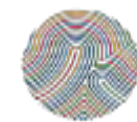




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SEAMEO-UNESCO Joint Webinar: COVID-19 Effects on Biodiversity: Science Education Reimagined, 5 June 2020



WORLD  
ENVIRONMENT  
DAY

# Biodiversity for One Health: Making Transformative Change through Education

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Photos: Evonne Yiu



the variety of inheritable characteristics or genes in an interbreeding population



genetic diversity

the number of different species in an area



species diversity

the variety of habitats, communities, and ecological processes in an area

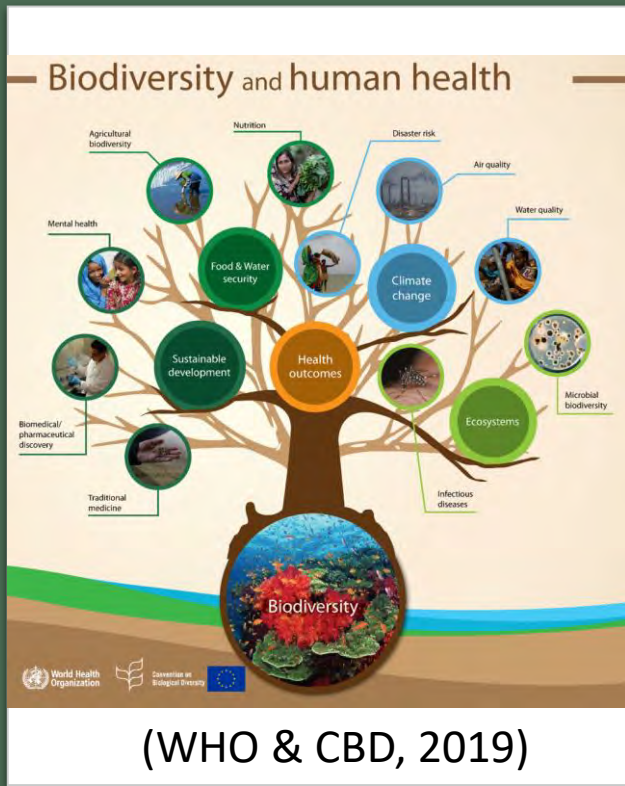


ecosystem diversity

(Graphics source: Game Smartz)

# Biological Diversity

“the **variability among living organisms** from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.” (CBD Article 2, 2006)



