The ways in which we grow, produce, transport, consume and utilise food is lost or wasted. The world’s ecosystems face unprecedented threats. An alarming and authoritative new report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services reveals that nature is declining at rates never seen before in all of human history. Since 1990, deforestation has caused the loss of more than 250 million hectares of forests that help to absorb harmful carbon dioxide emissions from the atmosphere. One million plant and animal species are at risk of extinction and more than 80 per cent of marine fish stocks are in decline or overfished. The impacts on people around the world will be grave. Current negative trends in biodiversity and ecosystems are projected to undermine progress towards 80 per cent of the targets for the Sustainable Development Goals. We simply cannot allow this to happen.

This year’s International Day highlights the impact of environmental neglect on food security and public health. The world’s current food system is increasingly broken. Billions of people lack access to proper nutrition. Approximately one third of what is produced is lost or wasted. The ways in which we grow, process, transport, consume and waste food are leading causes of malnutrition. 

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This year’s International Day highlights the impact of environmental neglect on food security and public health. The world’s current food system is increasingly broken. Billions of people lack access to proper nutrition. Approximately one third of what is produced is lost or wasted. The ways in which we grow, process, transport, consume and waste food are leading causes of malnutrition.
Biodiversity is the biological diversity which includes the variety of the whole species present on earth. It includes different animals, plants, micro-organisms and their genes, water ecosystems, terrestrial, and marine ecosystems in which they all are present. Biodiversity is necessary for our existence as well as valuable in its own right. This is because it provides the fundamental building blocks for the many goods and services which provides a healthy environment to lead our life. Biodiversity include fundamental things to our health like fresh water clean air and food products, as well as the many other products such as timber and fiber. Biodiversity also includes various other important things and services such as cultural, recreational, and spiritual nourishment that play an important role in which they all are present. We depend on biodiversity and we should try to maintain it.

Over the last 200 years world has suffered the largest documented decline in biodiversity of any continent. Despite efforts to manage threats and pressures to biodiversity, it is still in decline. Main threats to our biodiversity are as given below:

- Degradation, fragmentation and loss of habitat
- Spreading of invasive species
- Unsustainable use of natural resources
- Change of climate
- Inappropriate fire regimes
- Changes within aquatic environment and water flows

Why should we Conserve Biodiversity?

Human should conserve biodiversity because of its benefit for example services and biological resources which are essential to live our life on earth. However, it also provides spiritual benefits as well as social benefit.

Biological Resources

A biological resource means any product that is harvested from nature is the part of biological resources. These resources come under several categories such as medicine, food, wood products, fibers etc. For example under one category i.e., food more than 7,000 species of plants are involved, although we depend mainly on only 12 major crops for food. For medicinal field human population is dependent on only 12 major crops for food. For medicinal purposes many of our medicines are produced by chemicals in pharmaceutical companies, but the original formulas come from plants. For example, aspirin is comes from willows, opium which is a pain reliever is derived from poppies and quinine which is used for the treatment of malaria produced by the Cinchona tree. Fibers which is used for ropes, clothing, webbing, netting, sacking, and other materials are obtained by plants mainly for example cotton plants, Agave plants (sisal), flax plants (linen), Corchorus plants (jute), bamboo, palms and Agave plants.

Ecosystem Services

Ecosystem services means processes provided by the nature to support human life. For example Pollination, decomposition of waste, water purification, renewal of soil fertility and moderation of floods. Ecosystem processes are often overlooked, and are not generally valued as part of the economy until they cease to function. When economic value is assigned to these services, it becomes very high. For example, insect pollinators help produce many commercially important fruits such as almonds, melons, blueberries, and apples. The global economic value of pollination services performed by insects has been valued at $217 billion per year. Similarly in other ecosystem, service water purification just involves filtering of rain water by soil and by microbes that can break down nutrients and contaminants, and reduce metal ions, slowing their spread into the environment. Wetland and riparian plants absorb nitrogen, and trap sediments that decrease water quality. But human construction and development will disrupt natural environments as well all activity and services related to this environment. So finally we have to depend on artificial man made services like filtration we used different different types of water filters and purifiers. For these artificial services we need to pay more while the natural ecosystem services are at free of cost.

