

Nature based Solutions for Net Zero Journey



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1

Global Risks identified by WEF

(through a survey of over 1000 stakeholders from a network of academia, business, government, civil society and thought leaders every year)

2

Years 2015 & 2017

The Global Risks Landscape 2015

What is the impact and likelihood of global risks?

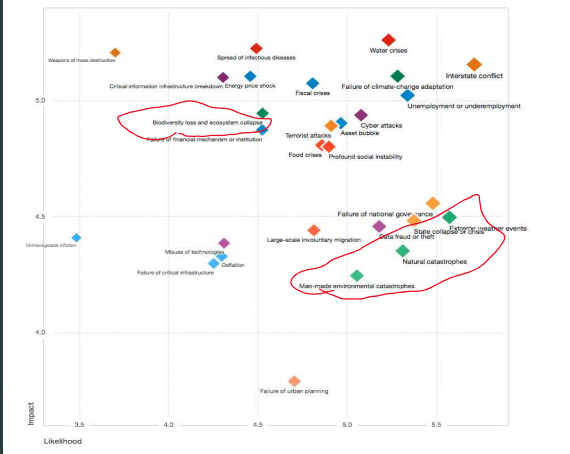
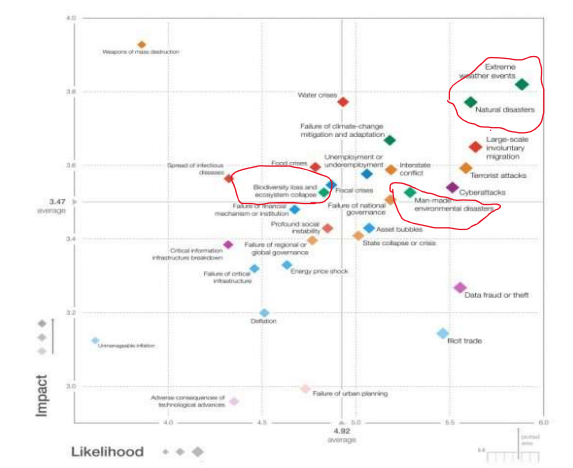


Figure 3: The Global Risks Landscape 2017



3

Year 2019 & 2021

Global Risks Landscape

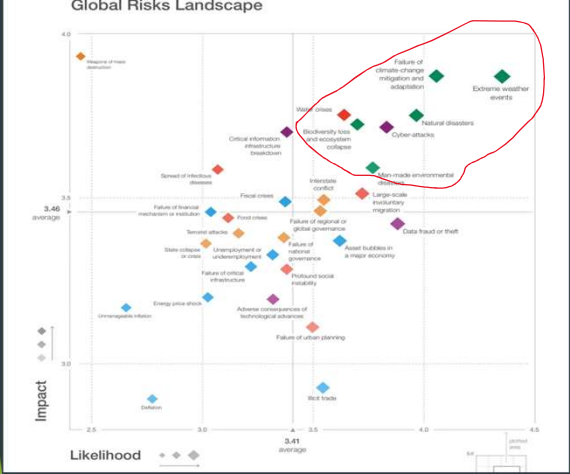
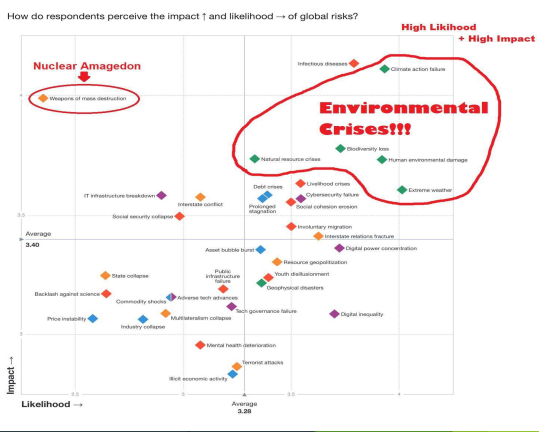


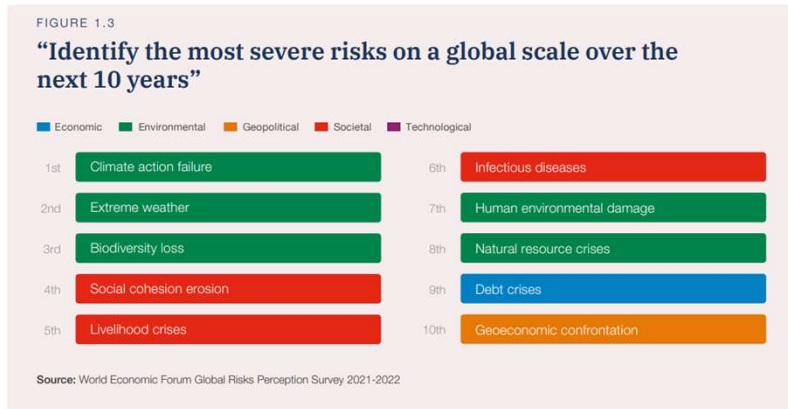
FIGURE II Global Risks Landscape

How do respondents perceive the impact and likelihood of global risks?

