

BALIPARA FOUNDATION

Assam • India

10th

**EASTERN HIMALAYAN
NATURENOMICS™ FORUM**

12th - 14th December, 2022

Dhaka, Bangladesh

ECOLOGY IS ECONOMY

PREVIEW 2022

EXECUTIVE SUMMARY

Global Forest Watch estimates that between 2000-2019, 30,676 sq. kms of forests have been lost in the Eastern Himalayas, causing wide scale land degradation and the devaluation of regenerative ecosystem services that the economies depend on. Building and protecting the region's natural assets is key to meeting net zero targets by 2030, to contribute both to country NDCs as well as building climate resilience in the region – especially pertinent, since temperatures have already risen by 1.3 degrees Celsius in the Hindu-Khush-Himalayan region, which includes the Eastern Himalayas.

Bangladesh at 50, today, is one of the fastest growing economies in the Eastern Himalayan region, outpacing both India and China. However, this economic growth has come at a cost to its ecology, diminishing its ecological resilience to the climate challenges it is now facing cyclones, floods, rising sea levels, salinity and climate displacement.

The Eastern Himalayan Naturenomics™ Forum 2022, in its 10th edition, will explore the key areas needed to transition Bangladesh's economy for the next 50 years to a Naturenomics™ paradigm of interdependence between ecology is economy across four key areas:


1. **Forests** – rewilding its degraded forests with a special focus on mangroves in the Sundarbans
2. **Farms** – climate-resilient agriculture through agroforestry
3. **Soil** – reducing salinity by investing in the country's natural assets
4. **Water** – optimized transboundary collaborations for water management

The Forum will explore these themes through dialogues on key themes:

- I. **Valuing Natural Assets:** Creating Ecological Budgets - Nature Capital Debt for Social Mobility
- II. **Rewilding The Eastern Himalayas:** Building Resilient Landscapes from Snowline to Seeline
- III. **Democratize Forest Management:** Enhancing Ownership of Indigenous Communities & Gender Inclusion
- IV. **Transparency:** Technology for Participatory Natural Asset Management
- V. **Wellbeing:** Building Bridges between Development and Conservation for Human Resilience
- VI. **Transboundary Ecological Diplomacy:** Conservation for Action

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The Global Paradox



In 2021, the Intergovernmental Panel on Climate Change released its sixth report on the global climate scenario, ringing the alarm on the urgent need to limit the global temperature rise below 1.5 degrees Celsius – or else face irreversible climate change impacts on heating, weather systems and ecosystems. Despite this urgency, analysis by Climate Action Tracker of the Glasgow Climate Pact's commitments places the world on a trajectory for 2.4 degrees Celsius of warming by 2100. Rich countries committed to doubling adaptation finance by 2025, but actively sidelined targets on funding for loss and damage for developing nations and vulnerable island nations. 1.5 degrees remains barely alive, but at the same time the financial sector pledged to mobilize trillions towards decarbonizing energy systems.

According to the World Economic Forum, 15 key transitions towards a nature-positive future, across land & ocean use, infrastructure and energy will deliver \$10.1 trillion in business opportunities and create 395 million jobs by 2030. Revitalizing these three areas mitigates risks to 80% of our biodiversity today. Catalyzing this transition calls for \$2.7 trillion in public-private investments by 2030 and concerted skilling & education for mainstreaming sustainability, natural asset management and decarbonization.

Today, both the formal and informal forest sector employ over 86 million people globally, many of them in small & medium enterprises (SMEs). **Directly investing in sustainable forest management globally will create an additional 16 million jobs by 2030. Broader investments in restoration agriculture can create 191 million jobs through enhanced productivity and restoration of degraded land.** Degradation of agricultural land today costs the global economy \$6 trillion, or 75% of the total value it adds to the global economy. **Rewilding both forests and agriculture can generate \$3.5 trillion in direct business opportunities through technology for restoration, sustainable timber and sustainable non-timber forest produce.**



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Eastern Himalayas at 2022

It is unfortunate that one of the greatest biodiversity hotspots of the world, the Eastern Himalayas, often considered the roof of the world, has lost nearly 10% of its forest cover since only the year 2000. It sustains over 250 million people from over a milieu of 400 varied indigenous groups across the borders of its constituting nations (China, India (the NorthEast and West Bengal), Myanmar, Bhutan, Nepal, Bangladesh). A region of immense geo-political strategic value and potential, it is endowed with nature capital that remains largely untapped and undervalued. With the increase in socio-economic development of the Eastern Himalayas, there has been a rise in demand for timber, fodder, fuel wood, industrial land, infrastructure and more, thus, converting large areas of existing verdant forests into industrial and agricultural land and human settlements.