Social and Spiritual Benefits

Most of the time in human history, conservation means protecting nature for the spiritual gifts it provides, and protecting sacred places in the local landscape. The biodiversity effects on cultural development can be shown by heterogeneity of the world’s mythology, folk dances and folk art which contribute to the richness of literature and global arts. In different landscapes, different cultures are present which influenced our language, diet, occupation and various types of activity. Uniqueness of each habitat is presented by their animals and plants that why each country and state have their flagship animals as well as plants. Even during traveling, motivation of the peoples is to see biological diversity, different cultural and landscape. Ecotourism is travel with the aim to view, support and sustain the local cultures and its natural ecosystem. Support from ecotourism can be very helpful to reduce habitat destruction as well as to preserve endangered species.

Biodiversity Conservation Methods

In-situ biodiversity conservation

In-situ conservation means the conservation of species within their natural habitats, this way of conserving biodiversity is the most appropriate method for biodiversity conservation. In this strategy you have to find out the area with high biodiversity and select the conservation area in the form of natural park sanctuaries/biosphere reserve etc. In this way biodiversity can be conserve in their natural habitat from human activities.

Ex-situ conservation methods

Ex-situ conservation involves the conservation of biological diversity outside of their natural habitats. This involves conservation of genetic resources, as well as to wild and cultivated species, and draws on a diverse body of techniques and facilities. Ex-situ biodiversity conservation can be done as following:

- By forming Gene banks: In this store seeds, sperm & ova at extremely low temperature and humidity.
- It is very helpful to save large variety of species of plants & animals in a very small space. e.g. sparnom & ova banks, seed banks.
- Forming Zoo and botanical garden; for research purpose and to increase public awareness collecting living organisms for aquaria, zoos and botanic gardens.
- Collections of in vitro plant tissue and microbial culture.
- Captive breeding of animals and artificial propagation of plants, with possible reintroduction into the wild.

Ex-situ biodiversity conservation strategy also plays an important role in recovery programmes for endangered species. The Kew Seed Bank in England has 1.5 per cent of the world’s flora - about 4,000 species - on deposit. In agriculture, ex-situ conservation measures maintain domesticated plants which cannot survive in nature unaided. It provides good platform for research opportunities on the components of biological diversity. Some of the institutions also play a major role in public education and in increasing awareness among public by bringing members of the public into contact with plants and animals they may not normally come in contact with. It is estimated over 600 million people visit zoos/museums every year worldwide.
Risk to biodiversity pose challenges to food security and health

Securing environmentally sustainable quality food that is healthy and safe for the entire global population of 7.7 billion persons is one of the world’s biggest challenges today.

The issue of sustainability is fundamental for human development. In 2015, when the MDGs evolved into today’s Sustainable Development Goals (SDGs), world leaders committed to making their national development efforts sustainable in the larger interest of humankind and for future generations to come.

Sustainable Development activities cannot be carried out without giving due consideration to the biological resources of the world we live in. Biological resources, namely, genetic resources, organisms and other components of an ecosystem, are vital to our economic and social development. With this in mind, biological diversity is recognized as a global asset of high value for humanity.

Acknowledging that all forms of life play a significant role in sustaining human wellbeing, the United Nations adopted the Convention on Biodiversity (CBD) which provides a framework for supporting all economically and socially important life forms on land and in water. In the tenth meeting of the Conference of the Parties, held in Nagoya, Aichi Prefecture, Japan, and the Strategic Plan for Biodiversity 2011-2020 was adopted. The Plan provides a framework for engaging all Parties in the effective management of biodiversity and the development of coherent policies with a focus on humankind living harmoniously with nature.

To achieve this vision, the Plan provides twenty targets called Aichi Biodiversity Targets (ABTs). As with the SDGs, eleven of the ABTs are in support of nature (human knowledge, species and other components of an ecosystem; ecosystem goods and services; living with biodiversity; biodiversity and poverty; food security and livelihoods; biodiversity and health; biodiversity and water; biodiversity and disaster risk reduction; biodiversity and tourism; and biodiversity and sustainable consumption and production). These targets are in support of nature in ABTs are in support of nature in various contexts: water security, food security and health, nutrition, sustainable development.

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Today, biodiversity is under serious threat due to human activity on the planet. Initial threats to biodiversity were hunting and gathering while current ones are climate change, urbanization and global warming. Loss of indigenous knowledge due to the shift to mono-cropping in response to commercialization has resulted in poor natural resource management and loss of biodiversity. The growing perception has been that climate change is the major threat to biodiversity until a study published in the Nature showed that the “old” threats are still the dominant drivers of current species loss. It concluded that over exploitation (72%) and agriculture (62%) have been the major drivers of current biodiversity loss. It concluded that over exploitation (72%) and agriculture (62%) have been the major drivers of current biodiversity loss.

