



Amma's Message for The International Day for Biodiversity.

Dear sweet children,

The **International Day for Biological Diversity** (or **World Biodiversity Day**) is a United Nations–instituted international day for the promotion of biodiversity issues. It is held annually on 22nd May.

The International Day for Biological Diversity falls within the scope of the UN Post-2015 Development Agenda's Sustainable Development Goals, which the SMVA Trust is supporting and working for. In this larger initiative of international cooperation, the topic of biodiversity concerns stakeholders in sustainable agriculture; desertification, land degradation and drought; water and sanitation; health and sustainable development; energy; science, technology and innovation, knowledge-sharing and capacity-building; urban resilience and adaptation; sustainable transport; climate change and disaster risk reduction; oceans and seas; forests; vulnerable groups including indigenous peoples; and food security.

The 2021 Day of Biodiversity

The Biodiversity Day 2021 slogan is: **“We’re part of the solution”**. The slogan was chosen to be a continuation of the momentum generated last year under the overarching theme, “Our solutions are in nature”, which served as a reminder that biodiversity remains the answer to several sustainable development challenges. From 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.

Given the ongoing COVID-19 pandemic, Biodiversity Day 2021 will be commemorated through an online-only campaign of awareness-raising, education and action for transformation.

While on the spiritual path, we have to see our intrinsic connection with all of nature and Mother Earth. We cannot be delinked from the life around us – from creatures big and small. Spiritual wisdom means to be in tune with the biodiversity that enriches our life with all its colors, sounds, tactile sensations or fragrances and aromas.

We ask the question: what is biological diversity and why is it important to us?

The term biodiversity (from “biological diversity”) refers to the variety of life on Earth at all its levels, from genes to ecosystems, and can encompass the evolutionary, ecological, and cultural processes that sustain life. So, we spiritual seekers need to reflect on what biodiversity is. It comprises species we consider rare, threatened, or endangered but also every living thing—from humans to organisms we know little about, such as microbes, fungi, and invertebrates. They all sustain our existence on this globe.

Since we live in society, we must include humans and human cultural diversity as a part of biodiversity. We use the term “biocultural” to describe the dynamic, continually evolving and interconnected nature of people and place, and the notion that social and biological dimensions are interrelated. This concept recognizes that human use, knowledge, and beliefs influence, and in turn are influenced, by the ecological systems of which human communities are a part. This relationship makes all biodiversity, including the species, land and

seascapes, and the cultural links to the places where we live—be right where we are or in distant lands—important to our wellbeing as they all play a role in maintaining a diverse and healthy planet. They sustain, nourish, refresh and rejuvenate us.

The Significance of Biodiversity for Human Life – For physical survival

Biodiversity is important to most aspects of our lives. We value biodiversity for many reasons, some utilitarian, some intrinsic. This means we value biodiversity both for what it provides to humans, and for the value it has in its own right. Utilitarian values include the many basic needs humans obtain from biodiversity such as food, fuel, shelter, and medicine. Further, ecosystems provide crucial services such as pollination, seed dispersal, climate regulation, water purification, nutrient cycling, and control of agricultural pests. Biodiversity also holds value for potential benefits not yet recognized, such as new medicines and other possible unknown services.

For spiritual and religious reasons

Biodiversity has cultural value to humans as well, for spiritual or religious reasons for instance. The intrinsic value of biodiversity refers to its inherent worth, which is independent of its value to anyone or anything else. This is more of a philosophical concept, which can be thought of as the inalienable right to exist. Finally, the value of biodiversity can also be understood through the lens of the relationships we form and strive for with each other and the rest of nature. We may value biodiversity because of how it shapes who we are, our relationships to each other, and social norms. These relational values are part of peoples' individual or collective sense of wellbeing, responsibility for, and connection with the environment. The different values placed on biodiversity are important because they can influence the conservation decisions people make every day.