Global Forest Watch estimates that between 2000-2019, 30,676 sq. kms or 10% of forests have been lost in the Eastern Himalayas, causing wide scale land degradation, devaluing regenerative ecosystems services critical for its survival. The loss of forest cover has made this region further vulnerable to the on-going effects of climate change, habitat and biodiversity loss, natural disasters, depletion of nature capital and land degradation, along with noticeable conversion of primarily tribal Eastern Himalayan agrarian cultures to unsustainable practices such as growing of cash crops and mono-culture plantations.

Intensifying the problem of declining income of rural populations, the cross-border illegal trade of timber, poaching of wildlife, smuggling guns, gold and drugs has put the rich forests of the Eastern Himalayas and its communities at risk of destruction. The demands and pressures of an ever-changing and increasing development landscape presents unprecedented challenges to the diverse anthropogenic constituents of the Eastern Himalayas and the subsequent flourishing ecosystems that it all relies on.

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Eastern Himalayas at 2022

Building and protecting the region's natural assets is key to meeting net zero targets by 2030, to contribute both to country NDCs as well as building climate resilience in the region – especially pertinent, since temperatures have already risen by 1.3 degrees Celsius in the Hindu-Khush-Himalayan region, which includes the Eastern Himalayas. While an immediate energy transition to complete renewable power (albeit in a sustainable fashion, avoiding the megadam projects that have traditionally formed the backbone of hydel capacity in the region) is important, practical realities mean this complete transition is a long way off. For the Eastern Himalayan region to achieve net zero, a transition towards restorative agricultural practices is necessary across all levels, from changing existing cultivation practices towards low impact, low carbon practices, to the introduction of new and effective models of cultivation which turn land that emits carbon into land that draws down carbon.

The Eastern Himalayan region consists of complex natural assets that spread across borders - rivers, mountain ecosystems, forests and more. Over the past few years, for example, flooding in Bangladesh and the increasing salinity of the mangroves of the Sundarbans has been linked to shifts and failures in river management upstream in India. Natural asset diplomacy is urgently needed, for the region to collaboratively manage these natural assets, ensuring their health and minimizing harm to communities impacted by changes to these natural assets. Effective coordination is needed at a policy and diplomatic level to achieve this, as well as knowledge sharing through indigenous collaborations - for in a region as ethnically diverse as the Eastern Himalayas, encouraging knowledge sharing and learning across ethnic lines could not only help develop stronger and responsive strategies for natural asset management, but also nurture tools for further cooperation and reconciliation, and ultimately mobilize the future generation towards achieving global sustainable green goals towards a transformative future.

Balipara Foundation Hosts the 10th Eastern Himalayan Naturenomics™ Forum 2022 at Dhaka, Bangladesh

Bangladesh at 50

2021 marked 50 years since Bangladesh's first president, Sheikh Mujibur Rahman, declared independence on March 26th 1971. Over the intervening period the country's income per person has surpassed Pakistan's and is approaching India's. It is now one of Asia's fastest growing economies. Before the pandemic, economic growth exceeded 7% for four years in a row, outpacing both India and China.

Bangladesh outperforms its other South Asian counterparts on many key social indicators as well: nearly 98% of Bangladeshi children finish primary school, adult female literacy is nearly 70%, infant mortality is 22 births per 1000 against India's 25 births per 1000 and open defecation has nearly been eliminated, immunization of children is at 80% and girls outnumber boys in high schools. Bangladesh's garment industry has become the world's second largest, accounting for 11% of its GDP and 80% of export revenue.