The situation in Pakistan is not very encouraging. Crop diversification and utilization has been lacking in both subsistence and ecosystem farm-holding. The major crops across Pakistan have consistently been cereals (wheat, rice and maize). This low dietary diversity has limited the availability of nutrition-rich diets resulting in high malnutrition due to high protein, and a low variety of plant species on a wider scale. Currently, about 200 million children are stunted and one in three persons have micronutrient deficiencies around the globe. This state of malnutrition is responsible for 35% of mortality in children and accounts for 11% of the global disease burden.

While tackling the challenges, it is very important to prioritize the main threats to biodiversity. Priority attention should be given to over-harvesting and agricultural-based activities as these have been found to be the major threats. Activities for safeguarding biodiversity within this context, in all world regions, include: conflict development and governance of sustainable harvest regimes, enforcement of hunting regulations, establishment of the marine fisheries resources in Pakistan. In this study it was observed that Pakistan has about 150 fish species of economic importance in its territorial water and beyond to the Economic Exclusion Zone. The local fishing industry has developed over-fishing capacity for shallow water while the capacity for deep water is quite weak. Overfishing has disturbed the marine ecosystem. The presence of all species has declined, in some cases, by up to 90% or more. Overfishing has reduced major stock to undesirably low limits. It is observed that ninety percent of the species groups are below the depleted threshold limit. Only two species groups, of fourteen, remain within the safe limits. The FAO Assessment further recommended that several fishing regimes restore the ecosystem by making marine resources available on a sustainable basis.

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Risk to biodiversity pose challenges to food security and health

Mina Dowlatchahi, Aamer Irsah and Rosana Frattini, FAO-Pakistan
biodiversity loss, while also contributing to climate change. We must act quickly to reverse the tide leading to the most transformative change. Solutions exist. By halting environmentally harmful practices, diversifying our food systems and promoting more sustainable production and consumption patterns, we can improve global health, increase food security and reduce pressure on the planet to silence to climate change.

On this International Day for Biological Diversity, I urge all – governments, the civil society – to take urgent action to protect and sustainably manage the fragile and vital web of life on our one and only planet.

In 2000, IUCN Pakistan also facilitated the process of bringing together all the stakeholders that included the Ministry of Pakistan; Government of Balochistan, Pakistan; National Institute of Oceanography; WWF-Pakistan; Indus Earth Trust and Sindh Forest and Wildlife Department.

In the year 2000, IUCN Pakistan, the Government of Pakistan and the then Ministry of Environment, have launched the first Biodiversity Action Plan for Pakistan which was an important milestone and a major step towards sustainable conservation of biodiversity in the country.

The Government of Pakistan assigned the task of aligning the National Action Programme (NAP) to Combat Desertification in Pakistan with the United Nations Convention to Combat Desertification. The process of developing NAP was led by IUCN Pakistan which involved engaging key stakeholders at the federal and provincial levels. IUCN has also been instrumental in developing the Pakistan National and Provincial Biodiversity Strategies and Action Plans for achieving Aichi Biodiversity Targets and Sustainable Development Goals.

In 2010 in collaboration with the Forest and Wildlife Department, Government of Balochistan, IUCN Pakistan initiated the process of designating the Jupur Forest as a Component of the Biosphere Reserves of the Deserts. The process of designating was led by IUCN Pakistan under the guidance of the project titled: Mainstreaming Biodiversity Conservation into the Jupur Forest Ecosystem Protection with UNESCO Pakistan’s financial support under One UN Programme in collaboration with all the stakeholders, local communities and the international Biodiversity partners.

In the past some of the success-fuly implemented programmes and strategies of IUCN Pakistan in the Biodiversity in Pakistan include: Conservation green turtles along the Karachi coast in May 2019.

The IPES report has put na-ture loss in the global spotlight and warning signs of the climate crisis. We need to rethink and rewire the importance of mountain ecosys-ters, recognize their fragility, ad-dress the deforestation of our mountains, be faced by mountain communities, and focus on ecosystem health and resilience. It is time for bold action. 

The Fifteenth Meeting of the Conference of the Parties to the Convention on Biological Diversity (CoP15) will be hosted by China in 2020. It will provide an opportunity for Pakistan to showcase its mile-stones covered towards achieving the CBD goals. It will also provide a platform for learning from the best practices applied in other coun-tries.

