



Convention on Biological Diversity

Distr.
GENERAL

UNEP/CBD/COP/DEC/X/33
29 October 2010

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY

Tenth meeting
Nagoya, Japan, 18-29 October 2010
Agenda item 5.6

DECISION ADOPTED BY THE CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY AT ITS TENTH MEETING

X/33. Biodiversity and climate change

The Conference of the Parties

1. *Takes note* of the report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change¹ and *encourages* Parties, other Governments, and relevant organizations, and *requests* the Executive Secretary, to take its findings into consideration, where appropriate, when carrying out work on biodiversity and climate change;
2. *Recognizes* that the loss of biodiversity and its potential damage is one impact of, *inter alia*, climate change;
3. *Notes* the ongoing discussions on issues relating to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries under the United Nations Framework Convention on Climate Change and its importance in helping achieve the objectives of both the Convention on Biological Diversity and the United Nations Framework Convention on Climate Change; and *encourages* Parties to promote the importance of biodiversity considerations in ongoing discussions on this issue;
4. *Recognizes* that by improving the provision of financial support for biodiversity conservation and sustainable use including through new and additional financial resources, in accordance with Article 20 of the Convention as part of a portfolio of climate-change adaptation and mitigation measures, applied both within and beyond protected areas in developing countries, in particular the least developed and small island developing States, as well as countries with economies in transition, including through the LifeWeb initiative, amongst others, some of the challenges caused by climate change and its affects on biodiversity can also be addressed;
5. *Recognizes also* the urgent need of developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, for the provision of financial support, including new and additional financial resources in accordance with Article 20 of the Convention as well as technical assistance to address the challenges to biodiversity from climate change, especially with regards to vulnerability and adaptation, and *urges* developed countries to fully fulfil their financial commitments to developing countries under the Convention, to support their efforts in addressing the impacts of climate change on biodiversity and *invites* donors to consult with the

¹ UNEP/CBD/SBSTTA/14/INF/21.

Executive Secretary on ways and means to provide adequate support to developing countries, in particular the least developed countries and small island developing States, as well as countries with economies in transition, for the better implementation of the decisions of the Conference of the Parties on biodiversity and climate change;

6. *Invites* the Global Environment Facility to consult with the Executive Secretary on ways and means to better inform its Implementing Agencies about decisions made by the Conference of the Parties on biodiversity and climate change, especially those related to enhancing cooperation between the Rio conventions, in order to facilitate the Parties efforts pursuant to such decisions;

7. *Suggests* that Parties consider developing mechanisms to streamline reporting and data collection related to the biodiversity and climate change interface at the national and subnational level, in accordance with national circumstances;

8. *Invites* Parties and other Governments, according to national circumstances and priorities, as well as relevant organizations and processes, to consider the guidance below on ways to conserve, sustainably use and restore biodiversity and ecosystem services while contributing to climate-change mitigation and adaptation:

Assessing the impacts of climate change on biodiversity

(a) Identify, monitor and address the impacts of climate change and ocean acidification on biodiversity and ecosystem services, and assess the future risks for biodiversity and the provision of ecosystem services using the latest available vulnerability and impact assessment frameworks and guidelines;

(b) Assess the impacts of climate change on biodiversity and biodiversity-based livelihoods, particularly with regard to livelihoods within those ecosystems that have been identified as being particularly vulnerable to the negative impacts of climate change with a view to identifying adaptation priorities;

Reducing the impacts of climate change on biodiversity and biodiversity-based livelihoods

(c) Reduce the negative impacts from climate change as far as ecologically feasible, through conservation and sustainable management strategies that maintain and restore biodiversity;

(d) Implement activities to increase the adaptive capacity of species and the resilience of ecosystems in the face of climate change, including, *inter alia*:

(i) Reducing non-climatic stresses, such as pollution, over-exploitation, habitat loss and fragmentation and invasive alien species;

(ii) Reducing climate-related stresses, where possible, such as through enhanced adaptive and integrated water resource and marine and coastal management;

(iii) Strengthening protected area networks including through the use of connectivity measures such as the development of ecological networks and ecological corridors and the restoration of degraded habitats and landscapes in accordance with decision IX/18 on protected areas and the programme of work on protected areas (goal 1.2, activity 1.2.3);

(iv) Integrating biodiversity into wider seascape and landscape management;

(v) Restoring degraded ecosystems and ecosystem functions; and

(vi) Facilitating adaptive management by strengthening monitoring and evaluation systems;

