



International Day for Biodiversity

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The International Day for Biological Diversity, also known as World Biodiversity Day, is observed on **May 22** to promote biodiversity.

The theme for the year 2019 is "Our Biodiversity, Our Food, Our Health". The theme focuses on biodiversity as the foundation for food and health and a key catalyst to transforming food systems and improving human health.

Biodiversity For Food and Agriculture (BFA)

- Biodiversity is the variety of life at genetic, species and ecosystem levels. **Biodiversity for food and agriculture (BFA) is, in turn, the subset of biodiversity that contributes in one way or another to agriculture and food production.**
- BFA includes the domesticated plants and animals that are part of crop, livestock, forest or aquaculture systems, harvested forest and aquatic species, the wild relatives of domesticated species, and other wild species harvested for food and other products.
- It also encompasses what is known as **"associated biodiversity"**, the vast range of organisms that live in and around food and agricultural production systems, sustaining them and contributing to their output.

BFA is Essential to Food Security

- BFA is indispensable to food security and sustainable development. **It supplies many vital ecosystem services, such as creating and maintaining healthy soils, pollinating plants, controlling pests** and providing habitat for wildlife, including fish and other species that are vital to food production and agricultural livelihoods.
- Biodiversity **makes production systems and livelihoods more resilient to shocks and stresses**, including those caused by climate change.

Diversifying production systems, for example by using multiple species, integrating the use of crops, livestock or promoting habitat diversity in the local

landscape or seascape, helps to promote resilience, improve livelihoods and support food security and nutrition.

BFA is on Decline

- **Since the 1900s, some 75 percent of plant genetic diversity has been lost** as farmers worldwide have left their multiple local varieties and landraces for genetically uniform, high-yielding varieties.
 - This has resulted in a rapid decline of agro-biodiversity and associated traditional knowledge related to food and medicine.
 - The homogenization of plant varieties makes humans vulnerable to the vagaries of climate change, pollution and other developmental imperatives, putting food and nutrition security at risk.
- **30 % of livestock breeds are at risk of extinction;** six breeds are lost each month.
- Today, 75 percent of the world's food is generated from only 12 plants and five animal species. Only three - rice, maize and wheat - contribute nearly 60 percent of calories and proteins obtained by humans from plants.
- More than 40% of amphibian species, almost 33% of reef-forming corals and more than a third of all marine mammals are threatened.

Animals provide some 30 percent of human requirements for food and agriculture and 12 percent of the world's population live almost entirely on products from ruminants.

Way Forward

- **Local and indigenous biodiversity for food and nutrition should be promoted.**
- **Enabling frameworks** for the sustainable use and conservation of biodiversity for food and agriculture are urgently need to be established or strengthened. This is necessary to achieve sustainable development goals related to hunger, health, conservation of ecosystem etc.