

Ecosystem-based Adaptation (EbA)

**Fifteenth session of the Conference of the Parties to the United Nations Framework Convention on Climate Change (COP15)
7th – 18th December, 2009, Copenhagen, Denmark**

Ecosystem-based Adaptation in the negotiating texts and supporting documents

IUCN welcomes the references in the negotiating texts and supporting documents before AWG-LCA to the several links between ecosystems and adaptation. These include references to ecosystem-based adaptation, to the vulnerability of ecosystems, and to the importance of ensuring that all adaptation interventions are environmentally sound. This position paper aims to clarify and strengthen references to ecosystem-based adaptation in particular.

What is Ecosystem-based Adaptation¹?

Ecosystem-based adaptation (EbA) integrates the use of biodiversity and ecosystem services² into an overall adaptation strategy to help people to adapt to the adverse impacts of climate change. Ecosystem-based adaptation uses the sustainable management, conservation, and restoration of ecosystems to provide services that enable people to adapt to both current climate variability and change. It aims to maintain and increase the resilience and reduce the vulnerability of ecosystems and people. EbA is a means of adaptation that is readily available to the rural poor, and can generate social, economic and cultural co-benefits, building on the traditional knowledge of indigenous peoples and local communities. It can contribute to the conservation of biodiversity and build on the extensive investment and experience in natural resource management, including the establishment and governance of protected area systems. In addition, healthy, well managed ecosystems have climate change mitigation potential. For example, through the sequestration and storage of carbon in healthy forests, wetlands, and coastal ecosystems.

Ecosystem-based Adaptation activities should be part of a broader portfolio of adaptation measures.

Ecosystem-based adaptation can be applied at different geographical scales (local, regional, national) and within various time frames (short, medium and long term). It can be implemented as projects and as part of overall adaptation programmes. It is most effective when implemented as part of a broad portfolio of adaptation and development interventions, such as early warning systems, education, and physical infrastructure.

EbA promotes policy coherence

In promoting the sustainable use of natural resources, ecosystem-based adaptation strategies provide policy coherence with other national and international commitments. For maximum effectiveness, these strategies should be aligned with ongoing action under the Convention on Biological Diversity, the UN Convention to Combat Desertification, the Ramsar Convention on Wetlands, the UN Declaration on the Rights of Indigenous Peoples and other relevant international commitments.

For more information, please contact :

Neville Ash
Head, Ecosystem Management Programme
IUCN HQ
Tel: +41 22 999 0273
Neville.ash@iucn.org

Ninni Ikkala
Climate Change Coordinator
IUCN HQ
Tel: +41 22 999 0106
Ninni.ikkala@iucn.org

Claire Parker
Senior Policy Consultant
Fairhaven
Long Lane
Fowimere, Cambs
SG8 7TG
United Kingdom
Tel: +44 7769664701
Claire.n.parker@btopenworld.com

IUCN World Headquarters
Rue Mauverney 28
1196 Gland
Switzerland
Tel: +41 22 999 0000
mail@iucn.org
www.iucn.org/unfccc

¹ This text draws from and is consistent with: CONNECTING BIODIVERSITY AND CLIMATE CHANGE MITIGATION AND ADAPTATION- Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change under the Convention on Biological Diversity (CBD).

² Ecosystem services are the benefits people obtain from nature, such as flood regulation, storm protection, food, clean water, fuel, shelter etc.

Analysis of references related to ecosystem-based adaptation in the UNFCCC draft negotiating texts and related documents

The role of ecosystems in adaptation has been referred to in various ways in the current draft negotiating texts (FCCC/AWGLCA/2009/INF.1 and FCCC/AWGLCA/2009/INF.2) and supporting documentation, including the Non-paper on adaptation (53) and the Non-paper on Shared vision (52). Below, IUCN provides some guidance on how references on ecosystems and adaptation are used in the current documentation to refer to Ecosystem-based Adaptation, the Ecosystem Approach and to the separate issue of vulnerability of ecosystems to climate change.

1. Ecosystem-based Adaptation, as defined by the CBD's AHTEG³:

“Ecosystem-based adaptation is the use of biodiversity and ecosystem services as part of an overall adaptation strategy to help people to adapt to the adverse effects of climate change.”

