













# **UNEP/UNESCO YouthXchange Biodiversity and** Lifestyles Guidebook

This guidebook is the third in a series of thematic quidebooks supporting the **UNEP/UNESCO** 

YouthXchange Initiative. Guidebook designed to help young people familiarize with themselves the dimensions global cultural biodiversity. diversity as well as help them to develop essential skills while engaging with biodiversity. It aims to well-researched provide insights into the interactions between the biodiversity and lifestyle choices facing young people by explaining interrelatedness of food, consumption, culture and biodiversity conservation. The guidebook focuses on the learning to preserve biodiversity through responsible lifestyle choices suggests for starting points engagement and action for young people.



# **Towards Preserving Biodiversity**

Biological diversity – or biodiversity – is used to define the variety of life on Earth the natural patterns it forms. Biodiversity manifests itself in all forms of life, habitats and ecosystems. The effect of human activities - magnified in recent years by population growth and climate change - has greatly reduced biodiversity around the world.

"Biodiversity is the foundation for health ecosystems and sustainable human development. It touches on most parts of our lives - from our security to our welfare, from our social relations to our health."

> Irina Bokova, Director-General, UNESCO

The 2010 target for biodiversity conservation, which called for a significant reduction of the current rate of biodiversity loss at the global, regional and national level, were largely missed. This has potentially grave consequences such as adverse impacts on food systems and food security, the erosion of cultural diversity, the loss of social cohesion and the reduction in the diversity of landscapes. If current consumption patterns continue, we risk endangering the Earth's biodiversity, which is not only essential to the proper functioning of the earth systems, but also key to the production and delivery of ecosystem services that are crucial to human life, dignity and well-being. It is now up to every one of us, particularly young people, to take action in order to preserve biodiversity and reconcile it with human life.

# Young People and Biodiversity

Nearly half of the world's population is under the age of 25. Youth are a critical stakeholder in the global economy and will be the main actor and motor for change in the near future. Young people read about biodiversity protection or conservation in headlines regularly but they do not necessarily engage with the scientific, economic, social and cultural dimensions behind biodiversity. It is therefore essential to connect these headlines to young people's everyday lifestyle choices to help empower them to better engage with and be part of the solution to the loss of biodiversity, to form their own opinions, and to determine their own lifestyle

The global annual economic cost of biodiversity loss, where it can be measured, lies between 1.35 and 3.1 trillion U.S. dollars<sup>1</sup>. This cost of biodiversity loss has to be borne by present and future generations. This burden can become an obstacle in particular for young people, as it affects their job opportunities and well-being. Endangering biodiversity also endangers the cultural and social interactions of today's generation.

The energy, motivation and creativity '"On a planet of six billion, rising to over nine of youth are essential assets to stimulating change and preserving the Earth's biodiversity. Adequate education and training are crucial for young people to participate actively in preserving biodiversity as well as to understand the relationship between the long-term co-evolution of people, and plant species. animal and biological and cultural diversity.

billion by 2050, more creative ways of managing ecosystems and biodiversity that reflect their central role in human well-being and their inordinate contribution to life, livelihoods and economies, will, in large part, determine whether an evermore populous humanity can survive and thrive in the 21st century."

**Achim Steiner, UN Under-Secretary-General** and Executive Director, UNEP

<sup>&</sup>lt;sup>1</sup> According to The Economics of Ecosystems and Biodiversity study in 2009

### 1. Biodiversity: A key to learning and change

Education can help us recognize that individual actions – as harmless as they can appear – can have can have global ramifications and impacts in terms of biological diversity. Therefore, biodiversity needs to be part of awareness-raising, learning and education for a sustainable future. Embracing learning and new communication patterns puts young people in a position to act as convincing communicators and change agents in addressing biodiversity. Promoting a better understanding of the importance of biodiversity is crucial for actions towards the sustainable and equitable use of biodiversity resources. How can we create learning opportunities for all that explore the skills, values and attitudes that are conducive to biodiversity preservation and sustainable lifestyle choices?

"Young people are not only aware of the trends of our consumer societies but they also contribute to shaping our markets and lifestyles. They have a great role in making our consumption and production patterns more respectful of biodiversity. Youth's creativity, awareness and resourcefulness are powerful vehicles that can transform our everyday habits and reduce their negative impacts on biodiversity."