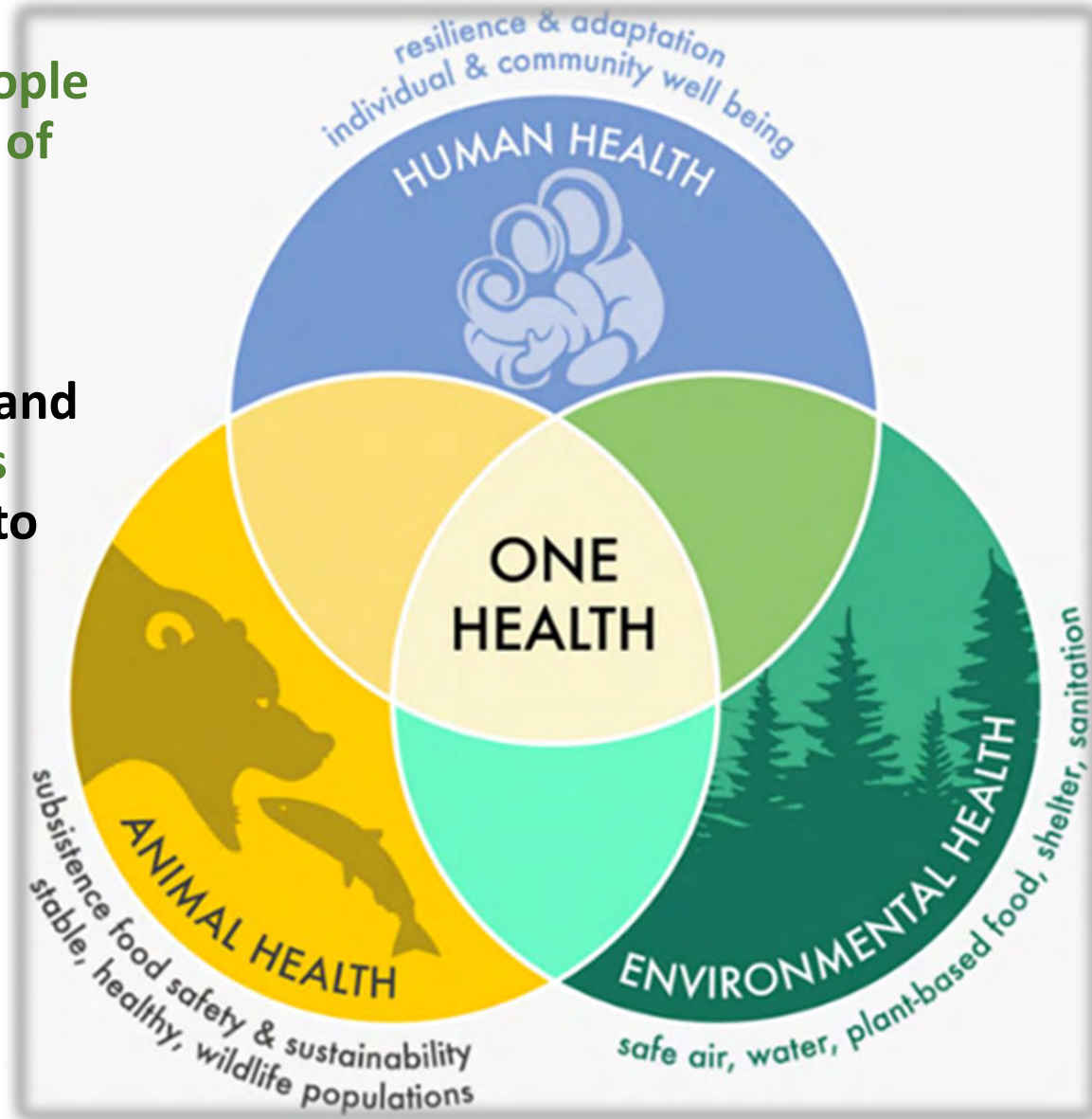
**Biodiversity is the basis of the human health and Nature.  
The loss of biodiversity threatens human health,  
including increasing the risk of zoonosis.**



# One Health Approach

- “Recognizes that the health of people is closely connected to the health of animals and our shared environment.” (CDC)
- “Designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes.” (WHO)

