

Nandini Velho

- Dr. Velho is a wildlife biologist
 - Currently, an ORA India Fellow and Adjunct faculty member at the Institute of Public Health Bengaluru.
 - She has a decade of field experience and is founder and lead of Canopy Collective a multidisciplinary group dedicated to addressing the science and educational needs of forest and indigenous communities in northeast India.
- She will share her experiences on the co-production efforts undertaken to establish a Planetary Health Interpretation Center in Pakke Tiger Reserve, Arunachal Pradesh in Northeast India.





Co-production Efforts for Establishing a Planetary Health Interpretation Centre in Pakke Tiger Reserve

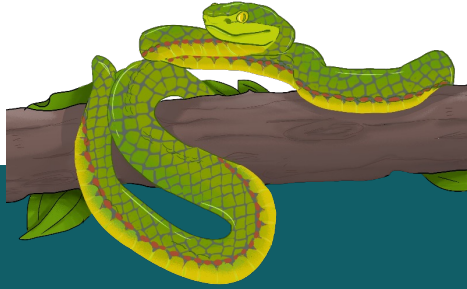
A Multi-disciplinary approach

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Bengaluru

Kime Rambia, Range Forest Officer, Pakke Tiger Reserve





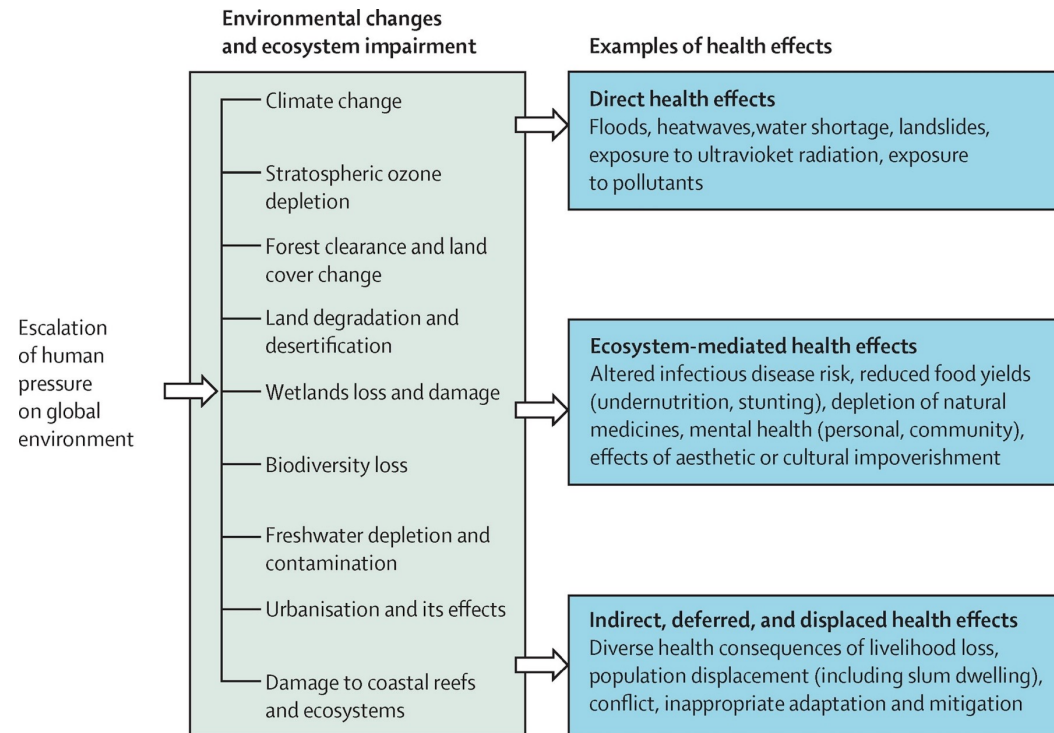
How do we integrate the conceptual and empathetic of human health and environmental change?

How do we implement the concept of planetary health on the ground?

Implementation Research Questions



NO TEMPLATES ON THE GROUND (YET) TO COMMUNICATE WITH COMMUNITIES...