(e) Bearing in mind that under climate change, natural adaptation will be difficult and recognizing that *in situ* conservation actions are more effective, also consider *ex situ* measures, such as relocation, assisted migration and captive breeding, among others, that could contribute to maintaining the adaptive capacity and securing the survival of species at risk, taking into account the precautionary

approach in order to avoid unintended ecological consequences including, for example, the spread of invasive alien species;

(f) Develop a strategy for biodiversity conservation and sustainable use, including landscape and seascape management in those areas that are becoming accessible to new uses as a consequence of climate change;

(g) Take specific measures:

(i) For species that are vulnerable to climate change, including migratory species; and

(ii) To maintain genetic diversity in the face of climate change taking into account paragraph 2 of Annex I to the Convention;

(h) Undertake awareness-raising and capacity-building strategies on the key role of biodiversity conservation and sustainable use as a mechanism for climate-change mitigation and adaptation;

(i) Recognize the role of indigenous and local community conserved areas in strengthening ecosystem connectivity and resilience across the sea and landscape thereby maintaining essential ecosystem services and supporting biodiversity-based livelihoods in the face of climate change;

Ecosystem-based approaches for adaptation

(j) Recognizing that ecosystems can be managed to limit climate change impacts on biodiversity and to help people adapt to the adverse effects of climate change; implement where appropriate, ecosystem-based approaches for adaptation, that may include sustainable management, conservation and restoration of ecosystems, as part of an overall adaptation strategy that takes into account the multiple social, economic and cultural co-benefits for local communities;

(k) In accordance with national capacities and circumstances, integrate ecosystem-based approaches for adaptation into relevant strategies, including adaptation strategies and plans, national action plans to combat desertification, national biodiversity strategies and action plans, poverty reduction strategies, disaster-risk reduction strategies and sustainable land management strategies;

(l) In the planning and implementation of ecosystem-based approaches for adaptation, carefully consider different ecosystem management options and objectives to assess the different services they provide and the potential trade-offs that may result from them;

Ecosystem-based approaches for mitigation

(m) Consider the achievement of multiple benefits, including ecological, social, cultural and economic benefits, between ecosystem-based approaches for climate change mitigation and adaptation activities;

(n) Implement ecosystem-management activities, including the protection of natural forests, natural grasslands and peatlands, the sustainable management of forests considering the use of native communities of forest species in reforestation activities, sustainable wetland management, restoration of degraded wetlands and natural grasslands, conservation of mangroves, salt marshes and seagrass beds, sustainable agricultural practices and soil management, amongst others, as a contribution towards achieving and consistent with, the objectives of the United Nations Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, the Ramsar Convention on Wetlands and the Convention on Biological Diversity;

(o) In forest landscapes subject to harvesting, clearing and/or degradation, implement, as appropriate, improved land management, reforestation and forest restoration prioritizing the use of native communities of species, to improve biodiversity conservation and associated services while sequestering carbon and limiting the degradation and clearing of native primary and secondary forests;

(p) When designing, implementing and monitoring afforestation, reforestation and forest restoration activities for climate-change mitigation consider conservation of biodiversity and ecosystem services through, for example:

- (i) Converting only land of low biodiversity value or ecosystems largely composed of non-native species, and preferably degraded ones;
- (ii) Prioritizing, whenever feasible, local and acclimated native tree species when selecting species for planting;
- (iii) Avoiding invasive alien species;
- (iv) Preventing net reduction of carbon stocks in all organic carbon pools;
- (v) Strategically locating afforestation activities within the landscape to enhance connectivity and increase the provision of ecosystem services within forest areas;

(q) Enhance the benefits for, and avoid negative impacts on, biodiversity from reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries, and other sustainable land management and biodiversity conservation and sustainable-use activities, taking into account the need to ensure the full and effective participation of indigenous and local communities in relevant policy-making and implementation processes, where appropriate; and to consider land ownership and land tenure, in accordance with national legislation;

(r) Assess, implement and monitor a range of sustainable activities in the agricultural sector that may result in the maintenance and potential increase of current carbon stocks and, at the same time, the conservation and sustainable use of biodiversity;

(s) Where appropriate, promote biodiversity conservation, especially with regard to soil biodiversity, while conserving and restoring organic carbon in soil and biomass, including in peatlands and other wetlands as well as in grasslands, savannahs and drylands;