Globally, Bangladesh has become one of the world's leading voices on global support for climate change adaptation, mitigation and loss and damage. At COP26, Bangladesh led more than 100 poorer nations in demanding action from the richer countries to "take responsibility by cutting their emissions and keeping their promise to help those their emissions have harmed". It leads the V20 - Vulnerable 20 group – all cooperating to work through dialogue towards actively tackling global climate change through concrete action.

Frontlines of Crisis

Bangladesh's economic successes, however, have come at a cost to its ecology and to its rural communities. Inequality is growing between 2010 and 2016 the richest households saw their income rise by nearly a quarter, while the poorest households saw theirs decline by a third. Forests are on the decline: despite its goal to eliminate deforestation by 2020, Bangladesh lost 19,775 hectares of forest. Official figures put forest cover in Bangladesh at 19%, but unofficial estimates suggest this figure is closer to 4.5 – 5%. Forest land, including key mangrove areas, are increasingly being redirected for development.

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Frontlines of Crisis

Deforestation and degradation on Bangladesh downstream life results in frequent and heavy flooding and rapid siltation.

Bangladesh is also experiencing the first waves of climate impact, with intensified natural disasters, increasingly erratic rainfall, and flooding. Together, these have contributed to growing salinity and water scarcity in coastal areas, destabilizing traditional agricultural livelihoods, and causing a rise in desperate migration. In 2020 alone, 4.4 million people were displaced from their homes because of natural disasters like Cyclone Amphan. Given that a quarter of the country's population lives in the coastal belt - a climate change hotspot - reducing risk and building resilience is vital to the livelihoods of the thousands of lives.

Furthermore, the large mangrove forest ecosystem of Bangladesh, the Sundarbans, located in the south-west adjoining the Bay of Bengal in India, is also losing biodiversity at an alarming rate. This is due to lesser freshwater flow and sedimentation in the western (Indian) part of the delta region, with rate of sea level rise higher than the sediment supply. Thousands of acres of these forests are also lost to cash crop agriculture, use of chemicals and effects of climate change, as even though Bangladesh contributes minimally to global emissions, it is one of the worst hit in the pressing climate crisis.

Water is a double-edged sword in Bangladesh: a lifeline for its communities and a perennial threat, when displaced. More than 40% of Bangladesh is water area. The delta plain of the Ganges (Padma), Brahmaputra (Jamuna), and Meghna Rivers and their tributaries occupy 79% of the country. India and Bangladesh have 54 transboundary rivers between them, where the lack of transparent data and disproportionate control over the river systems have leads to conflict and insecurity over food, water, and community development. While China and India pursue political water diversion plans and dam-building activities, an absence of bilateral or multilateral accords on the Brahmaputra River basin spells disastrous consequences for Bangladesh's water security in the next decade. Transboundary diplomacy for the preservation of the Brahmaputra and Meghna basin is critical for the region, particularly to manage the growing climate threats posed by changing rainfall patterns, extreme weather events, cyclones and floods.

ECOLOGY IS ECONOMY: THE BANGLADESH STORY

This year, in an effort to mitigate the environmental risks that the region currently faces, Bangladesh as the host for the '10th Eastern Himalayan Naturenomics™ Forum' will bring together experts and thought leaders from business, conservation, the civil service and academia to chart how Bangladesh can lead the Eastern Himalayas in building the world's first climate resilient lab for '*Ecology is Economy*' by regenerating four key areas: forests, farms, water and soil.

In the past 50 years, Bangladesh has made huge strides in building a thriving and inclusive economy, growing per capita income from \$140 in 1970 to \$1962 in 2020. Microcredit has turned millions of rural women into entrepreneurs. The share of women in paid work has risen from 3% 50 years ago to 36% today. Water is a lifeline for its economy: 86% of its water is used for agriculture, fisheries and a further 2% is used in industry, critical for the garments sector.

Bangladesh's next 50 years must reconcile economy and ecology, to manage and adapt to not only climate change, but also to the growing biodiversity crisis facing the Eastern Himalayan region. As the rest of the world recognises the central value of nature in the economic system, the Bangladesh too cannot afford to continue on outdated modes of development, without placing due priority on the importance of ecology-centric policies and framework. There is a need for building climate resilience through frameworks that support environmental policies and integrate the livelihood of the communities that live within the region. Trans-boundary land use policy across the region effectively needs to be integrated into the existing business structures and policies, in order to scientifically utilise the land, minimise deforestation, opt for sustainable forms such as agroforestry and restoration agriculture, where the economic pressures and needs of the people can be combined holistically over the growth paradigm.