→ promoting communication, coordination, and collaboration across all sectors

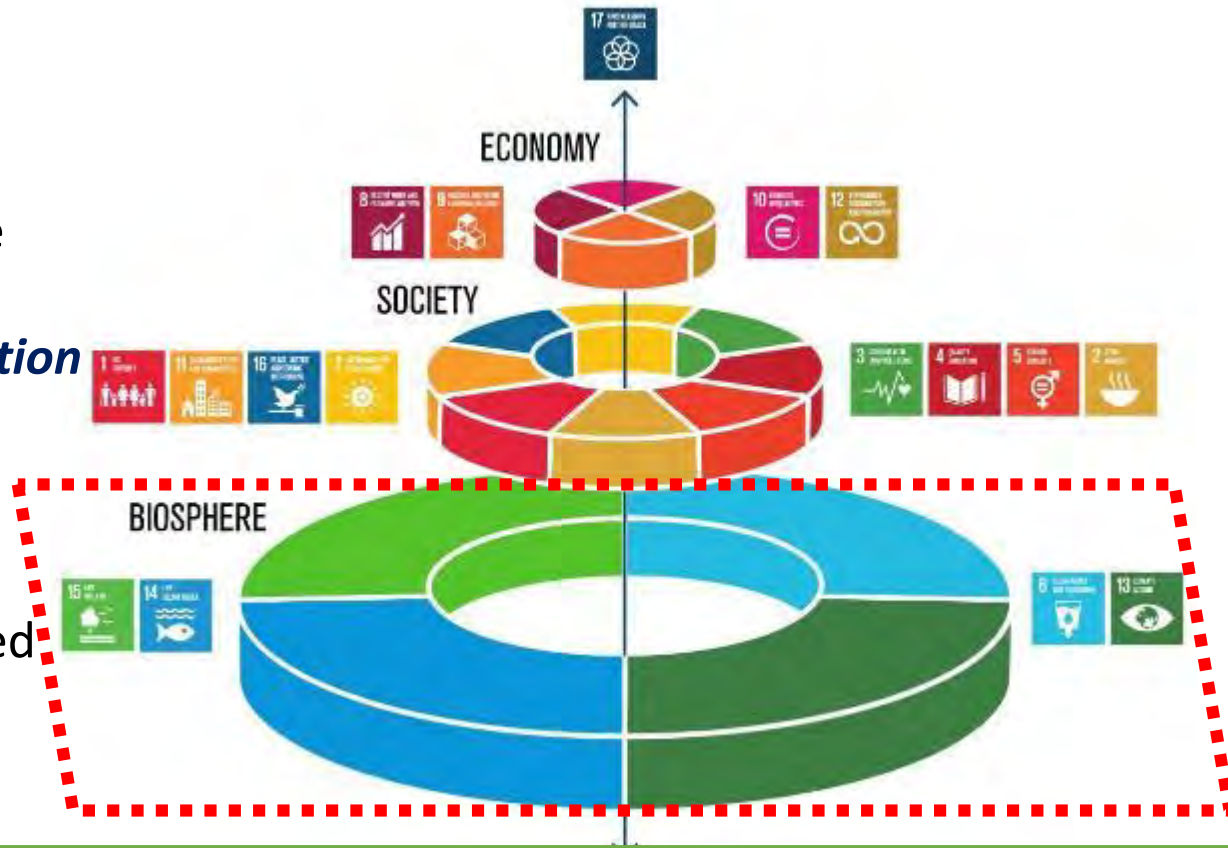


# Biodiversity underpins sustainability of the planet!

## The SDGs ‘Wedding Cake’

(Stockholm Resilience Center, 2016)

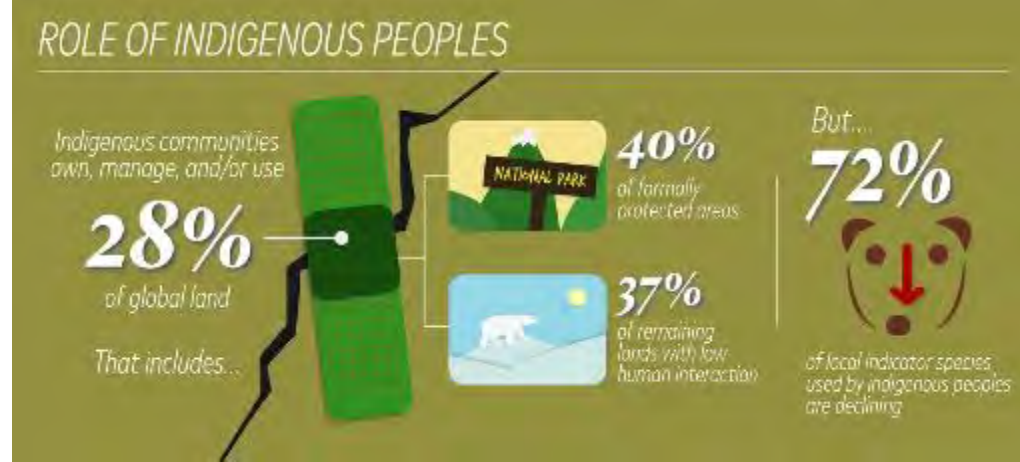
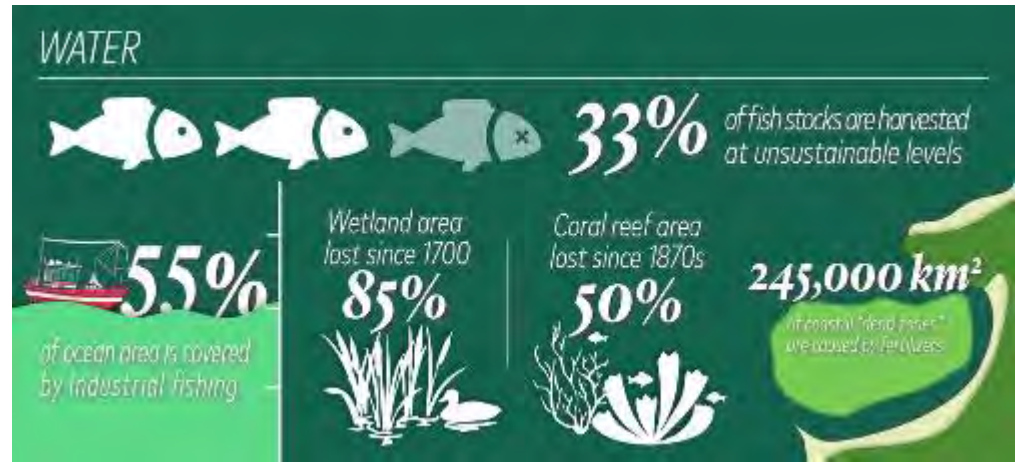
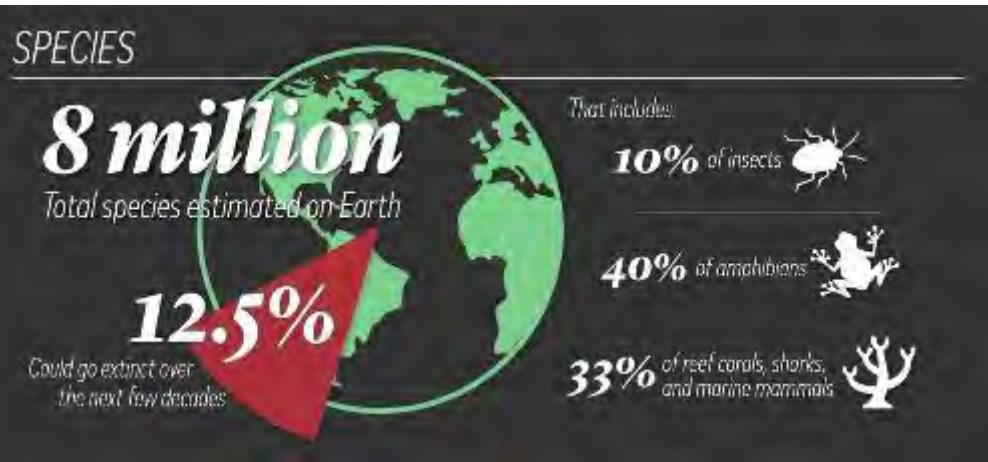
- Forming the basis of the planet are 4 goals related to the **biosphere**:
  - SDG 6: Clean water and sanitation*
  - SDG 13: Climate action*
  - SDG 14: Life under water*
  - SDG 15: Life on land*
- Economy and Society are embedded parts of Biosphere



