# NEWSLETTER



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# **MEMBERSHIP HIGHLIGHTS**

IBBI membership has grown to 38 business signatories with the joining of new member from Adani Power Limited.



EGIME

Adani Power Limited (APL), a part of the diversified Adani Group, is the largest private thermal power producer in India. They are he world's first company to set up a coal-based supercritical thermal power project registered under the Clean Development Mechanism (CDM) of the Kyoto protocol.



CII-ITC Centre of Excellence for Sustainable Development



# **BIODIVERSITY AND HUMAN HEALTH**

Our planet's biological resources are not only shaped by natural evolutionary processes but are also being transformed by anthropogenic activity, population and globalisation pressures. The rate at which biodiversity loss is happening poses potential risks to millions of people whose livelihoods, health and well-being are sustained by healthy ecosystems and biodiversity. Today we are increasingly facing complex global health challenges like poverty, malnutrition, infectious diseases and growing burden of many lifestyle diseases like diabetics, thyroid, heart attacks etc.. And these are inter-linked to the complex interactions between ecosystems, people and socioeconomic processes.

#### **Biodiversity and Human Health Inter-linkage**

The interactions between biodiversity and health are manifested at multiple scales from individuals, through communities and landscapes at planetary scale:

1. **Individual**: the human microbiota- microorganisms present in our gut, respiratory tract, oro-pharyngeal and urogenital tracts and on the skin- support in uptake of nutrition, regulate immune system and prevent infections.

2. **Communities**: for example at farm level, crops and livestock, associated pollinators and pest control organisms and soil microorganisms – support agricultural production.

3. **Landscapes**: include healthy functioning of many ecosystem services like fresh water, clean air and climate regulation.



Read more here.

### How biodiversity influences human health?

Scientific studies have identified few major pathways through which biodiversity may provide health and well-being benefits to humans.



### **BIODIVERSITY AND ZOONOTIC DISEASES**

It is well established through some <u>studies</u> that rich biodiversity supports in protecting human health by reducing the risk of infectious diseases. And in turn, loss of biodiversity and habitat destruction due to drivers like land use change and species population fragmentation results in <u>increase of</u> <u>Zoonotic diseases</u>- disease spread by spillover of pathogens from wildlife.

Biodiversity acts as a buffer and provides mechanisms to resist disease transmission by:

(i) reducing the population density of an important natural reservoir for pathogens; (ii) reducing the population density of arthropod vectors for pathogens; and (iii) reducing encounter rates between vectors and reservoirs or among reservoirs.



Human Interference with Wildlife and Biodiversity



### **SPECIAL FOCUS**

#### Land Degradation Neutrality for Biodiversity Conservation

Healthy land is vital to the existence and persistence of all human societies. From food, fodder, water and materials such as timber and fiber, to climate regulation, pest and disease control and cultural identity, the benefits provided by land are myriad and indispensable. But as the demands on land from a growing and more prosperous global population increase, finite land resources are coming under increasing pressure. At the same time, climate change threatens to disrupt and undermine the capacity of the land to keep delivering the vital services on which people rely.



Land Degradation Neutrality (LDN) is "a state whereby the amount and quality of land resources necessary to support ecosystem functions and services and enhance food security remain stable or increase within specified temporal and spatial scales and ecosystems". LDN provides a broad range of measures to avoid or reduce land degradation through appropriate planning, regulation and sustainable land management practices, combined with localized action to reverse past degradation, through land restoration and rehabilitation, to achieve a state of no net loss of healthy and productive land. To know more read the full report <u>here</u>.

#### Weaving Human Rights, SDGs, and the Post-2020 Global Biodiversity Framework

Biodiversity is a constitutive part of the environment to which the right to a safe, clean, healthy and sustainable environment refers. In UN General Assembly 2017 it was recognised that human rights to health, life, food, water and culture are supported by ecosystem services, and that biodiversity is necessary for these ecosystem services. If the right to a safe, clean, healthy and sustainable environment is violated, the enjoyment of biodiversity dependent rights will be compromised.



Human right to a healthy environment for a thriving Earth Handbook for weaving human rights, SDGs, and the post-2020 global biodiversity framework



Integrating Values of Human Rights into into Post 2020 Global Biodiversity Framework:

- Need to have a clear linkage to the SDGs, including indicators relevant for sustainability, human rights and climate
- Targets in the post-2020 framework should be measurable and smart to receive more political attention and willingness to implement by various actors
- Support multi-actor efforts to develop empirical and qualitative evidence to generate awareness on interlinkages of human rights and environment
- Put communities at the centre of environmental conservation as well as synchronize local mechanisms for the conservation of biodiversity

To know more about human rights & biodiversity inter-linkages read the full report <u>here</u>.

# **IBBI ACTIVITIES**

#### AGRI - BUSINESS SUSTAINABLE OPERATIONS AND WETLAND CONSERVATION

Wetlands are vital for human survival. They include some of the world's most productive ecosystems and provide ecosystem services leading to countless benefits. The <u>Ramsar Wetland Convention</u> is an intergovernmental treaty that provides the framework for the conservation and wise use of wetlands and their resources. There are currently over 2,300 Ramsar Sites around the world covering over 2.1 million square kilometers.

The definition of a wetland under Ramsar is an area with marsh or water, whether artificial or naturally occurring, where the water is either flowing or stagnant, either salty or fresh and can also include marine areas where the depth of water during low tide reaches a minimum of six meters.