References to ecosystem-based adaptation included in the negotiating texts and non-papers are shown in **Annex 1**. IUCN suggests using clear terminology in these instances that is in-line with the CBD's definition of ecosystem-based adaptation.

2. The Ecosystem Approach as defined by the CBD:

“The ecosystem approach is a strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way.” (CBD COP 5 Decision V/6)

The ecosystem approach, as a strategy, should be applied to all adaptation responses to ensure that they are environmentally sound. References to the Ecosystem Approach as applied to adaptation are included in the negotiating texts, as shown in **Annex 2**.

3. The negotiating texts and supporting documents also include several references to the **adaptation of ecosystems, including particularly vulnerable ecosystems. This means enhancing the ability of biodiversity and ecosystems themselves to adapt to the impacts of climate change. As referred to in Article 2 of the UNFCCC, the ability of ecosystems to adapt is dependent on stabilization of greenhouse gas concentrations. Article 8 (h) also makes reference to the vulnerability of “Countries with fragile ecosystems, including mountainous ecosystems...”.**

UNFCCC Article 2:

“...stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change...”

³ **CONNECTING BIODIVERSITY AND CLIMATE CHANGE MITIGATION AND ADAPTATION-** Report of the Second Ad Hoc Technical Expert Group on Biodiversity and Climate Change under the Convention on Biological Diversity (CBD)

Annex 1 – Ecosystem-based Adaptation

References in the negotiating texts and non-papers to the role of ecosystems in adaptation, which are **consistent with the CBD definition of ecosystem-based adaptation**.

Text in Adaptation Non-paper 41 (contained in Non-paper 53)

Paragraph	Reference	Observation
7. a.	All Parties [shall] [should] undertake actions at all levels, including strengthening enabling environments, sharing of data, information and knowledge, and protecting and sustainably managing natural resources and ecosystems, and the goods and services they provide , to facilitate adaptation;	This is consistent with ecosystem-based adaptation as defined by CBD.

Text in Adaptation Non-paper 31 (contained in Non-paper 53)

Paragraph	Reference	Observation
1.	Adaptation [shall] [should] encompass action to reduce the vulnerability and increase the resilience of ecological and social systems and economic sectors to present and future climatic changes, in order to minimize the threats to life and livelihoods, assets, amenities, ecosystems and sustainable development.	The text in bold encompasses ecosystem-based adaptation actions.
7 (a.)	All Parties [shall] [should] undertake actions at all levels, including strengthening enabling environments, sharing of data, information and knowledge, and protecting and sustainable managing natural resources and ecosystems, and the goods and services they provide, to facilitate adaptation	This is consistent with ecosystem-based adaptation as defined by CBD
10.	To enhance adaptation action at national level, all Parties, in line with a country-driven approach and taking into account local and national adaptation plans, as well as gender and ecosystem considerations , [shall] [should] [may] implement specific programmes, projects, activities, strategies and measures, including...	The text in bold implies taking into account ecosystem-based adaptation opportunities
Annex 1 (u)	Strengthening environmental and natural resources management and enforcement	This text recognizes the importance of ecosystem-based adaptation, consistent with the CBD definition.

Text in FCCC/AWGLCA/2009/INF.1

A Shared vision for long-term co-operative action

Paragraph	Reference	Observation
1.(Proposal 6) p.8	The maintenance of healthy ecosystems and their services is necessary to maintain the life support system on earth in the face of climate change, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development.	This is consistent with ecosystem-based adaptation as defined by CBD.
Alternative to Para 6 p. 11	Urgent and immediate adaptation needs of developing countries that are particularly vulnerable to the adverse effects of climate change require special attention, necessitating a shared vision for actively promoting sustainable community-based ecosystem management, conservation and restoration activities, where appropriate to support adaptation	This is consistent with ecosystem-based adaptation as defined by CBD.