Braulio Ferreira de Souza Dias, Executive Secretary, Convention on Biological Diversity

#### 2. Biodiversity is evolving: change is in the wind

The biodiversity we see today is the outcome of billions of years of evolution, shaped by both natural processes and increasingly, by the influence and actions of humans. In nature, all components are interdependent. If one element changes or disappears, this may lead to the loss of others. Scientific analysis shows that Earth systems are being pushed towards their biophysical limits, with evidence that these limits are close and have in some cases been exceeded. With more than 30% of the Earth's land surface used for agricultural production, some natural habitats have been shrinking rapidly. Around 20% of vertebrate species are under threat, and the threat to coral reefs is even greater. How do we learn to better understand and enhance the relationships between biodiversity, people and societies?

#### 3. Benefits of biodiversity: more is better

The world is dependent on biodiversity – the building blocks of all life on Earth. It is the combination of life forms and their interactions with each other and with the rest of the environment that has made Earth a uniquely habitable place for humans. Biodiversity provides a large number of goods and services that sustain our lives. Biological resources support such diverse industries as agriculture, cosmetics, pharmaceuticals, pulp and paper, horticulture, energy, construction and waste treatment. Our personal health, and the health of economies and societies, depends on the continuous supply of various ecological services that would be extremely costly or impossible to replace. Protecting biodiversity is in our self-interest. What choices can we make to reduce the number of threats to biodiversity?

#### 4. Celebrating biodiversity: join in

Throughout history, biodiversity has been very important in inspiring many cultural traditions (music, ceremonies, holidays, mythology, decorations, etc.). For example, in the Pacific, the diverse biological resources are essential for the livelihoods of Pacific people and have helped shape their cultures, traditions, identity and heritage. Protecting biodiversity helps preserve and develop many of these traditions. Traditional Indigenous Territories coincide with areas that hold 80% of the planet's biodiversity. The survival and evolution of local and indigenous cultural minorities, which ensure the preservation of several practices and the transmission of environmental knowledge from generations to generations requires the preservation of biodiversity. This can be seen in Brazil, Colombia, or Nicaragua where the territories of indigenous groups who have been given the rights to their lands have been better conserved than the adjacent lands. How aware are we of the inter-linkages between biodiversity and cultural diversity?

"One bird out of 8, 1 mammal out of 4, and 6 marine turtles out of 7 are all threatened with extinction. 70% of plant species assessed are threatened. 75% of the world's fisheries are fully or over exploited and one-third of reef-building corals around the world are threatened with extinction."

2009 IUCN Update

#### 5. Leisure and tourism: come for biodiversity

We all want to enjoy life and have access to sites that are rich in biodiversity. This is a growing concern because according to the World Travel and Tourism Council, tourism and its related economic activities generate 11% of the Global Domestic Product, employ 200 million people, and transport nearly 700 million international travellers per year. It is one of the largest and fastest growing industries in the world. Ecotourism, which includes nature-and culture-based tourism, respect the destinations' biological and cultural diversity while offering leisure activities and recreation. This helps contribute to the protection and conservation of biodiversity, limits negative socioeconomic impacts and benefits local people economically and socially. How can we enjoy nature while reducing our impact on the planet and its resources? Can we create nature and recreation areas that can be equally used by people, animals and plants?

## 6. Lifestyle choices: biodiversity goes with everything

Sustainable lifestyles for you, your family and friends are essential for safeguarding natural resources and conserving biodiversity for generations to come. Sustainable lifestyles and practices in forestry, agriculture, fishing and manufacturing, for example, need to be maximized in an effort to minimize pollution and waste. Every day, we make lifestyle choices when we plug in a computer, drive over short distances instead of biking or walking, buy food or take a bath instead of a shower. One way we can contribute to conserving biodiversity is to choose a more sustainable lifestyle and looking for sustainable alternatives. We need to learn that we are all part of a web of life. When one species disappears, others are at risk of disappearing as a result. How conscious are we of how lifestyle choices connect to biodiversity?

"The biodiversity hotspots are Earth's richest and most endangered terrestrial systems. They once covered more than 12% of Earth's land surface but have cumulatively lost nearly 90% of their original natural vegetation. What remains in them now accounts for only 1.4% of our planet's terrestrial environment, but they harbour more than 44% of all plants and 35% of mammals, birds, reptiles and amphibians as endemics found absolutely nowhere else."

UNEP – Mapping Tourism's Global Footprint/

#### 7. A healthy life: biodiversity matters

Biodiversity is life. Without it, we could not survive. It heals us, as more than 70,000 plant and tree species on Earth are used medicinally. The survival of plant diversity is intrinsically linked with human well-being. Many of the most important pharmaceutical drugs come from compounds discovered only in specific plants or organisms, meaning future drug discoveries may well depend on the survival of species that have yet to be studied for their medicinal properties. In addition, planet Earth currently hosts 7 billion people. We need to preserve biodiversity so that it can meet the needs of 9 billion of us in 2050. The healthiness of living conditions is maintained and enhanced by biodiversity, which contributes to air and water purity, among others. How can we shift towards a more sustainable and healthier lifestyle while an increasing number of people need access to food, clean air, and clean water?