Wetlands serve as valuable natural infrastructure for agriculture, providing reliable water and fertile soils, but they are at risk from agriculture's growing demands for land and water. They are increasingly threatened by population growth, large-scale development initiatives intended to alleviate poverty, and the possible impacts of climate change. The functions and economic values of wetlands must be considered in planning for the production of food and other agricultural products.

#### <u>Risks due to degradation of wetlands identified</u> <u>through biodiversity & ecosystem services assessment:</u>

- Wetlands provide habitat to many flora and fauna, especially many migratory species. These species act as bio-control agents for pest control. Degradation of wetland leads to habitat destruction and threat to species, thus **loss of natural pest control mechanism**.
- Wetlands support ground water recharge and flood control. These are important ecosystem services for agriculture production.
- Degradation of wetland leads to alterations in ecosystem thus encouraging invasive species and contribute to climate change.



#### How Wetlands Support Achievement of the SDGs

### <u>Risks</u> Management through mitigation measures and conservation:

- **Restoration**: Planting native plant species around the water body helps in restoring the natural ecosystem.
- Integrated Pest Management: Adopting measures for controlled pesticide usage, incorporating naturebased solutions like developing organic and biopesticides. Integrating traditional practices of pest and disease management.
- Measures to control soil erosion: Preventing excess water run off by monitored irrigation. Creating buffer zone around water bodies to prevent silting.
- **Training and Capacity Building**: Training programmes on sustainable cultivation, crop rotation, monitored use of bio chemicals and fertilisers, sustainable irrigation methodology.

To know more about integration of sustainable agriculture practices and wetland conservation write to us at :

> syamala.lingala@cii.in pravir.deshmukh@cii.in



Read about SDGs and Wetlands here.

#### PROMOTING BIODIVERSITY TO SAVE OURSELVES: WEBINAR

CII in collaboration with Mahindra Group organised a webinar "Promoting Biodiversity to Save Ourselves" on 27 March 2020. The webinar was attended by 46 participants including Mahindra Life Space, Holiday, Finance, Forging, and Mahindra group.

Anthropocene has led to unprecedented ecological change with degradation of natural ecosystem and biodiversity. The past years have seen huge changes in human lifestyle, consumption pattern and behaviour towards nature. The change in food intake and increased domestication of animals has led to increase in many human health issues.

We today are living the live example of one such disease Covid 19. This animal to human transmitted virus infection has led to great challenges in operations of business and society at large impacting the worlds economy. Zoonotic diseases or Zoonoses threaten economic development, animal and human well-being, and ecosystem integrity.

Over the last few years, several emerging zoonotic diseases made world headlines as they caused, or threatened to cause, major pandemics. These include Ebola, bird flu, Middle East respiratory syndrome (MERS), Rift Valley fever, sudden acuterespiratory syndrome (SARS), West Nile virus, and Zika virus disease. The increase in Zoonotic diseases in driven by the environmental changes resulting due to human activities like land use change, climate change and biodiversity loss.

#### Webinar Takeaways

- Awareness on biodiversity and ecosystem mapping
- Learnings from case study examples on actions towards sustainable management of biodiversity and ecosystem services
- Understanding on tools for risk identification & mapping
- Ways of biodiversity and ecosystem services management and monitoring



#### Key Highlights of the Webinar

- Biodiversity loss & Climate Change
- Biodiversity and Human Disease Inter-linkages
- Wildlife Trafficking and Biodiversity Loss
- Risks to Businesses from a Pandemic Situation like the Covid 19 Lock-down
- Adopting Post 2020 Global Biodiversity Framework for risk mitigation
- Way forward for businesses

#### What Businesses Can do to Promote Biodiversity?

- 1. Biodiversity & Ecosystem Service Risk Mapping across own operations, supply chain & product/services.
- 2. Develop Long Term Targets: No net loss/ net positive impact; adapt nature-based solutions; climate change mitigation etc.
- 3. Engagement of Stakeholders: Internal (employees), External (supply chain, local community and government) and Customers



Mainstream biodiversity across your value chain by capacity building and awareness creation of your stakeholders.

#### PLAN A WEBINAR WITH US!

To know more and to organise a webinar write to us at : <u>syamala.lingala@cii.in; pravir.deshmukh@cii.in</u>

# **UPCOMING EVENTS**

### Un-plastic Collective (UPC): Protocol for Plastic Use

The Un-plastic Collective (UPC) is co-founded by the Confederation of Indian Industry (CII), United Nations Environment Programme (UNEP) and WWF-India with the aim of minimizing the externalities of plastics, collectively. The initiative provides a voluntary, multi-stakeholder platform linking advisory, research and business aspects of the use of plastics and management of its waste. Activities are geared towards realising systemic change, fostering innovation, and building circularity in the plastics value chain.

UPC aims to provide knowledge products to steer the conversation on plastics and demonstrate solutions on-the-ground that are viable and scalable in the Indian context. Currently UPC has 13 members including major businesses and other key stakeholders.

In 2019, UPC conducted regional-level workshops in Delhi, Mumbai, Hyderabad and Guwahati. The objective of the workshops were to: (i) identify viable solutions available to manage plastic waste at different scales of operation, and (ii) understand the enabling mechanisms required to promote plastic waste management.



Read the report here



### **CII's Plastic-use Protocol** How to lead business transformation

8 APRIL 2020 I 3-4 PM

**REGISTER HERE** 

To know more & participate, share your interest at un-plastic@cii.in





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