



PUDUCHERRY ENVIS HUB

(Environmental Information System)

Host Centre : Puducherry Pollution Control Committee

Funded by Ministry of Environment, Forest & Climate Change

Government of India, New Delhi



INTERNATIONAL DAY FOR BIOLOGICAL DIVERSITY

THEME : "BUILDING A SHARED FUTURE FOR ALL LIFE"

22 MAY



Nilgiri marten

[HTTPS://DSTE.PY.GOV.IN/ENVISPDY/](https://dste.py.gov.in/envispdy/)

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Building a shared future for all life ”

As the global community is called to re-examine our relationship to the natural world, one thing is certain: despite all our technological advances we are completely dependent on healthy and vibrant ecosystems for our water, food, medicines, clothes, fuel, shelter and energy, just to name a few.

The theme in 2022 is “Building a shared future for all life”. Fitting within the context of the ongoing United Nations Decade on Restoration, which highlights that biodiversity is the answer to several sustainable development challenges, the slogan conveys the message that biodiversity is the foundation upon which we can build back better.

From ecosystem-based approaches to climate and/or nature-based solutions to climate, health issues, food and water security and sustainable livelihoods, biodiversity is the foundation upon which we can build back better. That is the main message from the Convention on Biological Diversity (CBD), key international instrument for sustainable development.



About

The United Nations has proclaimed May 22 The International Day for Biological Diversity (IDB) to increase understanding and awareness of biodiversity issues. When first created by the Second Committee of the UN General Assembly in late 1993, 29 December (the date of entry into force of the Convention of Biological Diversity), was designated The International Day for Biological Diversity. In December 2000, the UN General Assembly adopted 22 May as IDB, to commemorate the adoption of the text of the Convention on 22 May 1992 by the Nairobi Final Act of the Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity. This was partly done because it was difficult for many countries to plan and carry out suitable celebrations for the date of 29 December, given the number of holidays that coincide around that time of year.

What is Biodiversity?

Biodiversity or Biological diversity means the life on Earth constitutes a variety of living organisms. There are at least 8 million species on this planet including plants, animals, fungi, bacteria to name a few. The biodiversity we have today was formed through billions of years of evolution.



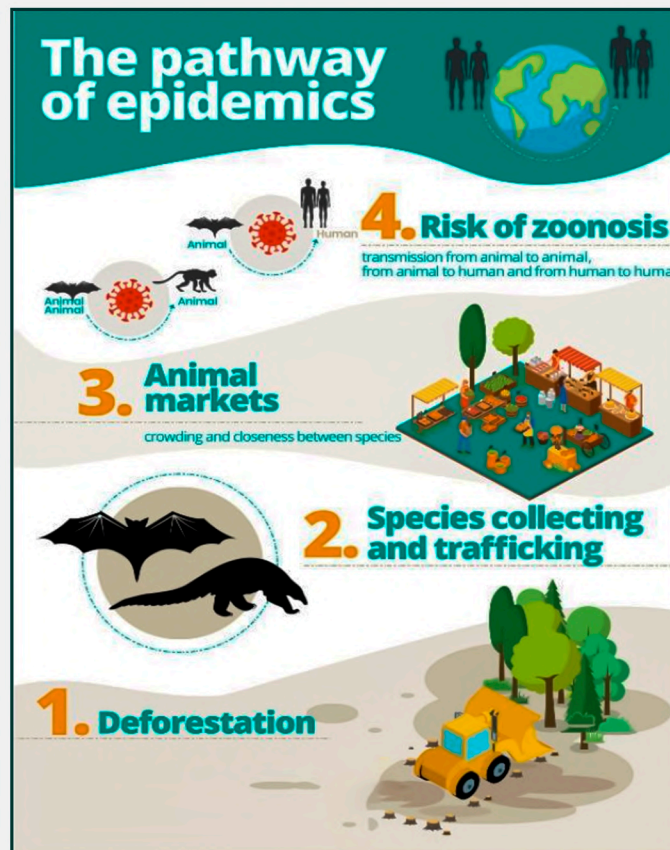
Biodiversity is very important for many reasons. It supplies the earth with clean water and oxygen. Biodiversity also enables plants to grow, which produces food for humans and animals. Other benefits of biodiversity is that it keeps pests and diseases in check and protects against flooding. It also helps to regulate the climate. Together, all of these benefits are known as ecosystem services.