(t) Enhance the conservation, sustainable use and restoration of marine and coastal habitats that are vulnerable to the effects of climate change or which contribute to climate-change mitigation, such as mangroves, peatlands, tidal salt-marshes, kelp forests and seagrass beds, as a contribution to achieving the objectives of the United Nation Framework Convention on Climate Change, the United Nations Convention to Combat Desertification, the Ramsar Convention on Wetlands and the Convention on Biological Diversity;

Reducing biodiversity impacts of climate change mitigation and adaptation measures

(u) Based on national circumstances, increase positive and reduce negative impacts of climate-change mitigation and adaptation measures on biodiversity *inter alia*, based on results from strategic environmental assessments (SEAs)² and environmental impact assessments (EIAs) that facilitate the consideration of all available climate-change mitigation and adaptation options;

(v) In planning and implementing effective climate-change mitigation and adaptation activities, including renewable energies, take into account impacts on biodiversity and the provision of ecosystem services and avoid the conversion or degradation of areas important for biodiversity through:

- (i) Considering traditional knowledge, including the full involvement of indigenous and local communities;
- (ii) Building on a scientifically credible knowledge base;

² [Decision VIII/28](#) (Voluntary guidelines on biodiversity-inclusive impact assessment).

- (iii) Considering components of biodiversity important for its conservation and sustainable use;
- (iv) Applying the ecosystem approach; and
- (v) Developing ecosystem and species vulnerability assessments;

(w) Ensure, in line and consistent with decision IX/16 C, on ocean fertilization and biodiversity and climate change, in the absence of science based, global, transparent and effective control and regulatory mechanisms for geo-engineering, and in accordance with the precautionary approach and Article 14 of the Convention, that no climate-related geo-engineering activities³ that may affect biodiversity take place, until there is an adequate scientific basis on which to justify such activities and appropriate consideration of the associated risks for the environment and biodiversity and associated social, economic and cultural impacts, with the exception of small scale scientific research studies that would be conducted in a controlled setting in accordance with Article 3 of the Convention, and only if they are justified by the need to gather specific scientific data and are subject to a thorough prior assessment of the potential impacts on the environment;

(x) Make sure that ocean-fertilization activities are addressed in accordance with decision IX/16 C, acknowledging the work of the London Convention/London Protocol;

Valuation and incentive measures

(y) Take into account the values of biodiversity and ecosystem services when planning and undertaking climate-change-related activities by using a range of valuation techniques;

(z) Consider, as appropriate, incentives to facilitate climate-change-related activities that take into consideration biodiversity and related social and cultural aspects, consistent and in harmony with the Convention on Biological Diversity and other relevant international obligations;

9. *Requests* the Executive Secretary to:

(a) Collaborate with the United Nations Environment Programme and the United Nations Development Programme in reviewing and revising the resource kit for national capacity self-assessments (NCSAs) with a view to ensuring that implementation of activities identified in the such assessments better reflects decisions of the Conference of the Parties on biodiversity and climate change, particularly those related to enhancing the capacity of developing countries to implement decision IX/16 on biodiversity and climate change and to report progress of this action to the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting prior to the eleventh meeting of the Conference of the Parties;

(b) Collaborate with relevant international organizations to collect scientific knowledge and case-studies and identify knowledge gaps on the links between biodiversity conservation and sustainable use and organic carbon stock conservation and restoration, and make the results available to Parties through the clearing-house mechanism;

(c) Collaborate with relevant international organizations to expand and refine analyses identifying areas of high potential for the conservation and restoration of carbon stocks, as well as of ecosystem management measures that make best use of related climate change mitigation opportunities, and make this information openly available, such as to assist with integrated land-use planning;

³ Without prejudice to future deliberations on the definition of geo-engineering activities, understanding that any technologies that deliberately reduce solar insolation or increase carbon sequestration from the atmosphere on a large scale that may affect biodiversity (excluding carbon capture and storage from fossil fuels when it captures carbon dioxide before it is released into the atmosphere) should be considered as forms of geo-engineering which are relevant to the Convention on Biological Diversity until a more precise definition can be developed. It is noted that solar insolation is defined as a measure of solar radiation energy received on a given surface area in a given hour and that carbon sequestration is defined as the process of increasing the carbon content of a reservoir/pool other than the atmosphere.