Challenges to achieving planetary health

The challenges for humanity from global environmental change can be broadly categorised into three categories (see [appendix](#) for a broader discussion of challenges).

Firstly, **conceptual and empathy failures (imagination challenges)**, such as an over-reliance on GDP as a measure of human progress, the failure to account for future health and environmental harms alongside present day gains, and the disproportionate effect of those harms on the poor and people in developing nations—ironically the groups who often have least say about policy matters.

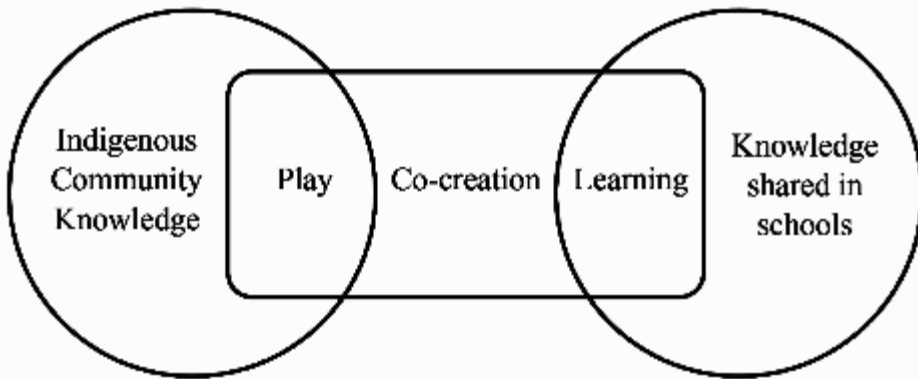
Secondly, **knowledge failures (research and information challenges)**, such as an increasingly molecular approach to medicine, which ignores social and environmental context; a historical scarcity of transdisciplinary research and funding within the health community; and an unwillingness or inability to deal with uncertainty within decision making frameworks.

Thirdly, **implementation failures (governance challenges)** such as how governments and institutions recognise and respond to threats, especially when faced with uncertainties, pooled common resources, and time lags between action and effect.

Whitmey et al. 2015. Safeguarding human health in the Anthropocene epoch. Lancet Commission.

THE NEED FOR ONGROUND PERSPECTIVES AND DESIGN THINKING APPROACHES...

- One Health aligns with indigenous perspectives that hold animals, people, and the environment together in a holistic view of health.
- Ministry of Human Resource Development (2020) indigenous children “find their school education irrelevant and foreign [. . .] both culturally and academically”



Yanching, M, 2022. Community-based map in the Planetary centre

Andlay, A., 2023. Supporting Education for Snakebite Management in Indigenous Contexts through Participatory Design

Minoi, J.L., et al., 2019. A Participatory Co-creation Model to Drive Community Engagement in Rural Indigenous Schools: A Case Study in Sarawak.



PLAY AND ON-GROUND CO-CREATION...



