Forests For Health

23rd June 2021
Naturenomics™ Dialogues vol. 2: 16th June – 7th July 2021

The pandemic has reminded us of the interdependence between people and the environment, between ecology and human health. In particular it has reminded us how the emergence of zoonotic diseases such as COVID-19 is linked to habitat encroachment, deforestation, loss of biodiversity, climate change, the legal/illegal wildlife trade, and rapidly escalating ecological degradation.

Jared Diamond writing in *Guns, Germs and Steel* highlighted the spread of diseases went from wild animals first to the domesticated ones and then to humans. These new germs may have killed most humans previously unexposed to them. For instance, European conquests brought many new diseases, such as measles and smallpox, to peoples of the Americas, Africa and Australia, decimating indigenous peoples and communities.

Forest landscapes have been extensively modified for agriculture, with large urban centres connected via extensive road systems and the growth in air travel. Land use change and degradation have increased the risks to biodiversity through broken connections and shrinking habitats. However, such fragmentation through the construction of highways and roads, even in areas where they didn't exist until recently such as in the Amazon, are bringing a new type of connectivity: between humans and novel diseases.

Linking Forests & Zoonotic Diseases

Although efforts to synthesize the primary literature related to some of these drivers have started, further analysis is needed to better understand the relationships between disease transmission and biodiversity and forest ecosystem health. These relationships are inevitably complex and are influenced from local to global scales by other factors such as climate change that serve to further complexify these relationships.

Recent research shows that 31% of the emerging diseases are linked to deforestation, and tropical forests are considered to be disease hotspots that are facing extensive deforestation. An estimated 1.7 million viruses live in mammals and birds and in tropical countries that comprises larger intact forests, loss of approximately 25% of intact forest in the last few decades have potentially increased the contacts between humans and wildlife, thereby exponentially increasing the risk of transmissions.

COVID-19 is estimated to cost the world $10.3 trillion in lost productivity. By comparison it takes $9.6 billion to protect standing forests, which reduces zoonotic disease emergency by 40%. A further $22 billion will halt the wildlife trade. Implementing these solutions for a decade would still amount to only 2% of the costs incurred by the COVID-19 pandemic. Efforts must be made to understand how forest ecosystem degradation and climate will intersect in affecting on disease emergence and transmission.

This leads us to a further question, Can all these factors be considered during ecological restoration and rewilding efforts?

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OBJECTIVES

1. Exploring new opportunities to the forest sector enabling diversification, creation of new green jobs, new types of services, new value chains, new profitable investments enhancing the competitiveness of the forest sector in the coming years.
2. To integrate human health aspects and other social values into forest management and to enhance their acknowledgement and implementation within the forest sector.
3. Encouragement of public participation and inclusivity while developing forest management plans.
4. Enhancement of cross-sectoral cooperation while speaking about human health and well-being, forest owners and managers should engage with local communities and intensify cooperation with professionals from other sectors.
5. Explore ways to develop mechanisms and funding for the long-term provision of forest ecosystem services for social and human health benefits.
6. Investment in research, innovation and development of new skills as a key for the future development of the forest sector.

KEY QUESTIONS

1. How does forest loss/habitat loss link to zoonotic disease emergence? How at risk is the Eastern Himalayan region for zoonotic disease emergence?
2. There is an existing body of research on the role of forest protection in mitigating disease emergence risks. Is there evidence on the role scientific forest restoration can play? How do you identify at risk landscape for restoration?
3. What are challenges for the research on the links between forests and human health, and for delivering health through forests in practice?
4. How can we bring a One Health perspective into the mainstream and drive cooperation between different policy makers and practical sectors?
5. How grassroots can be involved in future actions and discussion on human health and biodiversity by concentrating on the relationships that forests and humans share.
6. What are the ways of utilizing forest ecosystem services in effective health promotion that can potentially reduce the public health care budget of a state/country?