The health of the earth suffers when biodiversity decreases. It's also true of humans. The less biodiversity, the poorer our health becomes. Some even believe that pandemics are related to the loss of biodiversity. Now more than ever, we need to spread awareness for the importance of biodiversity.

Biodiversity: The Key to Curbing Pandemics

Biodiversity loss and COVID-19

The emergence of COVID-19 has made it clear that, when we destroy biodiversity, we destroy the system that supports human life. By upsetting the delicate balance of nature—encroaching on wildlife, reducing the genetic diversity within animal populations, causing climate change and extreme weather events—we have created ideal conditions for the spread of viruses between animal and human populations. Nature is sending us a message.



Over the last decades, a variety of fatal infectious diseases, including Human immunodeficiency virus infection and acquired immunodeficiency syndrome (HIV/AIDS), avian influenza, Ebola, Severe acute respiratory syndrome (SARS), and most recently Coronavirus disease 2019 (COVID-19), have had zoonotic origins.

In 2020 the COVID-19 pandemic has raised global awareness regarding the risks and dramatic consequences related to the emergence of zoonotic diseases. The potential causes for the pandemic (including direct or indirect roles of biodiversity wildlife and land use) have been gaining importance since decades, however, they were discussed only among experts and have not been at the forefront of general and political discussions.

Therefore, pandemics such as the latest COVID-19 (coronavirus) outbreak force us to reconsider the protective role that biodiversity plays in the future of humankind, since its many advantages result in one fundamental benefit: protection from infectious diseases.