Yanching, M, 2022. Community-based map in the Planetary centre

PLAY TO UNRAVEL ONGROUND CONTEXTS

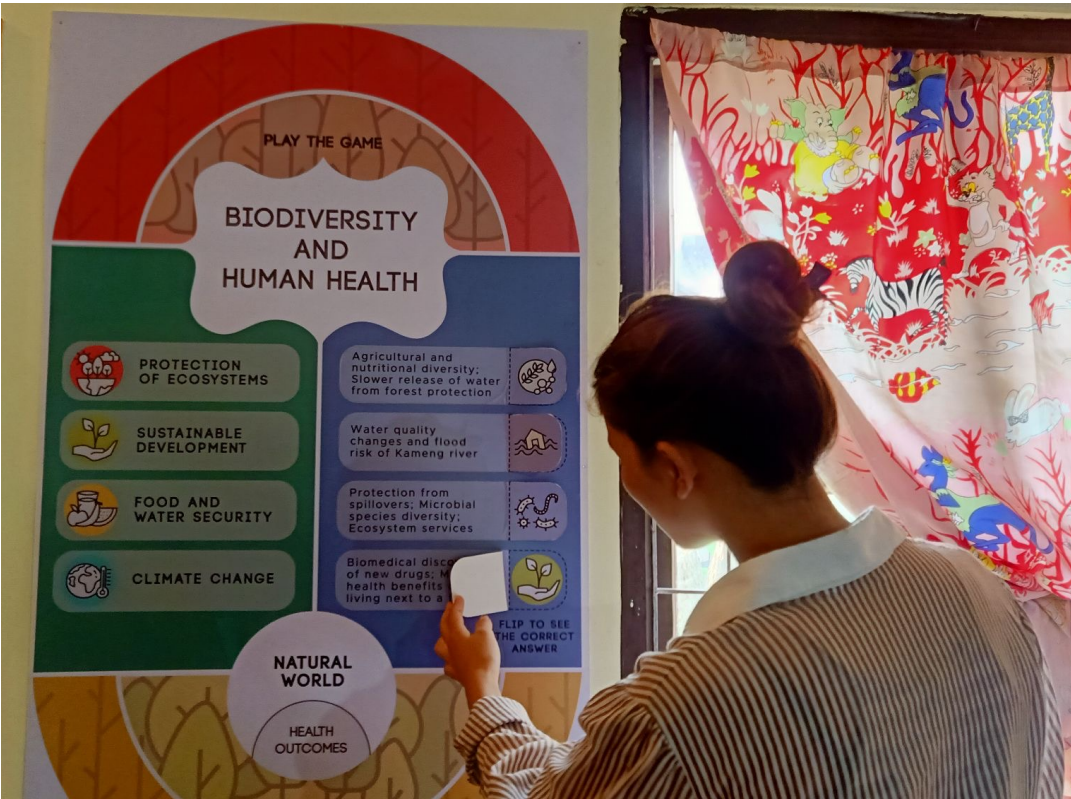
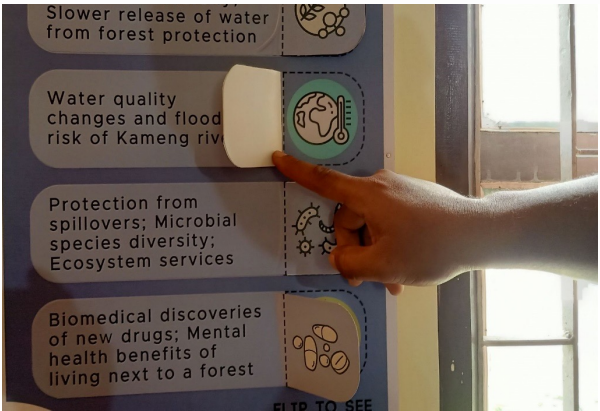


Table 1. Mediating processes and potential effects on human health of changes in climate*	
Mediating process	Health outcome
Effect on the range and activity of vectors and infective parasites	Changes in geographical range and incidence of vector-borne diseases
Changed local ecology of water-borne and food-borne infective agents	Changes in incidence of diarrheal and other infectious diseases
Changed food productivity (especially crops) through climate changes and associated pests and diseases	Malnutrition and hunger and consequent impairment of child growth and development
Sea level rise, with population displacement and damage to physical and economic infrastructure	Increased risk of infectious disease, physical injury and psychological disorders
Modification of production of air pollutants (including pollens and spores)	Asthma and allergies; other acute and chronic respiratory disorders and deaths

*Modified from Ref. 36.



Andrea Silva, Fernando Dias Velho, Anika Juneja and Nandini Velho, 2022. Biodiversity and Human Health Games.