**Biosphere is the foundation of sustainability of our planet, and biodiversity is a key element, connector and health indicator of our ecosystems.**



# However, biodiversity is now in **crisis**...



Source: IPBES Global Assessment (2019), infographic by Alex Schwartz/Popular Science

and sustainable development of our planet is under **critical threat!**

# The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment on Biodiversity Report (May 2019)

## 5 Key Drivers of Global Biodiversity Loss:

(Source: IPBES, 2019)



**Need *Transformative Change***  
**to halt biodiversity loss and rebuild the health of our planet**



# "Transformative change"



means a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values.

—IPBES  
Global Assessment

A **whole-of-society effort** to make dynamic changes, breaking away from **status-quo** and **business-as-usual ways**

- Paradigm shift and change of mindset
- 3 levels: Structure, Behaviour, and Consciousness
  - Need first to change the way we learn!
  - Every individual can be an agent of change!



# Making transformative change through education on biodiversity

- Community based lifelong learning
  - Involve resource holders -  
Esp. Women and Indigenous Peoples &  
Local Communities (IPLCs)
  - Multiple values of Nature
  - Bridging Traditional Knowledge and  
Science
  - Multidisciplinary research
  - Multi-sectoral collaboration
  - Regional/International exchange
  - Engage Youths
- Knowledge weaving: co-design,  
co-create and co-learning



SATOYAMA  
INITIATIVE



# Time for Nature!



- Both One Health Approach and Transformative Change to halt biodiversity loss call for a **whole-of-society effort**, through promoting **communication, coordination, and collaboration** across all sectors
- We need to **reinvent** the way we **think, learn** and **work**
- COVID-19 situation can provide **opportunities** to **build back better** for People and Planet
- **Leaving no one behind!**





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# THANK YOU



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*<https://satoyama-initiative.org/>*