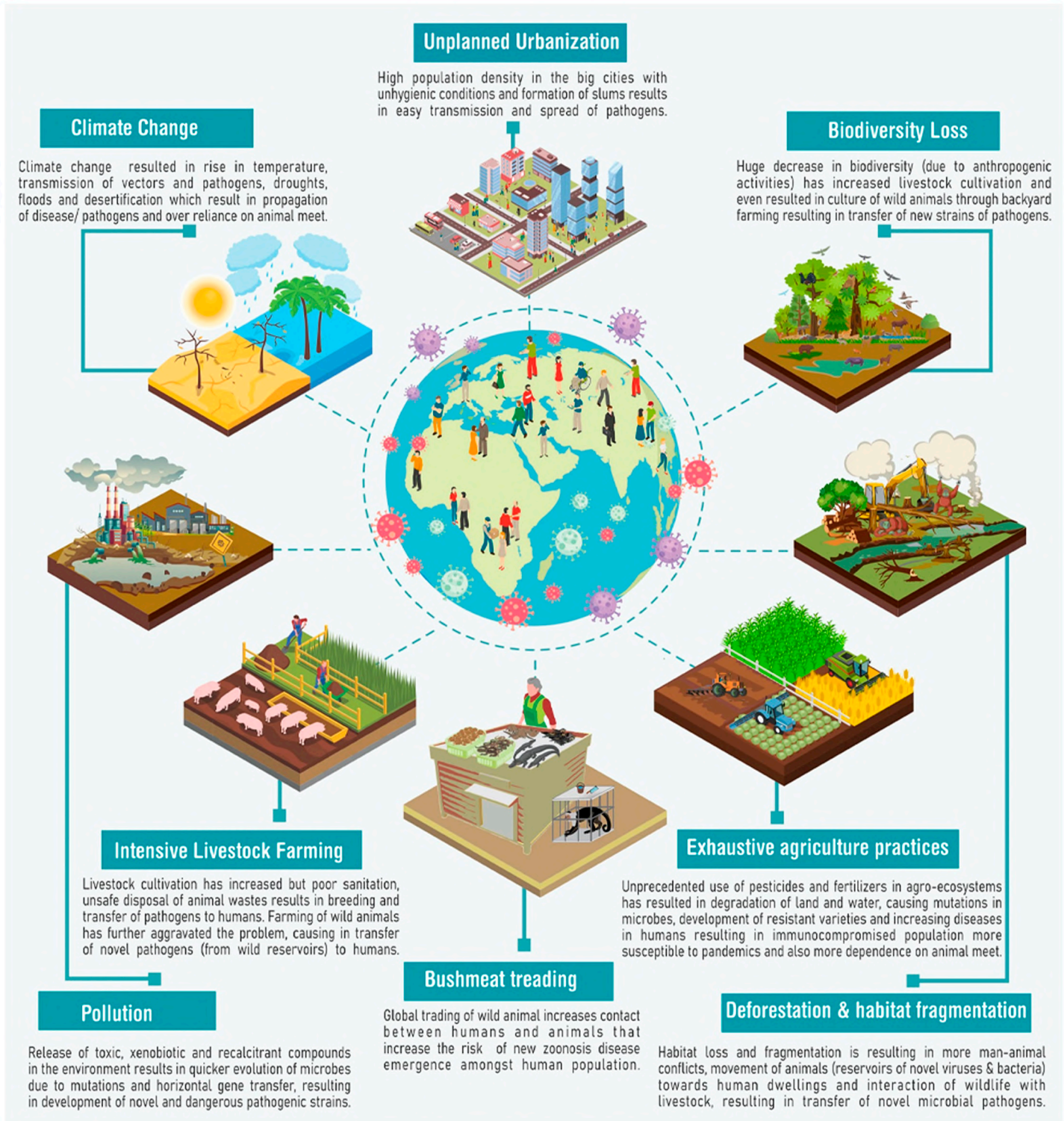
TOWARDS A RESTORED WORLD

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The United Nations Decade on Ecosystem Restoration (2021-2030) challenges everyone to massively scale up restoration efforts that breathe new life into our degraded ecosystems.

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Many of the pathogens causing these diseases jumped to humans in natural areas (forests, wetlands) after human encroachment, but soon travelled to other areas of the world.



“When biodiversity has a problem, humanity has a problem”

National Biodiversity Authority

National Biodiversity Authority (NBA) was established by the Central Government in 2003 to implement India's Biological Diversity Act (2002). The NBA is a Statutory Body and it performs facilitative, regulatory and advisory functions for the Government of India on issues of conservation, sustainable use of biological resources and fair and equitable sharing of benefits arising out of the use of biological resources.

The Biological Diversity Act (2002) mandates implementation of the provisions of the Act through decentralized system with the NBA focusing on advising the Central Government on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of the utilization of biological resources; and advising the State Governments in the selection of areas of biodiversity importance to be notified under Sub-Section (1) of Section 37 as heritage sites and measures for the management of such heritage sites. The NBA considers requests by granting approval or otherwise for undertaking any activity referred to in Sections 3, 4 and 6 of the Act.

The State Biodiversity Boards (SBBs) focus on advising the State Governments, subject to any guidelines issued by the Central Government, on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of the benefits arising out of the utilization of biological resources;

The SSBs also regulate, by granting of approvals or otherwise upon requests for commercial utilization or bio-survey and bio-utilization of any biological resource by the Indians. The local level Biodiversity Management Committees (BMCs) are responsible for promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity.

The NBA with its headquarters in Chennai, Tamil Nadu, India delivers its mandate through a structure that comprises of the Authority, Secretariat, SBBs, BMCs and Expert Committees. Since its establishment, NBA has supported creation of SBBs in 29 States and facilitated establishment of around 72,304 BMCs.

For more details please visit the website:

<http://nbaindia.org/content/500/55/1/biodiversityrelatedi.html>



Scan QR Code for more details

Biodiversity and the Sustainable Development Goals



The 2030 Agenda for Sustainable Development sets out an ambitious framework of universal and indivisible goals and targets to address a range of global societal challenges. Biodiversity and ecosystems feature prominently across many of the Sustainable Development Goals (SDGs) and associated targets. They contribute directly to human well-being and development priorities.

Biodiversity is at the centre of many economic activities, particularly those related to crop and livestock agriculture, forestry, and fisheries. Globally, nearly half of the human population is directly dependent on natural resources for its livelihood, and many of the most vulnerable people depend directly on biodiversity to fulfil their daily subsistence needs.

The Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets adopted under the Convention on Biological Diversity has been recognized as setting the global framework for priority actions on biodiversity. The SDGs and the Strategic Plan are mutually supportive and reinforcing, as implementation of one contributes to the achievement of the other.