Design Thinking Approaches for Specific Challenges

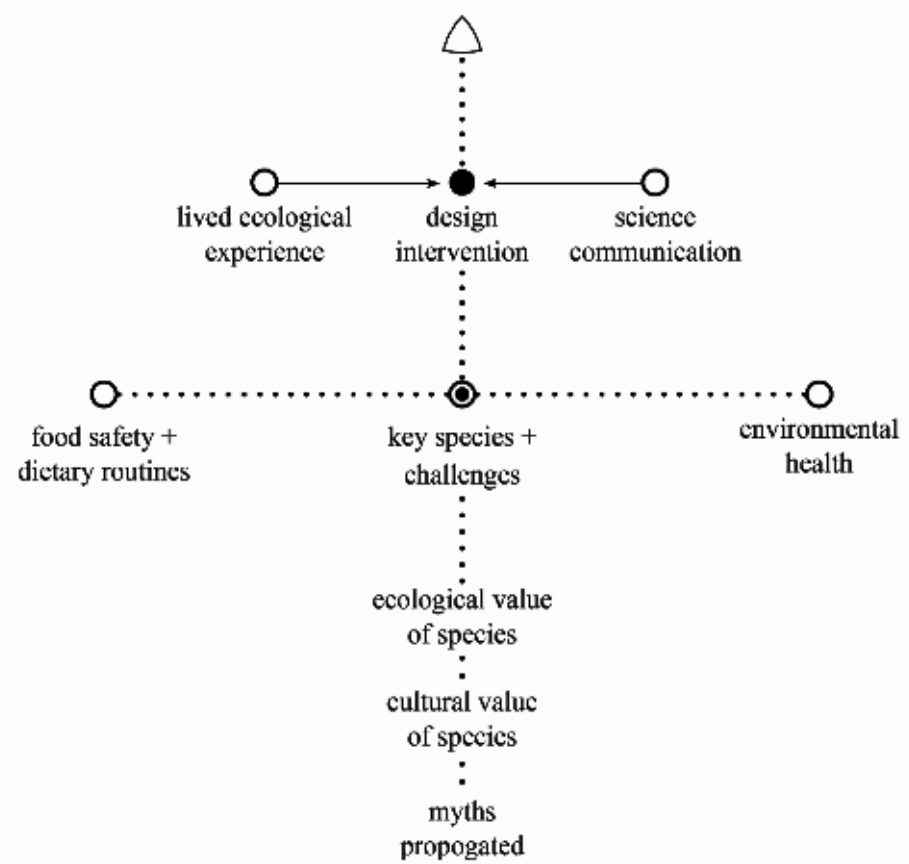
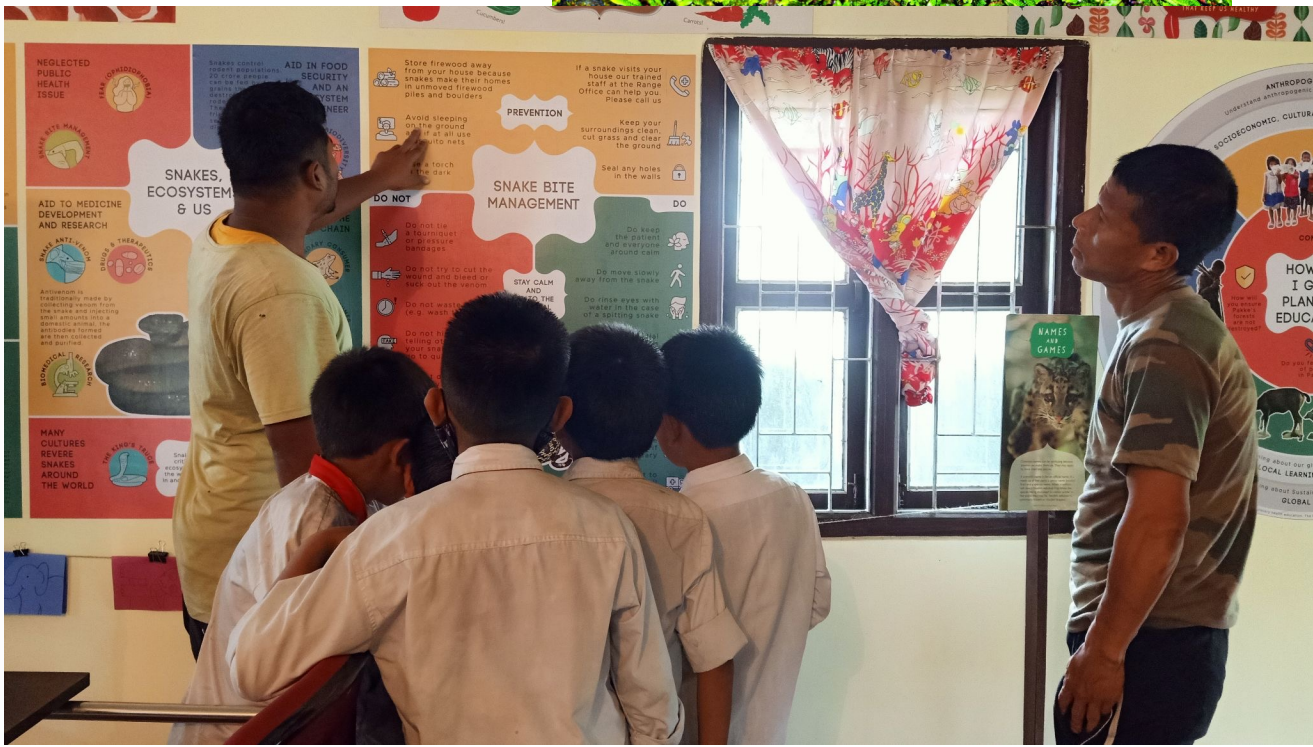