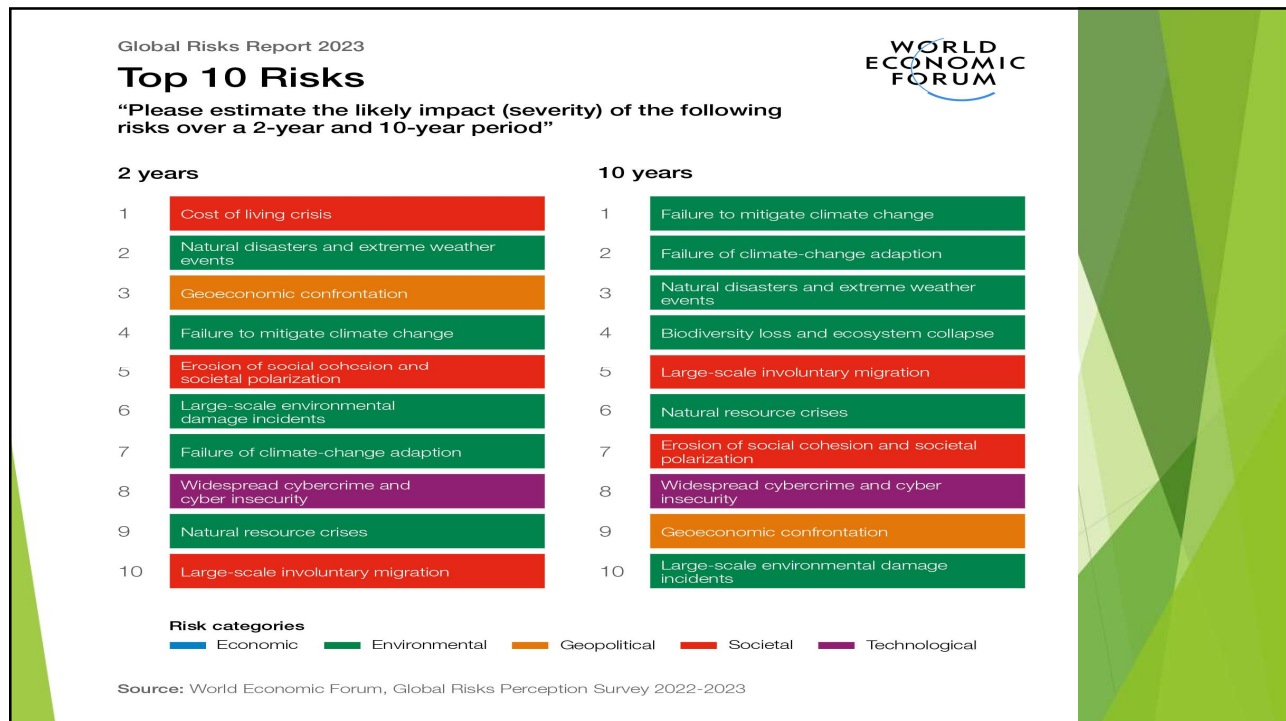


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In 2022, WEF lists 5 risks amongst the top 10 that are linked to environment, climate, biodiversity and nature

