ecosystems managed consistent with the conservation of inland water biological diversity***

Technical rationale

This target is designed to refer to "exploitation" of wild resources (that is, mainly capture fisheries but also hunting and gathering of non-fisheries products).

5/ UNEP/CBD/SBSTTA/9/9 and relevant information documents.

6/ The term "sustainably managed" is understood to mean "managed for sustainability" – that is the management objective is that the biodiversity or resources themselves are sustained (not that management itself is sustained).

"Managed on the basis of sustainability" is very difficult to define for inland water ecosystem biological diversity because the two major problems of environmental degradation, and loss, and over-exploitation are inter-dependent.

"Products" should include all benefits and not be limited to things which are directly consumed (for example, including recreational fisheries).

The FAO Code of Conduct for Responsible Fisheries is a good basis for management for sustainability for both fisheries and aquaculture. A quantitative target could be set based upon number of Parties or ecosystems where that code is effectively implemented. The FAO Code of Conduct for Responsible Fisheries is a very good framework for the identification of appropriate approaches to sustain fisheries and aquaculture.

It is assumed that in this target "production areas" refers to areas specifically managed for aquaculture (fish farming) or where the activity constitutes a major use. Hence, the objective here is to promote sustainable farming (fish farming) as opposed to sustainable "hunting" (fishing) which is addressed under target 4.1.1 (although sustaining production of "wild" resources requires both managing exploitation and the environment"].

Overall Target 4.2: Unsustainable consumption of biological resources, or that impacts upon biodiversity, reduced.

Application of target to inland water ecosystem biological diversity:

This target needs to be discussed. Currently it is suggested that this target is the same as target 4.1 – in that the definition of "sustainable consumption" is that the products consumed come from "sustainable sources".

Overall Target 4.3: No species of wild flora or fauna endangered by international trade

Application of target to inland water ecosystem biological diversity:

Applies directly without qualification or change.

C. Address threats to biodiversity

Goal 5. Pressures from habitat loss, land-use change and degradation, and unsustainable water use, reduced

Overall Target 5.1: Rate of loss and degradation of natural habitats decreased.

Application of the target to inland water ecosystem biological diversity:

This target can be applied directly to inland water ecosystem biological diversity .

Technical rationale

It is critical to include reference to "unsustainable" use of water under this goal. Water use, for example, affects ecosystem quality (without promoting habitat loss) and the dynamics of inland water ecosystems. "Loss of habitat" alone does not necessarily cover all threats to inland water ecosystem biological diversity in that habitats can remain physically intact but their quality or suitability can be eroded due to changes in the ecosystem brought about by unsustainable use of water (depending on the definition of "habitat"). Direct attention to water as a major area of concern also aligns the work programme better with similar concerns in related initiatives (for example, both the WSSD and the MDGs refer specifically to the need to improve water policies and management). Similarly, "land-use change" is important but does not comprehensively address threats to inland water ecosystem biological diversity

(since the "aquatic" part of aquatic ecosystems is not land and can be modified irrespective of land-use changes).

The actual target itself refers to "degradation" of habitat which is appropriate since it includes both loss of habitat (i.e., reductions in number or area) and reductions in the quality or ecological functioning of habitat (although there is scope, as mentioned previously, to quantify this target).

"Targets" for land-use and habitat loss would most logically be set also for work programmes in other thematic areas. Loss of habitat (etc.) in inland water ecosystems is invariably caused by sector-based activities (e.g., agriculture, forestry). The key requirement here is when activities in other sectors is considered, "sustainability" must include consideration of impacts upon inland water ecosystem biological diversity. That is, for example, "sustainable agriculture" is that which sustains not only agricultural production but also enables inland water ecosystem biological diversity to be sustained (for example, through more efficient use of water for irrigation). Again, adopting an ecosystems based approach to such issues is the most logical way forward.