Here's how biodiversity plays an essential role in achieving the Sustainable Development Goals:



SDG 1 – End poverty in all its forms everywhere

Biodiversity provides resources and income, particularly for the rural poor. Ecosystem services and other non-marketed goods make up between 50% and 90% of the total source of livelihoods among poor rural and forest-dwelling households.



SDG 2 – End hunger, achieve food security and improved nutrition; promote sustainable agriculture

Biodiversity is a key element of food security and a means of improving nutrition. Many of the most vulnerable people depend on food gathered from natural ecosystems, such as forests, grasslands, oceans and rivers.

Biodiversity also underpins ecosystem functions, such as pollination and the maintenance of soil fertility, and water quality, central to agricultural productivity.



SDG 3 – Ensure healthy lives and promote well-being for all at all ages

Nearly 1 in 4 deaths globally is attributed to environmental risk factors. Healthy ecosystems help mitigate the spread and impact of pollution by both sequestering and eliminating certain types of air, water and soil pollution.

Agricultural biodiversity contributes to increased sustainable production, reducing the need for pesticides and other chemical inputs, resulting in benefits to human health. Further, a substantial proportion of the world's population depends on traditional medicines derived from biodiversity for their health care needs.



SDG 5 – Achieve gender equality and empower all women and girls

Women play a vital role in agriculture, nutrition and the well-being of families and communities. Recognizing women's roles as key land and natural resource managers is central to sustainable development.

In addition, loss of biodiversity and associated ecosystem services can perpetuate gender inequalities by increasing the time spent by women and children in performing certain tasks, such as collecting valuable resources, including fuel, food and water.



SDG 6 – Ensure the availability and sustainable management of water and sanitation for all

Ecosystems help maintain water supply and quality, and guard against water-related hazards and disasters. For example, wetlands play a role in surface, subsurface and ground water storage, and reduce the risk of flooding. They also help capture, process and dilute pollutants. Similarly, vegetation, such as grasslands and forests, supports the healthy functioning of watersheds. Managing ecosystems to maintain these types of services is generally more cost-effective than employing built technologies.



SDG 8 – Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Biodiversity and ecosystems underpin many national and global economic activities, including those related to agriculture, forestry, fisheries and aquaculture, energy, tourism, transport and trade. Biodiversity conservation and sustainable use can lead to higher productivity, more efficient resource use, and long-term viability of resources.



SDG 9 – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Biodiversity and healthy ecosystems can provide reliable and cost-effective natural infrastructure. For example, coral reefs and mangrove forests protect coasts against flooding that are expected to increase with climate change. Natural infrastructure such as vegetation in cities can reduce the run-off of pollution into water bodies. Such green infrastructure can offer multiple benefits and are often more effective than built infrastructure in terms of cost, longevity and effectiveness.



SDG 11 – Make cities and human settlements inclusive, safe, resilient and sustainable

Ecosystems and biodiversity underpin the day-to-day functioning of human settlements by delivering the basic services and conditions that enable, support and protect human production, consumption and habitation.

Biological resources provide many of the foods, building materials, energy and medicines consumed in urban centres. Urban planning that integrates biodiversity considerations can contribute to more sustainable, cost-effective and healthy human settlements.



SDG 12 – Ensure sustainable consumption and production patterns

Consumption and production of all goods and services require the transformation of many natural resources, which in turn impacts biodiversity. Current unsustainable consumption and production patterns can undermine the ability of ecosystems to provide services for industries and communities

that rely upon them. Using cleaner and more resource-efficient approaches that minimize wastes and pollutants can bring about economic opportunities and better quality of life for consumers and producers alike, and at the same time benefit biodiversity.



SDG 13 – Take urgent action to combat climate change and its impacts

Forests, peatlands, wetlands, ocean and coastal ecosystems represent globally significant carbon stores, and their conservation and sustainable use is a critical element for avoiding dangerous changes to the Earth's

atmospheric temperature and climate system. Efforts to protect and restore habitats offer cost-effective and proven ways to mitigate climate change. Such ecosystems can also serve as natural buffers against climate extremes and other disasters, and strengthen adaptation to climate change.



SDG 14 – Conserve and sustainably use the oceans, seas and marine resources for sustainable development

The conservation and sustainable use of biodiversity in marine and coastal ecosystems is a key aspect of sustainable development. Biodiversity underpins all fishing and aquaculture activities, as well as other species harvested for foods and medicines.