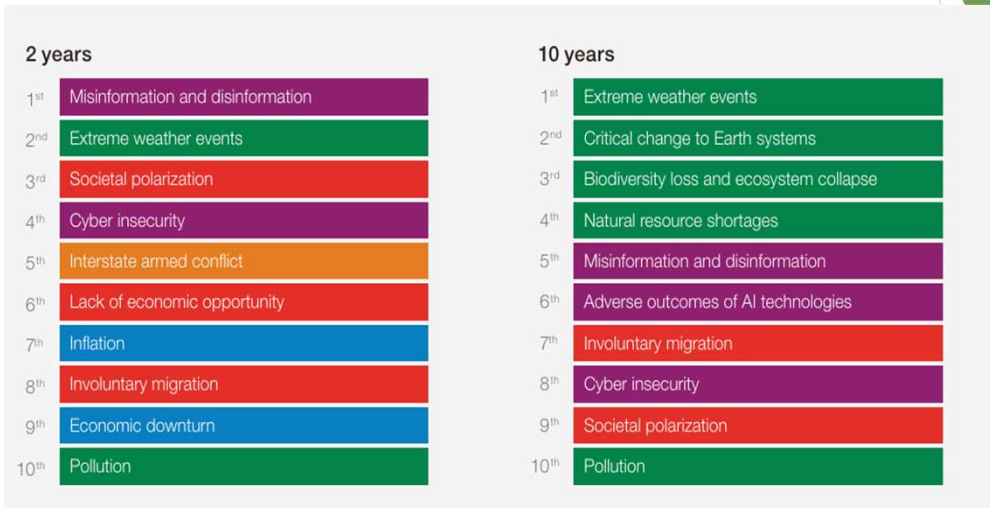


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Severity of Global Risks in 2024



7

As we can see, the world clearly sees **Loss of Biodiversity & Natural Resources and Natural Systems** as one of the biggest threat to the economic activity with carbon and ecological imbalance being important indicators.

We need to address both Carbon emissions and Loss of Nature or Biodiversity parallelly to mitigate and resolve potent risks...

8

Apart from Potential Risks, why should we be concerned about Nature?

Nature directly and indirectly contributes to nearly half the Global GDP or nearly US\$50 trillion annually and hence, degradation and loss of Nature entails huge risk to human well being and global economic activities

9

Ecosystem Services

Benefits from Nature

- SUPPORTING:** Photosynthesis, Soil Formation, Food
- PROVISIONING:** Clean Water, Fish, Wood, Pollination
- REGULATING:** Cool Temperatures, Control Flooding, Purify Water, Store Carbon, Clean Air
- CULTURAL:** Biodiversity, Habitat, Stewardship, Aesthetic, Recreation, Education

10

What are Nature-based Solutions (NbS)?

NbS are defined by IUCN as "actions to **address societal challenges** through the protection, sustainable management and restoration of ecosystems, benefiting both biodiversity and human well-being." They use the power of nature and functioning ecosystems as infrastructure to provide natural services to benefit society and the environment.

NbS have prime potential to help address global challenges such as:



climate change



economic and social development



human health



food and water security



disaster risk reduction



ecosystem degradation



biodiversity loss

NbS can provide long-term environmental, societal and economic benefits:



adaptation to climate change



green jobs



community resilience



health benefits



healthy and accessible food



clean air and water



disaster risk reduction



ecosystem integrity



biodiversity net gain

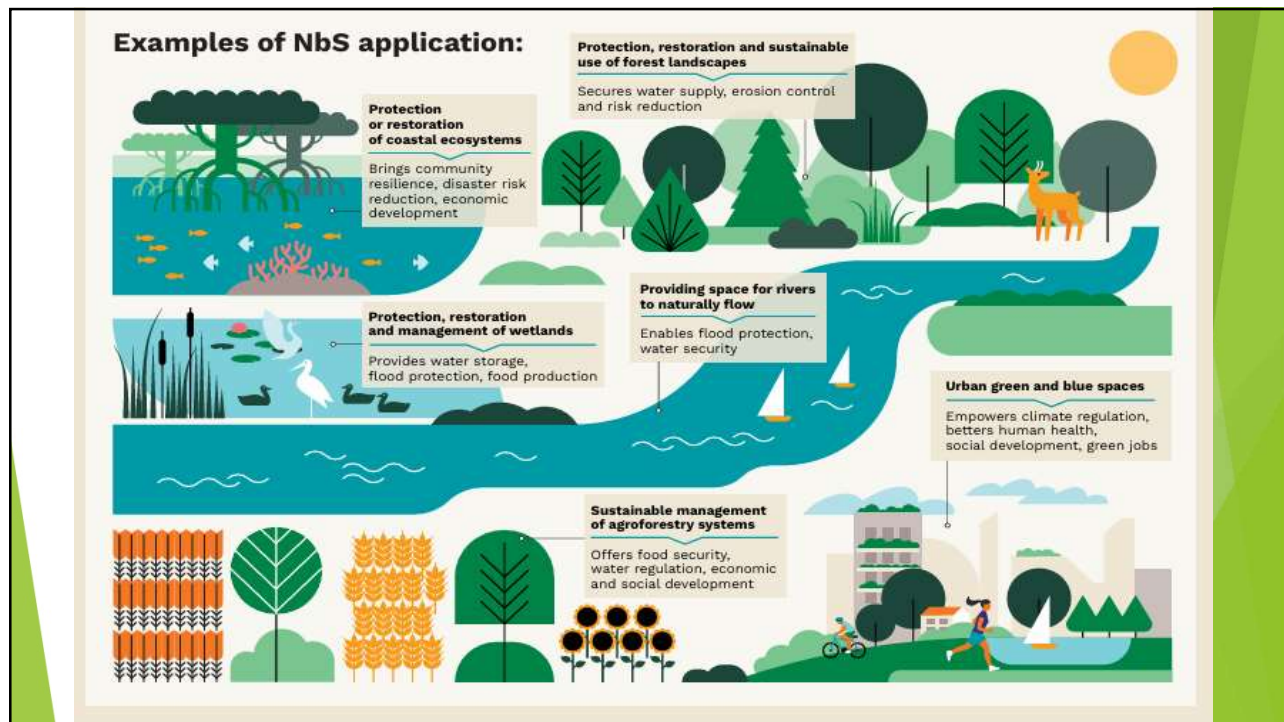
11

NbS is Preferred over Many Engineering Solutions

- ▶ It is 'Sustainable'
- ▶ It is 'Economical'
- ▶ It is 'Equitable'
- ▶ It is 'Inclusive'

All multilateral agencies, governments and civil society have been advocating using 'NbS' due to the multiple benefits it generates.