(d) Gather existing tools for assessing the direct and indirect impacts of climate change on biodiversity;

(e) Support, as appropriate, Parties and relevant organizations and processes to design and implement ecosystem-based approaches for mitigation and adaptation as they relate to biodiversity;

(f) Convene, subject to the availability of financial resources, in collaboration with the Secretariat of the United Nations Framework Convention on Climate Change an expert workshop, with the full and effective participation of experts from developing countries on reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries, with a view to enhancing the coordination of capacity-building efforts on issues related to biodiversity and ecosystem-based carbon sequestration and the conservation of forest carbon stocks;

(g) With regard to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries, collaborate with the secretariat of the United Nations Forum on Forests, the Facility Management Team of the Forest Carbon Partnership Facility and the Climate Investment Funds Administrative Unit of the World Bank, the secretariat of the United Nations Framework Convention on Climate Change, the secretariat of the United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries, and the other members of Collaborative Partnership on Forests, as well as the Low Forest Cover Countries secretariat and in collaboration with Parties through their national focal points for the Convention on Biological Diversity to provide advice, for approval by the Conference of the Parties at its eleventh meeting, including on the application of relevant safeguards for biodiversity, without pre-empting any future decisions taken under the United Nations Framework Convention on Climate Change, based on effective consultation with Parties and their views, and with the participation of indigenous and local communities, so that actions are consistent with the objectives of the Convention on Biological Diversity and avoid negative impacts on and enhance benefits for biodiversity;

(h) With effective consultation with Parties and based on their views and in collaboration with the Collaborative Partnership on Forests, identify possible indicators to assess the contribution of reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries to achieving the objectives of the Convention on Biological Diversity, and assess potential mechanisms to monitor impacts on biodiversity from these and other ecosystem-based approaches for climate change mitigation measures, without pre-empting any future decisions taken under the United Nations Framework Convention on Climate Change, and to report on progress to the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting prior to the eleventh meeting of the Conference of the Parties;

(i) Bring to the attention of relevant organizations the knowledge and information gaps identified by Parties through their national reports that prevent the integration of biodiversity considerations into climate change-related activities and report on activities undertaken by such organizations to address such gaps;

(j) Compile current and additional views and case-studies from Parties on the integration of biodiversity into climate-change-related activities for submission to the United Nations Framework Convention on Climate Change for publication on its website as appropriate and to report thereon to the conferences of the parties to the Convention on Biological Diversity, the United Nations Framework on Climate Change and the United Nations Convention to Combat Desertification;

(k) Develop proposals on actions to address the obstacles listed in section IV of the compilation of views submitted by Parties on ways to integrate biodiversity considerations into climate

change-related activities⁴ for the consideration of the Subsidiary Body on Scientific, Technical and Technological Advice at a meeting prior to the eleventh meeting of the Conference of the Parties;

(l) Compile and synthesize available scientific information, and views and experiences of indigenous and local communities and other stakeholders, on the possible impacts of geo-engineering techniques on biodiversity and associated social, economic and cultural considerations, and options on definitions and understandings of climate-related geo-engineering relevant to the Convention on Biological Diversity and make it available for consideration at a meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eleventh meeting of the Conference of the Parties;

(m) Taking into account the possible need for science based global, transparent and effective control and regulatory mechanisms, subject to the availability of financial resources, undertake a study on gaps in such existing mechanisms for climate-related geo-engineering relevant to the Convention on Biological Diversity, bearing in mind that such mechanisms may not be best placed under the Convention on Biological Diversity, for consideration by the Subsidiary Body on Scientific Technical and Technological Advice prior to a future meeting of the Conference of the Parties and to communicate the results to relevant organizations;

(n) Compile information, including existing guidelines on invasive alien species and related management responses, noting the need for the adaptation of biodiversity and ecosystems to climate change, as well as the need to reduce the impacts of existing and potentially new invasive alien species;

(o) Develop proposals on options for addressing gaps in knowledge and information on the impact of climate change on biodiversity outlined in the report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change for consideration of a meeting of the Subsidiary Body on Scientific, Technical and Technological Advice prior to the eleventh meeting of the Conference of the Parties ;

(p) Contribute to the update and maintenance of the TEMATEA issue-based module on biodiversity and climate change as a tool for better implementation of decisions related to biodiversity and climate change;