SDG 15 – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss

The conservation, restoration and sustainable use of terrestrial ecosystems a call to integrate ecosystem and biodiversity values into national and local development planning, poverty reduction strategies and accounts.



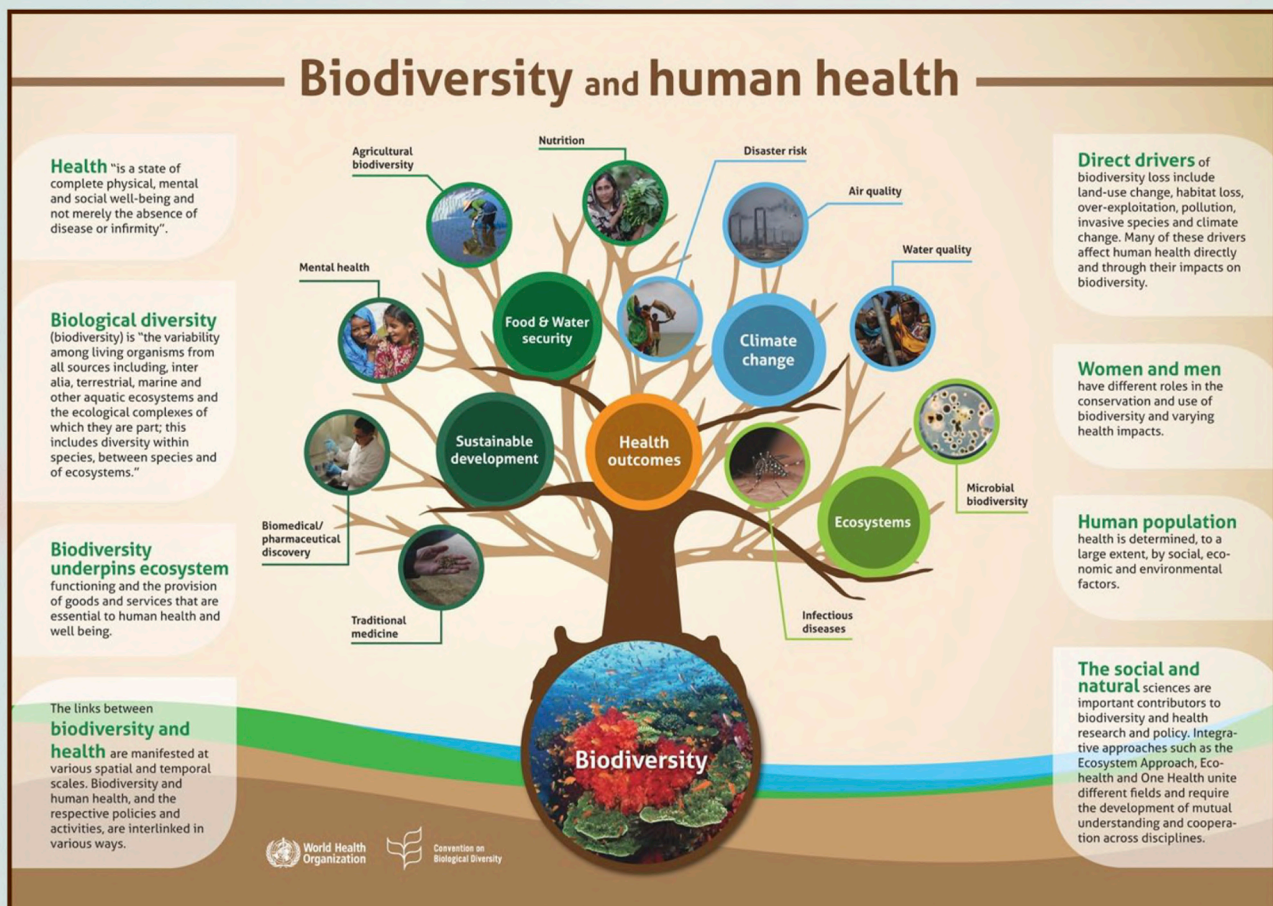
SDG 16 – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Conflicts over natural resources, environmental degradation and contamination can be one of the factors leading to social insecurity and violence. Vulnerable people are often disproportionately affected. Strengthening community rights over natural resources management, combating illegal exploitation and corruption, and ensuring transparent decision-making on social and environmental issues constitute an important process toward building an inclusive society based on justice.