IUCN has been in discussion with Governments of China and Pakistan to ensure environmental and social sustainability. In regard, IUCN has hosted numerous meetings and delegations from China who have shared their experiences and their priorities for sus-tainable development in CPEC.

Business and Biodiversity Platform is a promising initiative to leverage the know-how to invest in ecosystems and sus-tainable development. IUCN under its BBP planted one million young trees along the Karakach Coastal Valley in 2018 and another initiative is in the offing.

The convention requires countries to develop a National Biodiversity Strategy and Action Plan (NBSAP) to the CBD, which is a signatory to the United Nations Convention on Biological Diversity (CBD). The report reflects the progress made by Pakistan under the National Biodiversity Targets (ABT) 2011-2020 and Sustainable Development Goals (SDGs) 2030 to meet the national as well as global targets of CBD. It has been developed calling for increased investment and focus on diverse agricultural systems and nutrition. In-deed, the mountains of the Hindu Kush Himalaya and beyond can be a home of nature based agricultural solutions, with payoffs to humanity in the short term and the long run.

Keeping in view the theme for the year “Our Biodiversity: Our Food, Our Health,” we need to send out a strong message that our health, our food and our wellbeing is inter-related and inter-connected. It is the time for all stakeholders to get together and make a bold step to protect the Biodiversity on this earth.

The National Biodiversity and Action Plan (NBSAP) is one of the national strategies for IUCN Pakistan. It was among the 150 countries that signed the Convention on Biological Diversity at the Earth Summit and ratified it in 1994 and was therefore obliged to implement the requirements of the Convention. IUCN Pakistan was requested to prepare the fifth National Report to CBD and revised the NBSAP for the Convention. The convention requires countries for NBSAP for the CBD to be at stake, so being the custo-

Biodiversity. If the biodiversity is threatened, similarly the existence of human beings will be at stake, so being the custo-

mountains, and mountains harbour a vanishing vultures in Tharparkar; Conservation birds 

The variety of species and genes resources used for food and agriculture has considerably declined over the past century. And if you look today, how much of the world’s energy intake is produced by only 12 plants and 5 major livestock species. These will also be central

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The IPES report has put nature loss in the global spotlight and warned us that time is running out. This is the time to act, to be at the forefront of change in safeguarding and restoring our food and our health. You can contrib-

The Convention on Biological Diversity (CBD) of 1992 was adopted at the 1992 Earth Summit in Rio de Janeiro, Brazil, and came into force on 12 December 1993. The Convention on Biological Diversity (CBD) aims to "safeguard biodiversity and the ecological processes it supports to maintain the variety of life on our one and only planet. The variety of species and genes resources used for food and agriculture has considerably declined over the past century. And if you look today, how much of the world’s energy intake is produced by only 12 plants and 5 major livestock species. These will also be central concerns for achieving the new Global Biodiversity Framework, which hopefully will be adopted at the UN Convention on Biological Diversity in 2020 in Kunming.

Cross-sectoral action, steadfast commitment across all scales of governance and collaborative efforts to ensure that food chain is much needed. This includes conserving land and water resources used for food production; reducing the contamination of drinking water; safeguarding and restoring our food systems and landscapes; implementing measures that support the production and consumption of healthy foods like kiwis, yacun, quinoa, in addition to coffee and tea, and organic agriculture is instrumental in both policy statements and practice in the mountains. ICIMOD is working with a group of agricultural centres in the Asso-

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The IPES report has put nature loss in the global spotlight and warned us that time is running out. This is the time to act, to be at the forefront of change in safeguarding and restoring our food and our health. You can contribute your initiatives to the Sharm El-Sheikh to Kunming Action Agenda for Nature and People by registering on our webpage at the Convention of Biological Diversity.

I wish you a happy and healthy International Day of Biodiversity. Thank you.
Pakistan is losing its rangelands, forests, freshwaters and marine ecosystems

Pakistan Museum of Natural History

Due to anthropogenic activities, wildlife populations have declined dramatically in Pakistan for the last three to four decades. Natural habitats are continuously being fragmented and degraded. It is feared that Pakistan is experiencing the world’s second highest rate of deforestation. The country is losing its rangelands, forests, freshwaters and marine ecosystems at an alarming rate. It is also facing the menace of climate change, uncontrolled emission of greenhouse gases, pollution, increase in human population, urbanization, unsustainable agricultural practices, encroachments, hunting, poaching, introduction of exotic species and weak implementation of wildlife rules and regulations.