"Water quality" (freshwaters) is currently being explored as an indicator for the targets for the strategic plan (i.e., the "overall targets" as set out above). The indicator will also explore using "water quantity" (i.e., levels of water extractions etc.) as a complimentary indicator. One sub-target under this target might therefore be water quality and quantity (discussions of what parameters of water quality might be appropriate are being held for the aforementioned process in preparation for an AHTEG on this subject in October).

Goal 6: Control threats from invasive alien species

Overall Target 6.1: ***Pathways for major potential invasive alien species controlled.***

Application of the target to inland water ecosystem biological diversity: This target can be applied to inland water ecosystem biological diversity directly.

Technical rationale

The requirements for inland water ecosystem biodiversity are considered little different to those for most other ecosystems. The relevant pathways are also similar, although there may be differences in the relative importance of the various potential pathways. One consideration for inland water ecosystem biological diversity is that many alien species, once introduced, are very difficult to subsequently manage (particularly for submerged taxa such as fish and invertebrates). In effect this means that priority should be given to preventing introduction by controlling pathways. Inland water ecosystem biodiversity is under great threat due to the rapidly expanding aquaculture sector – but this has not been assessed relative to other thematic areas.

Overall Target 6.2: *Management plans in place for major alien species that threaten ecosystems, habitats or species.*

Application of the target to inland water ecosystem biological diversity: This target can be applied directly to the programme of work on inland water ecosystem biological diversity.

Technical rationale:

The target for plants (UNEP/CBD/COP/7/20/Add.3) is quantified "...for at least 100 major alien species....". Such a quantified target has not been proposed for inland water biological diversity since it is considered: (a) that there are very many more than the 100 potential target alien species, including a large number of plants (but the number is not currently assessed), and (b) in theory, "management plans" should be in place for all major alien species.

Goal 7. Address challenges to biodiversity from climate change and pollution

Target 7.1: *Maintain and enhance resilience of the components of biodiversity to adapt to climate change*

Application of the target to inland water ecosystem biological diversity:

This target can be applied directly to the programme of work on inland water ecosystem biological diversity.

Target 7.2: Reduce pollution and its impacts on biodiversity

Application of target to inland water ecosystem biological diversity:

This target applies directly to inland water ecosystem biological diversity.

Technical rationale

For the present purposes, "pollution" includes eutrophication and sedimentation. Technically, pollution refers to the entry of unnatural agents (chemicals etc.) into the environment. For inland water ecosystems an equally important problem is the build up of natural compounds, for example nutrients (eutrophication) or sediments (sedimentation). Similarly, the reduction below natural levels of compounds (e.g., nutrients or sediments) can also be problematic.

The problems of pollution (etc.) are largely brought about by unsustainable activities on land. This points to the need to ensure adequate attention to the requirements of inland water ecosystem biological diversity throughout all goals and targets as applied to other thematic areas. That is, this target (as well as some others) cannot be addressed through the programme of work on inland water ecosystem biological diversity alone. Inland water ecosystems are impacted by all the sectors and hence are more akin to a "cross-cutting" theme than a thematic area of work. This makes goals and targets for inland water ecosystem biological diversity difficult to develop but it can only be achieved through a collaborative process. Inland water ecosystems probably present the strongest case for the effective application of the ecosystems approach.

This target refers specifically to "water quality" and the above comments on this aspect (ref.. indicators) are relevant here.

C. Maintain goods and services from biodiversity to support human well-being

Goal 8. Maintain capacity of ecosystems to deliver goods and services and support livelihoods

Overall Target 8.1: Capacity of ecosystems to deliver goods and services maintained

Application of target to inland water ecosystem biological diversity:

This target can be applied directly to the programme of work on inland water ecosystem biological diversity.

Technical rationale

This is a very important goal as it relates to inland water ecosystem biological diversity. Ecosystem goods and services provided by inland water ecosystems are currently seriously underestimated in importance. A major requirement is to adopt an ecosystem-based approach to management. This can provide a framework under which the various potentially conflicting demands upon water can be addressed. Similarly, the "livelihoods"-based approach offers a very useful tool to compare the socio-economic benefits of development or management options. Ecosystem and livelihoods based approaches go very well together and offer significant hope for achieving the objectives of the Convention for inland water ecosystem biodiversity.

