



## Workshop 7

# Mainstreaming Biodiversity into education and learning

**Time:** 31 March: 15.00 – 18.00 h (first part), 1 April: 11.00 – 13.00 h (second part)

**Organizers:** David Ainsworth, Convention on Biological Diversity; Ana Persic, UNESCO

### 1. Introduction

Provision of food, fuel and fiber, shelter and building materials, purification of air and water, detoxification of wastes, moderation of floods and droughts, stabilization of climate, control of pests and diseases, as well as cultural and aesthetic benefits: these are just some of the many services that biodiversity, the diversity of genes, species, and ecosystems, provides to all forms of life on Earth, including humans. Yet, for most people, biodiversity remains the invisible basis for human existence. Increasingly settled in urban settings, the global community is largely unaware of the extent to which their economic, social and cultural well-being is founded on strong, resilient ecosystems, landscapes and seascapes which are themselves buttressed by a rich diversity of genes and species. For those communities that directly rely on biodiversity for their livelihoods, short-term considerations may obscure the impacts of their practices on the capacity of ecosystems to provide essential services on the long-term.

In both cases, this lack of awareness leads to practices that overexploit natural resources and harm biodiversity. Raising awareness of the critical role that biodiversity plays in ensuring environmental sustainability, economic prosperity and social and cultural well-being will contribute to the enhancement and/or the development of sustainable development actions, including ways of organizing thoughtful consumption and production behaviors that are sustainable from local to global levels.

People are willing to take the steps to engage in a life long learning process that will allow them to live in a way that will ensure a sustainable future including saving biodiversity. ESD can provide the values, competencies, knowledge and skills for citizens to realize this process.

During the workshop, participants will engage in group exercises to reflect on the following concepts, linked to the objectives of the Conference:

- Objective 1: “Why is ESD relevant?” Participants will reflect on how ESD is a key approach for the promotion of the conservation and sustainable use of biodiversity.
- Objective 2: “What can we learn from each other?” Discussions and activities will promote the sharing of how people experience biodiversity, and how it contributes to the identity of communities
- Objective 3: “What have we achieved so far, what are the lessons learned?” Participants will share the ways in which biodiversity has already been mainstreamed into different contexts of learning.
- Objective 4: “Where do we go from here?” The discussions will culminate in the development of recommendations/guidance for action plans focused on mainstreaming biodiversity into concrete thematic settings and their integration into ESD plans overall. →

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## 2. Workshop structure and organization

The workshop will be structured around three sets of questions, which will be explored through a variety of group exercises:

1. Understanding biodiversity and its place in ESD
2. Bringing biodiversity into contexts of learning
3. Action for a sustainable future: experiences with biodiversity

### 2.1. Understanding biodiversity and its place in ESD

A sustainable relationship between human communities and the biodiversity upon which they rely is the cornerstone of a sustainable future. Understood by scientists and resource managers, the concept of biodiversity and its relationship to human well-being however remains opaque and intangible for many. The Millennium Ecosystem Assessment (<http://www.millenniumassessment.org/en/index.aspx>) identified the ways that human well-being is founded on the services provided by ecosystems and biodiversity.

Mainstreaming biodiversity into education and learning processes requires that people begin to recognize the relationship between biodiversity and human well-being and reflect on how this is exemplified in every day life. Participants will discuss the following concepts:

- What is biodiversity? How do we understand it in our own contexts?
- Why is it important for humans and for sustainable development?
- How is biodiversity conservation, sustainable use and the equitable sharing of benefits from the use of genetic resources linked to the goals of ESD?

### 2.2. Bringing Biodiversity into learning contexts

**Formal:** Formal education systems around the world are continually asked to include a range of social issues in their curricula. At the same time, a concern for the loss of biodiversity and the ethical issues surrounding its sustainable use remains central to ESD. Therefore the goal is to infuse key biodiversity messages into the pursuit of a more sustainable future and engage formal education on this basis. Because the conservation and sustainable use of biological diversity is impacted by the activities of many government bodies, the broader context of government policies and commitments in any given country need to be clearly identified and effectively communicated.

**Non formal:** People are always learning. They learn from observing others; they learn from their parents; they learn from media; they learn in the workplace; they learn through their own life experiences. Non formal learning providers support this “everyday” learning by offering structured and free-choice opportunities for people to explore ideas, to satisfy curiosity, to gain information and skills, and to improve their quality of life. The goal is to identify ways that biodiversity is being explored by these communities and encourage sharing of experiences.

On the basis of the above, participants share their experiences in mainstreaming biodiversity concepts and principles into formal and non formal contexts of learning. The focus will be on ways to engage different actors including: educational ministries; teachers and students; NGOs, the media and the private sector.

### 2.3. Thematic Working groups: Action for a sustainable future: experiences with biodiversity

Taking the principles elaborated in the first two themes as a point of departure, workshop participants will create action plans for including biodiversity into ESD for specific themes:



#### *2.3.1. Using Ecosystem Services Sustainably*

The drivers of biodiversity loss: habitat destruction and fragmentation; pollution; invasive alien species; climate change; over-exploitation of resources, are strongly related to unsustainable patterns of consumption by individuals and groups. This group will explore how ESD can contribute to changing practices and attitudes towards more sustainable practices

#### *2.3.2. Training the Biodiversity Managers of the Future*

Management of biodiversity and sustainable production requires a particular set of skills. For example, a body of trained taxonomists is required to understand ecosystem functioning. Resource managers need to be trained in the relationship between the technical and social aspects of biodiversity conservation. ESD can contribute by making opportunities available for societies to train people in these skills. This group will create the framework through which societies can identify the required skills and values.

#### *2.3.3. Cities and Biodiversity*

Urban populations rely on biodiversity, whether it is that which is proximate to their surroundings, or the ecosystems which encircle our cities. Urban centres are also places where sustainable patterns of consumption and production can be fostered. This group will explore strategies that cities can use to promote biodiversity protection and encourage sustainable development.

#### *2.3.4. Biodiversity and Cultural Diversity*

The rich diversity of life on Earth encompasses not only biological, but also cultural diversity, including variety of practices, traditions, languages, artistic expressions, and belief, value and knowledge systems, which are rooted in and depend on specific aspects of biodiversity. Recognizing that biological diversity is intimately linked to cultural diversity and that together these two forms of diversity hold the key to sustainable development, this group will explore the ways of linking the issues of cultural and biological diversity in the context of ESD and in particular by focusing on integration of the following aspects in education and learning processes:

- cultural values of biodiversity (spiritual, aesthetic, inspirational, recreational and educational values);
- diversity of cultural practices impacting biodiversity and vice versa (use of local food systems and traditional medicine, rituals associated with natural cycles, conservation of sacred sites, ecotourism);
- diversity of knowledge systems (including local and indigenous traditional knowledge systems, citizen science, and other forms of knowledge).

### **3. Moving forward**

The workshop will conclude with a set of recommendations on integrating biodiversity into ESD. These will be based on the dialogue of lessons learned and best practices, that emerges from the working groups. Particular attention will be paid to the ways that biodiversity is part of the goals of ESD.

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