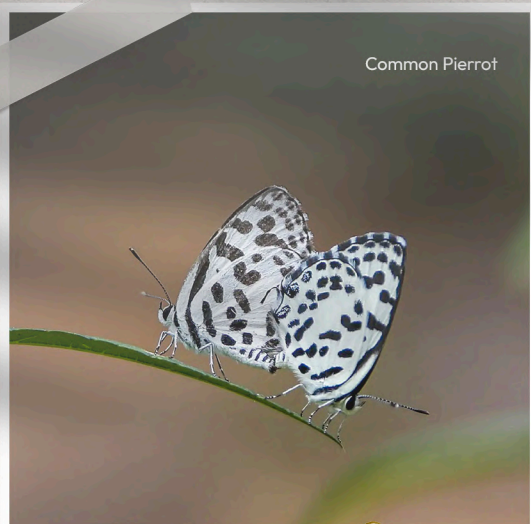


SDG 17 – Strengthen the means of implementation and revitalize the global partnership for sustainable development

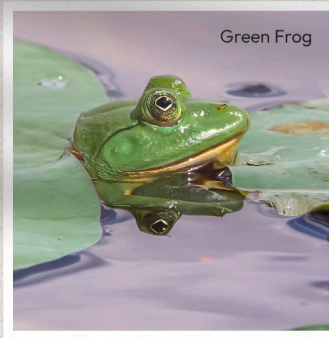
The Strategic Plan for Biodiversity provides opportunities for strengthening global partnership on science, technology and innovation, dissemination of environmentally sound technologies, and for building national capacity for monitoring the progress of the 2030 Agenda.



#Biodiversity



Common Pierrot

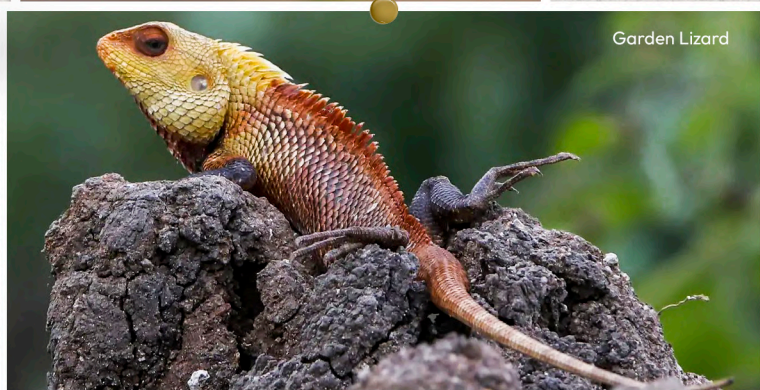


Green Frog



Common myna

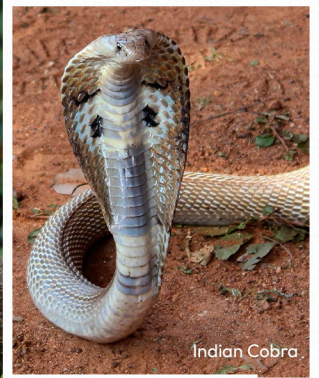
India for Nature



Garden Lizard



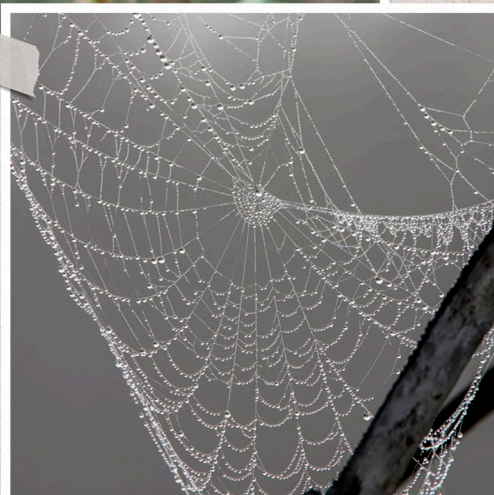
Grey Mongoose



Indian Cobra



Common Picture Wing



Baya Weaver