



Science in the City

Building Participatory Urban Learning Community Hubs
through Research and Activation





LIFE ON LAND: WHY IT MATTERS

**1 million
plant
and
animal
species
are
at risk
of
extinction**



15 LIFE ON LAND



Forests cover 30.7 per cent of the Earth's surface and, in addition to providing food security and shelter, they are key to combating climate change, protecting biodiversity and the homes of the indigenous population. By protecting forests, we will also be able to strengthen natural resource management and increase land productivity.

At the current time, thirteen million hectares of forests are being lost every year while the persistent degradation of drylands has led to the desertification of 3.6 billion hectares. Even though up to 15% of land is currently under protection, biodiversity is still at risk. Deforestation and desertification – caused by human activities and climate change – pose major challenges to sustainable development and have affected the lives and livelihoods of millions of people in the fight against poverty.

15 LIFE ON LAND



Efforts are being made to manage forests and combat desertification. There are two international agreements being implemented currently that promote the use of resources in an equitable way. Financial investments in support of biodiversity are also being provided



15 LIFE ON LAND



The Lion's Share Fund

On 21 June, 2018, the United Nations Development Programme (UNDP), FINCH and founding partner Mars, Incorporated, announced the **Lion's Share**, an initiative aimed at transforming the lives of animals across the world by asking advertisers to contribute a percentage of their media spend to conservation and animal welfare projects. The Lion's Share will see partners contribute 0.5 percent of their media spend to the fund for each advertisement they use featuring an animal. Those funds will be used to support animals and their habitats around the world. The Fund is seeking to raise US\$100m a year within three years, with the money being invested in a range of wildlife conservation and animal welfare programs to be implemented by United Nations and civil society organizations.



What's the goal here?

To sustainably manage forests, combat desertification, halt and reverse land degradation, and halt biodiversity loss.

Why?

Forests cover nearly 31 per cent of our planet's land area. From the air we breathe, to the water we drink, to the food we eat—forests sustain us. Around 1.6 billion people depend on forests for their livelihood. Almost 75 per cent of the world's poor are affected directly by land degradation. Forests are home to more than 80 per cent of all terrestrial species of animals, plants and insects. However, biodiversity is declining faster than at any other time in human history. An estimated 20 per cent of the Earth's land area was degraded between 2000 and 2015. Biodiversity and the ecosystem services it (...continues next slide)



underpins can also be the basis for climate change adaptation and disaster risk reduction strategies as they can deliver benefits that will increase the resilience of people to the impacts of climate change. Forests and nature are also important for recreation and mental well-being. In many cultures, natural landscapes are closely linked to spiritual values, religious beliefs and traditional teachings.

What would it cost to correct the problem?

The UN Forum on Forests Secretariat estimates that achieving sustainable forest management on a global scale would cost US\$70-\$160 billion per year. The Convention on Biological Diversity estimates that US\$150-\$440 billion per year is required to halt the loss of biodiversity at a global level by the middle of this century.



What would it cost if we don't correct the problem?

Biodiversity delivers multiple services from local to global levels, while responses to biodiversity loss range from emotional to utilitarian. For instance, insects and other pollen-carriers are estimated to be worth more than US\$200 billion per year to the global food economy. Three-quarters of the top-ranking global prescription drugs contain components derived from plant extracts, which would be threatened. Natural disasters caused by ecosystems disrupted by human impact and climate change already cost the world more than US\$300 billion per year. Deforestation and forest degradation results in loss of habitat for all species, a decrease in freshwater quality, an increase in soil erosion, land degradation and higher emissions of carbon into the atmosphere. In short, not taking action on forests impacts both the health of the planet and our communities.



What can we do?

Inevitably, we change the ecosystems we are a part of through our presence—but we can make choices that either affirm diversity or devalue it. Some things we can do to help include recycling, eating a locally-based diet that is sustainably sourced, consuming only what we need, and limiting energy usage through efficient heating and cooling systems. We must also be respectful toward wildlife and only take part in ecotourism opportunities that are responsibly and ethically run in order to prevent wildlife disturbance. Wellmanaged protected areas support healthy ecosystems, which in turn keep people healthy. It is therefore critical to secure the involvement of the local communities in the development and management of these protected areas.