#### 8. Eating and food: bio "diversity" on your plates

Farmers rely on services provided by ecosystems to produce the foods we eat every day, and the health of ecosystems, in turn, depend on biodiversity. The relationship between agriculture and biodiversity can be understood in two ways - the biodiversity within farmland landscapes (i.e. the biodiversity of soil microbes, birds, insects, etc.) and the biodiversity of agricultural crops and animals (i.e. breeds of cattle, varieties of wheat, etc.). Industrial food production increasingly relies on fewer and fewer crop varieties and animal breeds, further imperiling the security of food systems. The Food and Agriculture Organization has estimated that during the last century, 75% of crop genetic diversity has been lost, making food supplies more vulnerable to outbreaks of pests and diseases. How does what we eat and drink relate to biodiversity, and what choices can we make to reduce our impact on the planet and its resources?

#### 9. Shopping and consuming: support biodiversity

Shopping has become a way of life for many young people. However, it is these unsustainable consumption patterns in developed and emerging countries that are the principal cause of biodiversity loss. In fact, the rapid loss of the Earth's species is estimated to be between 1,000 and 10,000 times higher than the natural extinction rate. To help alleviate this, we need to change our unsustainable consumption habits and this starts with our shopping behavior. Although we all need goods, we must ask ourselves: what are the impacts of our everyday purchases on biodiversity? In times of ever-scarcer resources, new and more materials and resources are in demand. Can we think or develop sustainable alternative solutions?

"In Jakarta, young people are almost 30% of the population and if this number can work together as active agents for our environment, we believe we can tackle the issues affecting us and our environment at large."

Putri Ayusha, Responding to Climate Change (RTCC) student

#### 10. Money and jobs: linking them with biodiversity

Choices that we make in the work place and decisions on how we spend or invest our money can have a big impact on biodiversity. Nature conservation and economic well-being do not necessarily contradict each other. General economic development is closely linked to biodiversity, which is the source of many products used by industry, and the origin of various services using biotechnology. How can our economic choices help sustain biodiversity?

#### This Guidebook is structured around themed sections, including an online resources section.



# 11. Connecting with others: birds were tweeting long before Twitter

Young people communicate all the time, via text, email or social networking. Social interconnections are linked to our cultural diversity as well as biodiversity. Acting globally as well as locally contributes to preserving biodiversity. What is the impact of connecting with others and how can we use these connections to act as a force for change for biodiversity?

"We must counter the perception that people are disconnected from our natural environment. We must increase understanding of the implications of losing biodiversity ... We must generate a greater sense of urgency and establish clear and concrete targets. Biodiversity is life. Biodiversity is our life."

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Ban Ki-moon, Secretary-General of the United Nations.

#### 12. Mobilizing the international community: your action is vital!

The threats to biodiversity may seem daunting, but we can all make lifestyle choices that are more respectful of nature. Protecting our planet and conserving its biodiversity is our responsibility. Awareness-raising and education can help us take action and address these challenges today. The involvement of young people is critical to finding long-lasting solutions to our world's biodiversity challenges. How can we begin a journey towards a more responsible lifestyle?

Biodiversity underpins the health of our planet and has a direct impact on all our lives.

# **UNEP/UNESCO YouthXchange (YXC) Initiative**

The UNEP/UNESCO YouthXchange Initiative was created in 2001 to promote sustainable lifestyles among youth (aged 15-24) through education, dialogue, awareness raising and capacity building. YXC works with young people, educators, non-governmental organizations, trainers and youth leaders in more than 45 countries around the world. At the national and local levels, YXC capacity-building activities are secured through a diverse network of partners, and supported by a printed training kit on responsible consumption (translated into more than 20 languages) and a bilingual website. Thematic YouthXchange guidebooks enable young people to better understand how global challenges are connected to their everyday lifestyle choices. The first thematic guidebook is the YXC Climate Change and Lifestyles Guidebook (2011), followed by the YXC Green Skills and Lifestyles Guidebook (2014). YXC guidebooks, which explain complex issues in accessible language, supported by practical tips, suggested activities, relevant case studies/best practices, are downloadable from <a href="https://www.unep.org">www.unep.org</a> and <a href="https://www.unesco.org">www.unesco.org</a>.





UNEP was created in 1972 as the voice for the environment within the UN system. Its mission is to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations.

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UNESCO was founded on 16 November 1945. This specialized UN agency's mission is to contribute to the building of peace, the eradication of poverty, sustainable development and intercultural dialogue through education, the sciences, culture, communication and information.

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