Livelihoods is such an important issue for inland water ecosystem biological diversity (and other thematic areas) that consideration might be given to having a goal, with targets, devoted specifically to it. This would also enhance the clarity of linkages between these goals and targets and those of related human development goals.

"Sustaining livelihoods" is a complex concept for inland water ecosystem biological diversity, in particular because the water itself can be used in a number of potentially conflicting ways to "improve" livelihoods of different communities or interest groups. Refinement of targets may consider that the objective is not necessarily to maintain the *status-quo* of livelihoods benefits of existing stakeholders – but to consider benefits for all stakeholders and to ensure the benefits of future use of ecosystem goods and services are shared equitably. Particular attention needs to be given to the livelihoods of people who currently depend directly upon resources derived from inland water ecosystem biological diversity. This is particularly important in many developing countries. For example, if not properly and carefully implemented, water management activities can re-allocate the benefits of water resources from existing to new users, with a net loss in socio-economic value. This is invariably accompanied by a loss of the livelihoods benefits of biodiversity and the undermining of the sustainability of biodiversity at the local level.

Overall Target 8.2: biological resources, that support sustainable livelihoods, local food security and health care, especially of poor people maintained.

Application of target to inland water ecosystem biological diversity:

This target applies directly to inland water ecosystem biological diversity .

Technical rationale

Comments are as per target 8.1.

E. Protect traditional knowledge, innovations and practices

Goal 9 Maintain socio-cultural diversity of indigenous and local communities

Target 9.1: ***Protect traditional knowledge, innovations and practices***

Application of target to inland water ecosystem biological diversity:

This target applies directly to inland water ecosystem biological diversity.

Technical rationale:

It is unlikely that the issues and requirements (targets) are different in inland waters than any other ecosystem. Reliable indicators for this target will be difficult to find.

Target 9.2: Protect the rights of indigenous and local communities over their traditional knowledge, innovations and practices, including their rights to benefit sharing

Application of target to inland water ecosystem biological diversity:

This target applies directly to inland water ecosystem biological diversity.

Technical rationale:

It is unlikely that the issues and requirements (targets) are different in inland waters than any other ecosystem. Reliable indicators for this target will be difficult to find.

F. Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources

Goal 10: Ensure the fair and equitable sharing of benefits arising out of the use of genetic resources

Overall Target 10.1: All transfers of genetic resources are in line with the Convention on Biological Diversity, the International Treaty on Plant Genetic Resources for Food and Agriculture and other applicable agreements.

Application of target to inland water ecosystem biological diversity:

Applies directly without modification.

Indicators for this will be developed by the AHTEG on indicators. Consideration will be given to disaggregating data for inland water genetic resources.

Overall Target 10.2: Benefits arising from the commercial and other utilisation of genetic resources shared with the countries providing such resources.

Application of target to inland water ecosystem biological diversity:

Applies directly without modification.

Indicators for this will be developed by the AHTEG on indicators. Consideration will be given to disaggregating data for inland water genetic resources.

G. Ensure provision of adequate resources

Goal 11: Parties have improved financial, human, scientific, technical and technological capacity to implement the Convention

Overall Target 11.1: New and additional financial resources are transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with Article 20.

Application of target to inland water ecosystem biological diversity:

Applies directly without modification.

Indicators for this will be developed by the AHTEG on indicators. Consideration will be given to disaggregating data for inland waters.

Overall Target 11.2: ***Technology is transferred to developing country Parties, to allow for the effective implementation of their commitments under the Convention, in accordance with its Article 20, paragraph 4.***

Application of target to inland water ecosystem biological diversity:

Applies directly without modification.

Indicators for this will be developed by the AHTEG on indicators. Consideration will be given to disaggregating data for inland waters.