10. *Further requests* the Executive Secretary to include biodiversity considerations related to reducing emissions from deforestation and forest degradation and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries and the recommendations of the Global Expert Workshop on Biodiversity Benefits of Reducing Emissions from Deforestation and Forest Degradation in Developing Countries held in Nairobi from 20 to 23 September 2010 when conveying a proposal to develop joint activities between the three Rio conventions to the secretariats of the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification as contained in the present decision and to convey this information to the secretariat of the United Nations Framework Convention on Climate Change for appropriate consideration prior to the seventeenth meeting of the Conference of the Parties to the United Nations Framework Convention on Climate Change;

Climate change and the biodiversity of dry and sub-humid lands

11. *Invites* Parties and other Governments and relevant organizations to develop down-scaled climate change models that combine temperature and precipitation information with multi-stressor biological models in order to better predict the impacts of drought and increased climate variability on biodiversity;

⁴ UNEP/CBD/SBSTTA/14/INF/22.

12. *Encourages* Parties, other Governments and relevant organizations to make use of the information contained in the note by the Executive Secretary⁵ in their future work on implementation of the programme of work on the biodiversity of dry and sub-humid lands;

13. *Bearing in mind* the respective independent legal status and mandates of the three Rio conventions and the different composition of Parties, and the need to avoid duplication and promote resource efficiency and, based upon this, for the purpose of enhancing the capacity of countries, particularly developing countries, to implement the decisions of the Conference of the Parties' related to biodiversity, climate change and desertification/land degradation and to promote cooperation, noting the actions in decision IX/16 and the current serious knowledge and information gap in evaluating biological vulnerability as a result of climate change:

(a) *Requests* the Executive Secretary to convey a proposal to develop joint activities, between the three Rio conventions, to the secretariats of the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification; and

(b) *Invites* the conferences of the parties to the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification to collaborate with the Convention on Biological Diversity, through the Joint Liaison Group of the three Rio conventions, as appropriate, with a view to:

- (i) Including the development of joint activities in the agenda of the next meeting of the Joint Liaison Group of the three Rio conventions, and to consider, as appropriate, the proposed elements on joint activities regarding climate change, biodiversity, and land degradation and ecosystem-based approaches to climate-change mitigation and adaptation contained in decision IX/16;
- (ii) Exploring the possibility of convening, subject to the availability of financial resources and prior to Rio+20, a joint preparatory meeting between the three Rio conventions, including, if appropriate, the participation of indigenous and local communities, to consider possible joint activities while respecting existing provisions and mandates, and to identify areas for Party-driven collaboration and submit these to the next Conferences of the Parties to each of the three conventions for their consideration;
- (iii) Consulting the Bureau of the Preparatory Committee of the United Nations Conference on Sustainable Development 2012 (Rio +20) and to explore with, the Bureau, how to make use of this preparatory work in connection with Rio+20;
- (iv) Exploring the possibility of convening meetings of national and/or subsidiary body focal points, bearing in mind the need to avoid additional resource burdens, to contribute to the process of cooperation;

14. *Invites* national focal points for the Convention on Biological Diversity to inform their national counterparts for the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification about the above requests with a view to initiating discussions within their relevant processes;

15. *Invites* Parties and other Governments to identify and disseminate, good practices on cooperation for the implementation of the three Conventions at the national level, including implementation of the indicative list of activities contained in annex II of decision IX/16;

⁵ UNEP/CBD/SBSTTA/14/6/Add.1.

Ways and means to achieve biodiversity co-benefits

16. *Requests* the Executive Secretary, subject to the availability of financial resources:
- (a) Through the Joint Liaison Group, to develop best practices and a toolkit of lessons learned for Parties on the achievements of co-benefits for biodiversity, climate change and combating desertification/land degradation;
 - (b) Through the Joint Liaison Group, to publish a brochure on best practices for the achievement of co-benefits for biodiversity, climate change and combating desertification/land degradation;
 - (c) In collaboration with the Global Environment Facility, to identify indicators to measure and facilitate reporting on the achievement of social, cultural and economic benefits for biodiversity, climate change and combating desertification/land degradation;
 - (d) In collaboration with the Global Environment Facility and the its Implementing Agencies, to develop tools to evaluate and reduce the negative impacts of climate change mitigation and adaptation activities on biodiversity based on, *inter alia*, existing frameworks to analyse the potential environmental and cross-sectoral impacts of projects and the environmental safeguard policies in place within the Implementing Agencies of the Global Environment Facility;
17. *Invites* Parties and other Governments to consider the role of biodiversity and associated ecosystem services when climate-proofing / enhancing the climate resilience of investments, projects and programmes and to develop such strategies for biodiversity-related investments, projects and programmes.