Pakistan is located in the transition zone between many of World’s zoogeographical regions and therefore has specific affinities of our wildlife species with all these regions. With the grace of God, the country possesses millions of species of animals and plants many of them being endemic to Pakistan and not found anywhere in the world.

Pakistan also has global importance due to its location on the flyway to Central Asia and Northern India. The birds breeding in Central and Northern Asia migrate via Afghanistan as well as higher parts of the Himalayas and usually follow Indus valley which provides ample food and favorable habitat for them. Hence, Pakistan provides winter refuge millions of migratory ducks, geese, flamingoes, houbara bustard and other migratory bird species.

Pakistan is losing its rangelands, forests, freshwaters and marine ecosystems. The data coming from Africa is alarming, indicating that poaching of species like elephants and rhinoceros has increased dramatically over the past few years, mostly driven by illegal international trade. The impacts extend well beyond land and into the ocean, where sharks are being fished extensively.

The changes happening in land and sea not only impact other species, they are impacting our own lives. We rely on these species and ecosystems for our own livelihoods and wellbeing. Our own population has reached seven billion people. Seven billion people who rely on food, water and energy for their daily lives, and a legitimate aspiration of better livelihoods for them and their children. It is also fact that more than 50% of human population live in cities. We are an increasingly urban species, and this presents new challenges and opportunities. Increasingly, large cities rely on other parts of the world to provide the food, water and energy used by millions of people. Big cities of the world are having an impact on species and ecosystems across the planet.

We have many challenges to face and many questions to ask to ourselves regarding emerging environmental issues. We have to think as how will we increase food production by 50% over the next 50 years? How can we reduce the emissions of CO2 without hampering industry and economic growth? How can we reduce the impact of invasive species that are moving around in an increasingly globalized world? How can we create effective governance mechanisms and greater awareness about the link between people and nature? How can we leverage new technologies to improve the exchange of information for conservation? How can we protect the species and ecosystems to make sure they are around for future generations? These are the questions and challenges that we need to address while we get together in these kinds of functions.

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International Day for Biodiversity 2019

May 20 — 26, 2019

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Pakistan Museum of Natural History
A hub for biological diversity

Pakistan Museum of Natural History, the only Natural History Museum in the country, was established in 1976 as an attached organization of Pakistan Science Foundation (PSF)/ Ministry of Science and Technology, Government of Pakistan. It holds the mandate of exploring, collecting, identifying, cataloguing, and preserving natural resources of Pakistan in the form of plants, animals, minerals, rocks and fossils and to cater the research, educational and recreational needs of the country. PMNH offers amusement as well as disseminates knowledge on various scientific disciplines to students, teachers, researchers, conservationists, tourists and general public through its exhibits and displays and by organizing scientific exhibitions on large scale.

At present, PMNH has a collection of 1.5 million specimens collected from all over the country and displayed in the form of more than 150 attractive 2-D and 3-D exhibits. In its displays, it has some of the world’s famous iconic specimens like 18 ton Whale Shark with a length of 41 feet, 80 feet long Blue Whale, extinct Balochitherium (a 30 million old largest land mammal), 50 kg Python with a length of 18 feet. In addition, it has State of the art Gemstone Gallery, Biodiversity Gallery, Birds of Pakistan Gallery, Dinosaurs Gallery, Fossils of Plants Gallery, Gallery for Medicinal Plants, Gallery for Lower Plants including Algae, Cave life, World of Butterflies, World of Fishes, World of Reptiles, World of Mammals, World of Ocean Life, which are just few to mention from the distinctive collections, exhibits and repositories make PMNH a unique place for enjoyment, awareness and recreation by learning about natural resources of Pakistan. During 2016-17, our displays have been visited by more than 300,000 visitors including general public, students, local and foreign tourists and researchers from all parts of the country and the number are increasing every year.

Due to diverse educational themes at display, Pakistan Museum of Natural History is the best place for imparting formal and informal education and a focal point for research on various aspects of ecology, biodiversity and environmental sciences. Study tours of PMNH can be considered for the schools and colleges for a lifelong learning opportunity for the students as here the scientific phenomena and concepts are exhibited through specially designed devices, machines and instruments which make them easy to understand. The display staff is always ready to welcome study tours and visits of schools, colleges and universities for all the seven days of the week.

From page 3: Risk to biodiversity pose challenges to food security and health

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Due to diverse educational themes at display, Pakistan Museum of Natural History is the best place for imparting formal and informal education and a focal point for research on various aspects of ecology, biodiversity and environmental sciences. Study tours of PMNH can be considered for the schools and colleges for a lifelong learning opportunity for the students as here the scientific phenomena and concepts are exhibited through specially designed devices, machines and instruments which make them easy to understand. The display staff is always ready to welcome study tours and visits of schools, colleges and universities for all the seven days of the week.