Rewilding the Future

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ABOUT THE SERIES

Green is in. As the world gears up to set key climate goals at COP26 in Glasgow this year, countries and corporations are racing to institute new policies to limit carbon emissions and invest in sustainable business models and practices. Countries like China and the US have outlined ambitious programmes to ramp up government spending to aid a complete renewable energy transition while creating jobs for their economies and strengthening their GDP.

For climate vulnerable regions like the Eastern Himalayas, even a 1.5 C rise will transform its climate, impacting everything from its water sources, to the crops that can be grown, its biodiversity and by extension, the lives of the 246 million people living there. Climate resilience is poor: people lack access to resources that could help them weather these changes. For a primarily agrarian community, swift action is not a choice, it is a necessity, beginning with its rich natural assets.

The Eastern Himalayan region suffers from the historical problem of being natural capital rich, but money poor. As the world sets goals for the future of climate and biodiversity, the Eastern Himalayan region must seize this opportunity to take the lead on a new future for people and biodiversity.

Last year, at the 8th Eastern Himalayan Naturenomics™ Forum, the Balipara Foundation held multiple conversations on the theme of **Ecology is Economy**. Building on these conversations and the key outcomes from this forum, this series of the Naturenomics™ Dialogues will explore and debate the theme of **Rewilding the Future**: moving beyond rewilding as a means of restoring the complexity of our natural ecosystems, to restoring the interdependence between our natural, social and economic systems by building a new, natural capital economy participatorily led and stewarded by indigenous and rural communities. This is the first step on the path to equitable climate resilience for people and biodiversity in the Eastern Himalayas.

Through this series, we explore the role that our rich forests can play in our wellbeing and resilience, in mitigating climate threats and its social repercussions, how to create an equitable ecological budget and how a rewilding economy could help communities achieve greater agency over setting their own development and wellbeing priorities beyond the limitations of the GDP. These key themes will serve as an introduction to the critical themes and conversations of the 9th Eastern Himalayan Naturenomics™ Forum, as we continue to explore the idea of **Ecology is Economy** and shape the future of the Eastern Himalayas, its people, biodiversity and economy.

ABOUT THE NATURENOMICS™ DIALOGUES

The Naturenomics™ Dialogues is a digital offshoot of the the Eastern Himalayan Naturenomics™ Forum. It aims to bring together stakeholders from diverse backgrounds to debate pressing issues and opportunities for action in ecology, economy & community-centred conservation with a focus on the Eastern Himalayan region – India's North East, Bangladesh, Bhutan, Nepal, Myanmar and China.

The Naturenomics™ Dialogues is part of a broader initiative to pivot our flagship forum, the Eastern Himalayan Naturenomics™ Forum, to meet the challenges of the "new normal" through digitization.

The Naturenomics™ Dialogues will return next month, to explore new themes and questions, some raised over these sessions, for creating Rural Futures in the Eastern Himalayas.

ABOUT THE EASTERN HIMALAYAN NATURENOMICS™ FORUM

The Eastern Himalayan Naturenomics™ Forum is a global, interdisciplinary platform that brings together businesses, communities, the development sector, conservationists and academics to foster knowledge sharing, and generate grassroots actionable solutions to create Rural Futures across the Eastern Himalayas. Since 2020, the Forum has focused on the theme of **Ecology is Economy** for the region's future.

First instituted in 2013, the Forum has evolved and branched out into regional forums, the first of which was held in Sikkim in 2019, followed by a forum in Bhutan in 2020. The Forum held 12 digital editions of the regional forums in 2020 across all the states and countries of the Eastern Himalayas, and in 2021, held physical forums in Bangladesh and Manipur.

100+ Earth Heroes
200+ Projects
Through the Social Recognition Awards

2000+
Participants

20+
Countries

100+
Discussion Topics

9TH EASTERN HIMALAYAN NATURENOMICS™ FORUM
7-11 DECEMBER 2021

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