RED LIST INDEX:

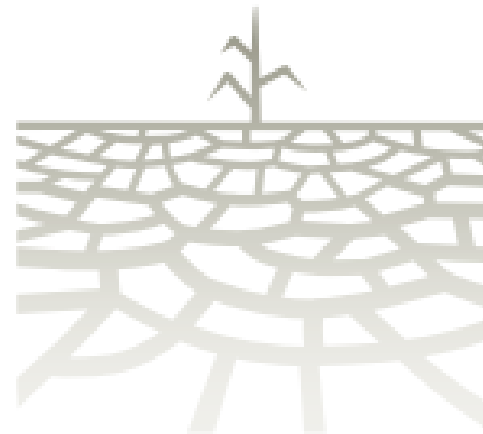
BIODIVERSITY LOSS IS HAPPENING

AT AN
ACCELERATED RATE



THE RISK OF SPECIES
EXTINCTION HAS
WORSENERD
BY ALMOST 10%
OVER THE LAST
25 YEARS

RED LIST INDEX TRACKS DATA ON MORE THAN 20,000 SPECIES OF MAMMALS, BIRDS, AMPHIBIANS, CORALS AND CYCADS. THE HIGHER THE VALUE, THE LOWER THE CONCERN



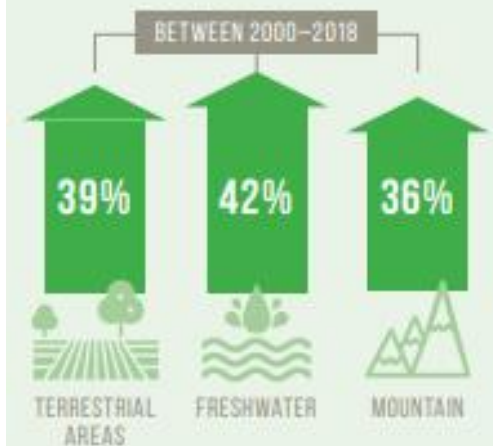
LAND DEGRADATION
IS AFFECTING ONE FIFTH
OF THE EARTH'S LAND
AREA AND THE LIVES OF
1 BILLION PEOPLE



116 PARTIES HAVE RATIFIED
THE NAGOYA PROTOCOL,
WHICH ADDRESSES ACCESS TO
GENETIC RESOURCES
AND THEIR FAIR AND EQUITABLE USE

MORE
OF EACH KEY
BIODIVERSITY AREA
IS PROTECTED

THE GLOBAL MEAN PERCENTAGE OF
EACH KEY BIODIVERSITY AREA COVERED
BY PROTECTED AREAS INCREASED BY:



Facts & Figures

Forests

- Around 1.6 billion people depend on forests for their livelihood, including 70 million indigenous people.
- Forests are home to more than 80 per cent of all terrestrial species of animals, plants and insects.
- Between 2010 and 2015, the world lost 3.3 million hectares of forest areas. Poor rural women depend on common pool resources and are especially affected by their depletion.



Facts & Figures

Desertification

- 2.6 billion people depend directly on agriculture, but 52 per cent of the land used for agriculture is moderately or severely affected by soil degradation.
- Arable land loss is estimated at 30 to 35 times the historical rate
- Due to drought and desertification, 12 million hectares are lost each year (23 hectares per minute). Within one year, 20 million tons of grain could have been grown.
- 74 per cent of the poor are directly affected by land degradation globally.



Facts & Figures

Biodiversity

- Illicit poaching and trafficking of wildlife continues to thwart conservation efforts, with nearly 7,000 species of animals and plants reported in illegal trade involving 120 countries.
- Of the 8,300 animal breeds known, 8 per cent are extinct and 22 per cent are at risk of extinction.
- Of the over 80,000 tree species, less than 1 per cent have been studied for potential use.
- Fish provide 20 per cent of animal protein to about 3 billion people. Only ten species provide about 30 per cent of marine capture fisheries and ten species provide about 50 per cent of aquaculture production.
- Over 80 per cent of the human diet is provided by plants. Only three cereal crops – rice, maize and wheat – provide 60 per cent of energy intake.
- As many as 80 per cent of people living in rural areas in developing countries rely on traditional plant--based medicines for basic healthcare.
- Micro-organisms and invertebrates are key to ecosystem services, but their contributions are still poorly known and rarely acknowledged.



Goal 15 Targets

15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements

15.2 By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally

15.3 By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world



Goal 15 Targets

15.4 By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development

15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

15.6 Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed

15.7 Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products



Goal 15 Targets

15.8 By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species

15.9 By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts

15.A Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems

15.B Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation



Goal 15 Targets

15.C Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities



Links

- [UNEP](#)
- [Convention on Biological Diversity](#)
- [FAO – Forestry](#)
- [The New York Declaration on Forests](#)
- [UN-REDD](#)
- [United Nations Convention to Combat Desertification](#)
- [International Maritime Organization](#)
- [International Union for Conservation of Nature](#)





To find out more about Goal #15 and the other Sustainable Development Goals, visit:

<http://www.un.org/sustainabledevelopment>