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The Snow Leopard Foundation (SLF) has been contributing over a decade in wildlife conservation through various conservation programs. The GEF funded project Pakistan Snow Leopard and Ecosystem Protection Program (PSLEP) is one of the ongoing projects, which SLF is implementing in partnership with Ministry of Climate Change and UNDP-Pakistan.

By partnerships with the mountainous communities, SLF has helped them in bearing economic losses from predation and brought a visible change in community attitudes towards predators like snow leopards. SLF’s capacity in wildlife research is well recognized nationally and internationally. The focus of SLF is to improve the socioeconomic conditions of the people who share fragile mountain ecosystems.

Community-based conservation programmes:
- Ecosystem Health Programme in Gilgit-Baltistan and Chitral
- The Ecosystem Health Programme aims to reduce livestock mortality due to diseases, improve the productivity of the stock, and cutback transmission of diseases from livestock to wildlife, respectively.

Snow Leopard Enterprises
- Snow Leopard Enterprises (SLE) involves training local people, especially women-folk living within the snow leopard habitat, to produce handicrafts that are marketed regionally and internationally. SLE was established in Pakistan in 2003.

Predator proof corrals
- Livestock losses due to snow leopards can be devastating when the carnivore gains entry to a poorly developed and predator prone corral. The cats have been known to kill large number of animals in one attack (far more than they need to consume) and may return for multiple nights in a row. SLF started building predator proof corrals in selected hotspots to minimize the risk of this mass predation.

Plantation of forest trees in Chitral
- As part of environmental campaign SLF organizes tree plantation drives in collaboration with provincial Forest Departments in Chitral and Gilgit.

Promotion of Ecotourism in Snow Leopard Habitats
- Promotion of ecotourism in snow leopard habitats is part of the PSLEP project under the community support and livelihood improvement component. This component is designed to enhance the livelihood opportunities of the local communities living in snow leopard habitats and to educate the tourists and local communities about protecting the biodiversity and wildlife.

Biodiversity and human health

Direct drivers of biodiversity loss include land use change, habitat loss, overexploitation, pollution, invasive species and climate change. Many of these drivers affect human health directly and through their impacts on biodiversity.

Women and men have different roles in the conservation and use of biodiversity and varying health impacts.

Human population health is determined, to a large extent, by social, economic and environmental factors.

The social and natural services are important contributors to biodiversity and health research and policy. Integrative approaches such as the Ecosystem Approach, Ecotourism and The Health and different fields and require the development of mutual understanding and cooperation across disciplines.
The Value of biodiversity!

While there is a growing recognition that biological diversity is a global asset of tremendous value to present and future generations, the number of species is being significantly reduced by certain human activities. The Convention on Biological Diversity is the international legal instrument for the conservation of biological diversity. The objectives of halting biodiversity loss and promoting the sustainable use of terrestrial and inland freshwater ecosystems are included in Sustainable Development Goal 15.

Species Extinction Rates Accelerating

A hard-hitting report into the impact of humans on nature shows that nearly one million species risk becoming extinct within decades, while current efforts to conserve the earth’s resources will likely fail without radical action. The historic report features the work of 400 experts from at least 50 countries, coordinated by the Bonn-based Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

Biodiversity to serve humanity

Protecting biodiversity is in our self-interest. Biological resources are the pillars upon which we build civilizations. Nature’s products support such diverse industries as agriculture, forestry, pharmaceuticals, pulp and paper, horticulture, construction and waste treatment. The loss of biodiversity threatens our food supplies, opportunities for recreation and tourism, and sources of wood, medicines and energy. It also interferes with essential ecological functions.

Our need for pieces of nature would be impractical to replace, to any large extent, services such as pest control performed by various creatures feeding on one another, or pollination performed by insects and birds going about their everyday business.

Protecting Biodiversity

The current decline in biodiversity is largely the result of human activity and represents a serious threat to human development. Despite mounting efforts over the past 20 years, the loss of the world’s biological diversity, mainly from habitat destruction, over-harvesting, pollution and the inappropriate introduction of foreign plants and animals, has continued. Biological resources constitute a capital asset with great potential for yielding sustainable benefits. Urgent and decisive action is needed to conserve and maintain genes, species and ecosystems, with a view to the sustainable management and use of biological resources.