The diverse nature of biodiversity

The diversity is mind staggering. The simplest aspect to consider is species. About 1.7 million species of animals, plants and fungi have been recorded, but there are likely to be 8-9 million and possibly up to 100 million. The heartland

of biodiversity is the tropics, which teems with species. In 15 hectares (37 acres) of Borneo forest, for example, there are 700 species of tree – the same number as the whole of North America.

Recent work considering diversity at a genetic level has suggested that creatures thought to be a single species could in some cases actually be dozens. Then add in bacteria and viruses, and the number of distinct organisms may well be in the billions. A single spoonful of soil – which ultimately provides 90% of all food – contains 10,000 to 50,000 different types of bacteria.

The concern is that many species are being lost before we are even aware of them, or the role they play in the circle of life.

Threats to Biodiversity

Over the last century, humans have come to dominate the planet, causing rapid ecosystem change and massive loss of biodiversity across the planet. This has led some people to refer to the time we now live in as the “anthropocene.” While the Earth has always experienced changes and extinctions, today they are occurring at an unprecedented rate. Major direct threats to biodiversity include habitat loss and fragmentation, unsustainable resource use, invasive species, pollution, and global climate change. The underlying causes of biodiversity loss, such as a growing human population and overconsumption are often complex and stem from many interrelated factors.

The Loss is Severe

The best studied creatures are the ones like us – large mammals. Tiger numbers, for example, have plunged by 97% in the last century. In many places, bigger animals have already been wiped out by humans. The extinction rate of species is now thought to be about [1,000 times higher](#) than before humans dominated the planet. Only 5% of known species have been calculated. But of those we know, the many species are threatened: 25% of mammals, 41% of amphibians and 13% of birds.

The results are scary. Billions of individual populations have been lost all over the planet, with the number of animals living on Earth having [plunged by half since 1970](#). Researchers call the [massive loss of wildlife](#) a “biological

annihilation” representing a “frightening assault on the foundations of human civilization”. Everything will collapse if we are going to lose the insects. Scientists warn that even losing parasites could destabilize ecosystems

Could the loss of biodiversity be a greater threat to humanity than climate change?

Yes – nothing on Earth is experiencing more dramatic change at the hands of human activity. Changes to the climate are reversible, even if that takes centuries or millennia. But once species become extinct, particularly those unknown to science, there is no going back. We could be heading towards widespread ecological collapse, already crossed, unlike CO2 levels, freshwater used and ozone losses.

So as spiritual seekers, we have to be responsible stewards of nature and live-in harmony with all the creations that inhabit this earth.

What is destroying biodiversity?

We are responsible, particularly as the human population increases and wild areas are razed to create farmland, housing and industrial sites. The felling of forests is often the first step and 30m hectares - the area of the Britain and Ireland - were lost globally in 2016.

Poaching and unsustainable hunting for food is another major factor. More than 300 mammal species, from chimpanzees to hippos to bats, are facing extinction. These are just a few examples. The overall destruction is staggering. Pollution is a killer too, and so is global trade and global shipping.

The hardest hit of all habitats may be rivers and lakes, with freshwater animal populations in these collapsing by 81% since 1970, following huge water extraction for farms and people, plus pollution and dams

What Can We Do?

What is encouraging is that it is within our power to change our actions to help ensure the survival of species and the health and integrity of ecological systems. By understanding threats to biodiversity, and how they play out in our context, we can be best prepared to manage conservation challenges. The conservation

efforts of the last decades have made a significant difference in the state of biodiversity today. Over 100,000 protected areas—including national parks, wildlife refuges, game reserves, and marine protected areas, managed both by governments and local communities—provide habitat for wildlife, and help keep deforestation in check. When protecting habitat is not enough, other types of conservation actions such as restoration, reintroduction, and the control of invasive species, have had positive impacts. And these efforts have been bolstered by continuous efforts to improve environmental policies at local, regional, and global scales.

Finally, the lifestyle choices of individuals and communities can have a large effect on their impacts on biodiversity and the environment. While we might not be able to prevent all negative human impacts on biodiversity, with knowledge we can work to change the direction and shape of our effects on the rest of life on Earth.

Puzzle pieces and icons of the 2021 Logo.