Enhanced action on adaptation and its means of implementation

Paragraph	Reference	Observation
Alternative 5 to subpara 22 (j) p.35	Particularly vulnerable ecosystems and species, including through promoting an ecosystem-based approach to adaptation understood as sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation;	This is consistent with ecosystem-based adaptation as defined by CBD, although ecosystem-based adaptation does NOT refer to vulnerable ecosystems and species in particular <u>IUCN suggests using the term "ecosystem-based adaptation" rather than "ecosystem-based approach to adaptation"</u> as to ensure consistency with CBD definitions.
Alternative to subpara 22 (j) (iii) p. 35	[Particularly vulnerable populations, groups and communities, ecosystems and species, including through promoting sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation;	This is consistent with ecosystem-based adaptation as defined by CBD.
Alternative to subpara 22 (m) Alternative 2 (m).4.	Protect and sustainably manage the natural resource base and recognise that ecosystems and the goods and services they provide (such as water, food, soil protection and carbon capture etc.) underpin resilience and are fundamental to support human adaptation and sustainable development;	This is consistent with ecosystem-based adaptation as defined by CBD.
Alternative to subpara 23 (e) p. 40	Take into account the composition, resilience and productivity of natural and managed ecosystems , and the support they provide to adaptation.	This is consistent with ecosystem-based adaptation as defined by CBD.
32. p. 53	In addition to the above, priority consideration should also be given to ecosystem-based and community-based adaptation activities , where appropriate, at local and national levels.	This is consistent with ecosystem-based adaptation as defined by CBD.
Alternative 1 to para 32. p. 53	In relation to the above priorities, consideration should also be given to sustainable ecosystem management, conservation and restoration activities , where appropriate, to support adaptation.	This is consistent with ecosystem-based adaptation as defined by CBD.

Text in FCCC/AWGLCA/2009/INF.2

A Shared vision for long-term co-operative action

Paragraph	Reference	Observation
PP 15, 3 Page 7	The maintenance of healthy ecosystems and their services is necessary to maintain the life support system on earth in the face of climate change, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development.	This is consistent with ecosystem-based adaptation as defined by CBD

Enhanced action on adaptation and its means of implementation

Paragraph	Reference	Observation
13 (c) Page 27	[Particularly vulnerable ecosystems and species, including through promoting [an ecosystem [based] approach to adaptation] [or] sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation.]]	This is consistent with ecosystem-based adaptation as defined by CBD However, <u>IUCN suggests using the term "ecosystem-based adaptation" rather than "ecosystem-based approach to adaptation"</u> as to ensure consistency with CBD definitions.
13 (i) Page 28	Protect and sustainably manage the natural resource base and recognise that ecosystems and the goods and services they provide (such as water, food, soil protection and carbon capture etc.) underpin resilience and are fundamental to support human	This is consistent with ecosystem-based adaptation as defined by CBD

40 Page 43	adaptation and sustainable development; [In addition to the above, priority consideration] [In relation to the above priorities, consideration] should also be given to [ecosystem-based and community-based adaptation activities , where appropriate, at local and national levels.] [sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation.]	This is consistent with ecosystem-based adaptation as defined by CBD
---------------	--	--

Enhanced action on the provision of financial resources

Paragraph	Reference	Observation
11 (f), alt 6 Page 129	In addition to the above, priority consideration should also be given to ecosystem-based adaptation activities;	

Text in Shared vision Non-paper 33 (contained in Non-paper 52)

Paragraph	Reference	Observation
Annex (issues under consideration in other contact groups)	2. Adaptation actions include those necessary to restore the resilience of ecosystems and their productivity to enable sustainable economic development.	The text refers to ecosystem-based adaptation, consistent with the CBD definition.
Annex (issues under consideration in other contact groups)	4. Necessitating a shared vision for actively promoting sustainable community-based ecosystem management, conservation and restoration activities, where appropriate to support adaptation.	The text refers to ecosystem-based adaptation, consistent with the CBD definition.

Annex 2 – Ecosystem Approach

References in the text that are in *line with the Ecosystem Approach as defined by the CBD*.

Text in FCCC/AWGLCA/2009/INF.1

The text includes several references to “*environmentally sound*” development with relation to adaptation, for example paragraphs: x.1 (d); 19 Alternative 4 (e); 20 Alternative 2.; 22 Alternative 4. (iii); 23-24. Alternative 2 (d), which are consistent with applying an ecosystem approach as defined by the CBD.

Text in FCCC/AWGLCA/2009/INF.2

Paragraph	Reference	Observation
16 (b) Page 32	[With a view to promoting adaptation planning] [all] Parties should: (b) Promote climate-resilient development in a manner that is practical, informed by the best science, environmentally sound , and economically efficient, and that promotes on-the-ground results	