12

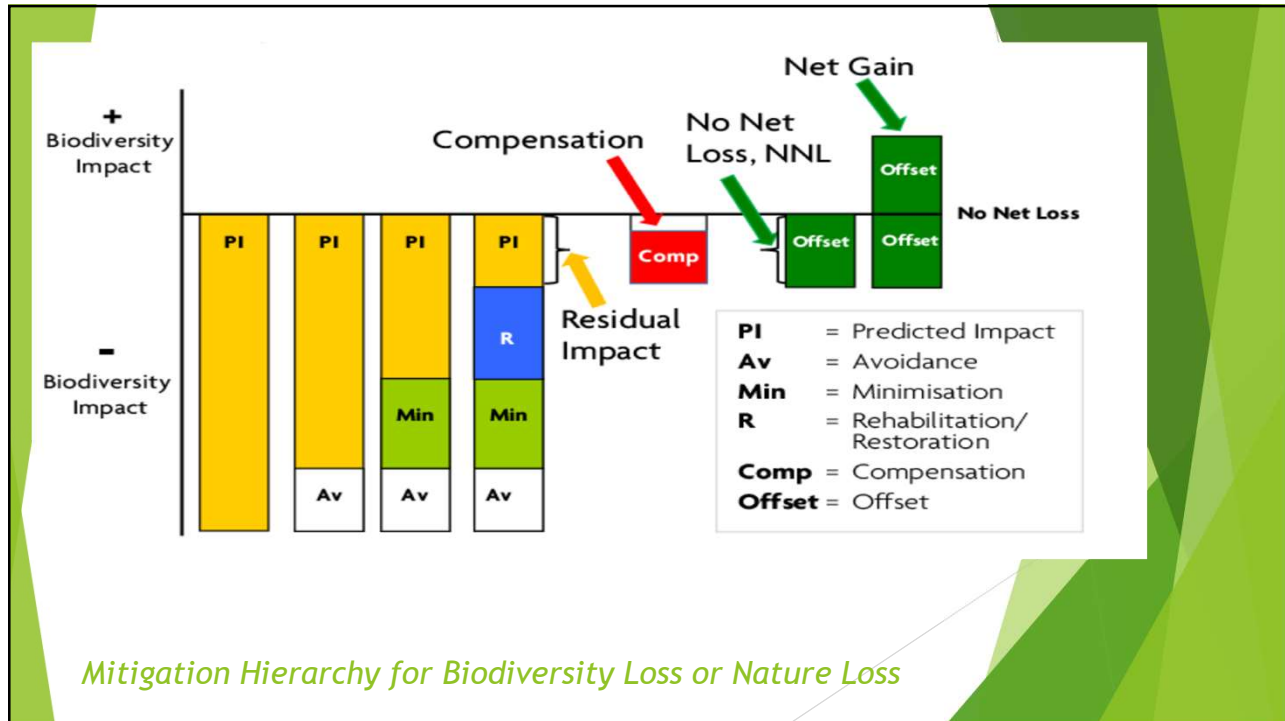


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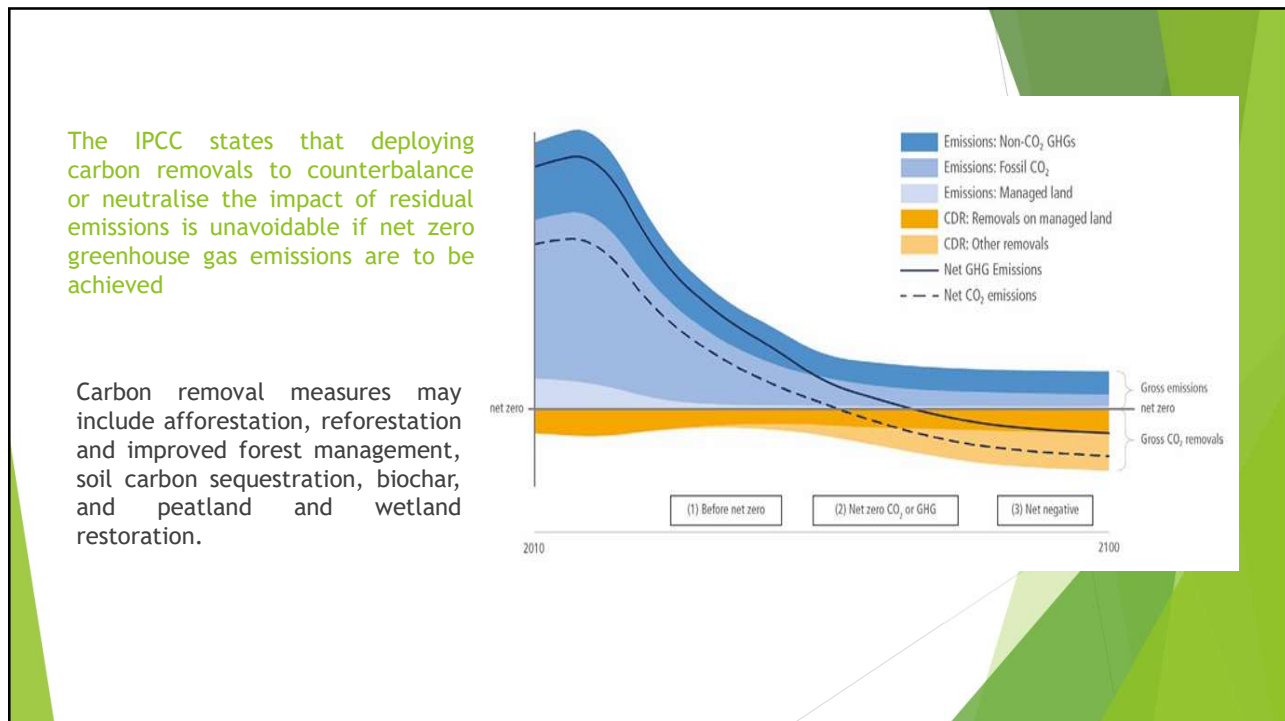
NbS Principles for Net Zero Journey

- ▶ NbS investments or initiatives are desired to achieve ‘Societal’ Net Zero
- ▶ Climate and Nature Crisis are interconnected and cannot be treated in silos. Hence applying NbS also helps solve the Climate crisis in many ways
- ▶ Almost all NbS activities help solve climate crisis in terms of providing carbon sinks, soil enrichment, blue carbon benefit, improved air recycling etc....creating natural capital
- ▶ Residual Emissions can be set off with NbS
- ▶ Mitigation Hierarchy has to be followed

14



15



16

Who are we?



***TERRACON ECOTECH** is a 15-years young Nature-based Solutions (Nbs) company that has been working with Industry, Governments and Urban Local Bodies (ULBs) to collect, collate, analyse and strategize the environmental / ecological data for creating a cleaner, greener and healthier planet by preparing management plans and executing Nbs projects*

- 80+ Clients
 - 200+ Projects
 - 15 million+ trees enumerated / censused
 - 3 Lakh+ Trees & Mangroves planted
 - India's first City Biodiversity Index & LBSAP
 - 60+ Biodiversity Management Plans till date
 - Partnered with WWF & IUCN
 - All India footprint - Worked in 23 States & 4 UTs
 - NABET / QCI accredited category 'A' company
- Cities: Nagpur, New Delhi, Nashik, Pimpri-Chinchwad, Thane, Mira-Bhayander, Vasai-Virar, Pune, Kolhapur, Lonavala, Igatpuri, Satara, Igatpuri, Kota, Jhalawar etc.
 - Worked with PSUs: GAIL, HPCL, BPCL, EIL, RCF, SJVN, IGGL, MECON & OIL
 - Worked with corporate houses: Tata Group, Adani, Mahindra, JSW, Vedanta, Aditya Birla, Lodha, Brookfield, JK, Godrej, D S Group etc.
 - State Governments: Maharashtra, Assam, Nagaland, Rajasthan, Gujarat, Odisha, Karnataka, Kerala

17

Thank You...



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18