By focusing on these four areas – **forests, farms, water and soil** – Bangladesh can make the critical changes needed to put it ahead of the curve in building resilience for its rural communities and transitioning to an economy built on the Naturenomics™ paradigm of interdependence between ecology is economy.

ACTION AGENDA

The dialogues at the 10th Eastern Himalayan Naturenomics™ Forum will explore the action agenda needed to transform forests, farms, water and soil through six critical themes:



Valuing Natural Assets:

Creating Ecological Budgets - Nature Capital Debt for Social Mobility



Rewilding The Eastern Himalayas:

Building Resilient Landscapes from Snowline to Sealine



Democratize Forest Management:

Enhancing Ownership of Indigenous Communities & Gender Inclusion



Transparency:

Technology for Participatory Natural Asset Management



Wellbeing:

Building Bridges between Development and Conservation for Human Resilience



Transboundary Ecological Diplomacy:

Conservation for Action

ECOLOGY IS ECONOMY – KEY GOALS

Achieving these transformations at the pace and scale required will not be possible without the alignment and collaboration of all nations in the Eastern Himalayan region. Thus, the Naturenomics™ Forum 2022 in Bangladesh calls for collaborative and coordinated actions to develop a global consortium that includes developed and developing countries, where coordinated actions would assist climate-vulnerable countries towards innovative technology transfer, capacity-building, and enhanced provision for accessing climate finance for adaptation and mitigation on:

Forests – Restoring 250,000 hectares of degraded forest land across Bangladesh with a special focus on forest areas in Chittagong and Sylhet and degraded mangroves in Khulna district to create new employment opportunities for rural youth

Farms – accelerating the transition to climate-resilient agriculture through agroforestry across the 70% of Bangladesh's land area under agriculture to secure farmland livelihoods for rural communities

Water – optimizing collaborative systems for transboundary management of riverine systems for Bangladesh's wetland areas

Soil – driving investment in ecosystems restoration to enhance natural assets, including soil-replenishing ecosystems services to combat salinity and desertification

As we find ourselves facing unprecedented challenges, humanity must also perceive the unprecedented opportunity to transform crisis into prosperity. The Forum 2022 will attempt to bridge this structure by evaluating the possibilities of investing in nature-based solutions, addressing the problems of the existing systems of energy production and consumption, land, water and resource sharing and management, empowering sustainable green investments in economy, biodiversity protection and transboundary commitment to conservation practices. The Forum will pave the way in dialogue for Bangladesh to redefine its economy by valuing nature to drive economy and social inclusion.

TARGET AUDIENCE

The Forum will be targeted at the audience for the Eastern Himalayan Naturenomics™ Forum, with a special focus on the following:

- Policymakers
- Environmental organizations & activists working at the intersection of livelihoods & Conservation
- Business Leaders
- Development sector
- Research Institutions
- Partner networks

ABOUT THE FORUM

The platform is a space where voices and thoughts manifest in various forms – panel discussions, individual talks, Balipara Foundation Social Recognition Awards and cultural performances. Through Regional Eastern Himalayan Naturenomics™ Forums, the platform aims to bring together leading academics, communities, senior government officials and civil servants from every Eastern Himalayan country and the Northeastern States to create regional awareness on Habitat-mediated delivery of Universal Basic Assets and identify community stalwarts for its implementation



Amplifying Community
Voices



Community
Conservation Models



Solutions for Conservation
& Livelihoods



Partnerships for
Action

IMPACTS



100+
Community
Representatives



20+
Countries



2000+
Participants



100+
Discussion Topics



200+ projects
Through Earth Heroes



530+
Publications
Supported through
grant recipients



2000+ hectares
Forest land restored
through grant recipients



2800+
livelihoods
For grant recipients



Educational
Apps
Orchids of the
Eastern Himalayas



600+ species
Conserved through
Earth Heroes