Fig. 2. Vertical analysis of One Health
Source: Adapted from CDC



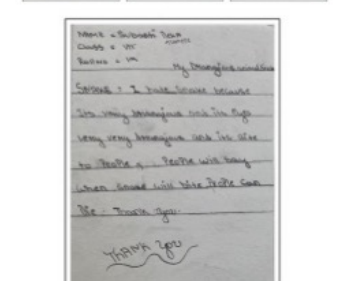
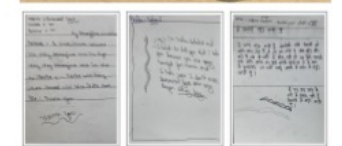
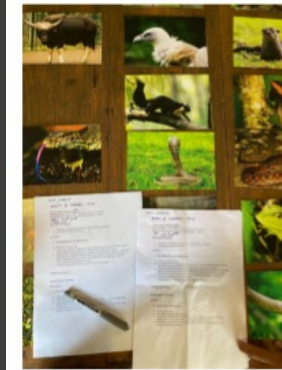
Adira Andlay, 2023. Biyu Tabu Nibew project & Tippi Planetary Health Centre Team. MacClelland's Coral Snake: Ashok Captain

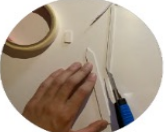

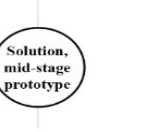
Discover

Define

Frequency table created of top 3 species based on data gathered for the activity 'write a letter to a species that you consider dangerous' (N=40)

Species	Percentage	Most frequently used word/s
Snake	43.47%	dangerous
Tiger	10.86%	dangerous, attack
Cat	8.69%	dirty, long nails, attacks



(c). Frameworks	1. The Field Study Handbook	1. Indigenous Research Methods	1. Play-to-engage model	1. Bloom's Taxonomy 2. Realms of Learning	
(d). Methods	Context mapping Understanding state-of-the-art Secondary research IDEO HCD guidelines Workshop planning	Ethnographic Study Expert interviews Gauging pain points Primary research Field analysis	Codesign Workshops • Craft Communities • Children from Indigenous Groups Low-fidelity prototyping	High-fidelity prototyping • Reflective Analysis • Material Research and Experiments User Evaluation	
(e). Deliverables	Project brief Project timeline Review of current challenges Setting up research board (Miro)	User research strategy Market analysis Light-touch Thematic Analysis of interviews + workshops Stakeholder Mapping	Low-fidelity prototypes User feedback 	High-fidelity prototype Expert validation 	

Brief Definition

Concept Selection

Solution, mid-stage prototype

Limitations and Future Directions...

- Where does this work fit in?
- Training supports interdisciplinary skills, co-creation time-consuming & need for more innovation.
- How can effective interdisciplinary and participatory action research be supported?

Facilitating biodiversity conservation through partnerships to achieve transformative outcomes

Rehema M. White ✉ Birgit Schmook, Sophie Calmé, Anthony J. Giordano, Yves Hausser, Lynn Kimmel, Lou Lecuyer, Mauro Lucherini, Crisol Méndez-Medina, Juan L. Peña-Mondragón

First published: 20 January 2023 | <https://doi.org/10.1111/cobi.14057>

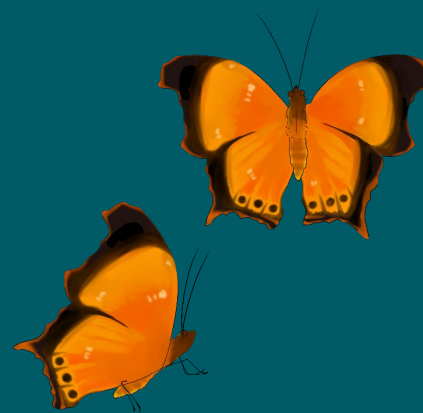


A new study reveals how the gathering together of conservation organisations in one location – a 'conservation cluster' – can work best to reap global rewards.

Conservation clusters: making the case

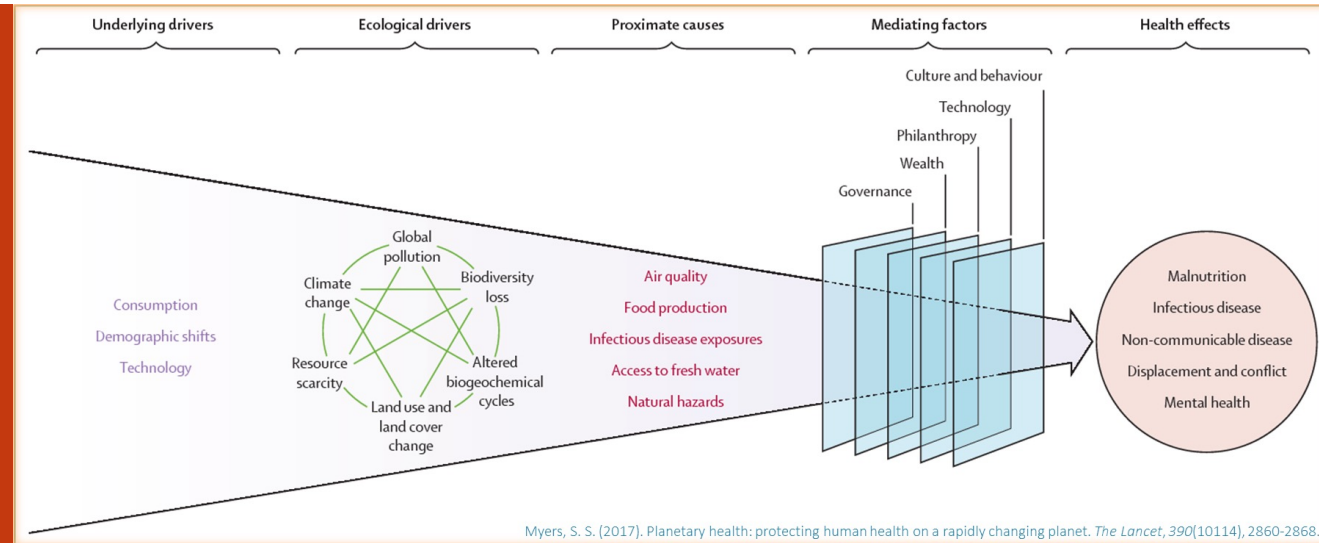


Q&A



Session A: Climate Change & Planetary Health

Session summary & discussion points



- ☐ Ecological drivers
- ☐ Proximate causes
- ☐ Mediating factors
- ☐ Health effects

Two guiding questions:

- A. What are facilitating, hindering or otherwise influencing factors for the establishment of planetary health framework in different regions of the world?
- B. What recommendations would you suggest to better equip and prepare leaders from the Global South / Global North to contribute to the agenda of Planetary Health?

#colloq23

Thank you!

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