



**BALIPARA FOUNDATION**

Assam • India

**SAVE THE DATE**

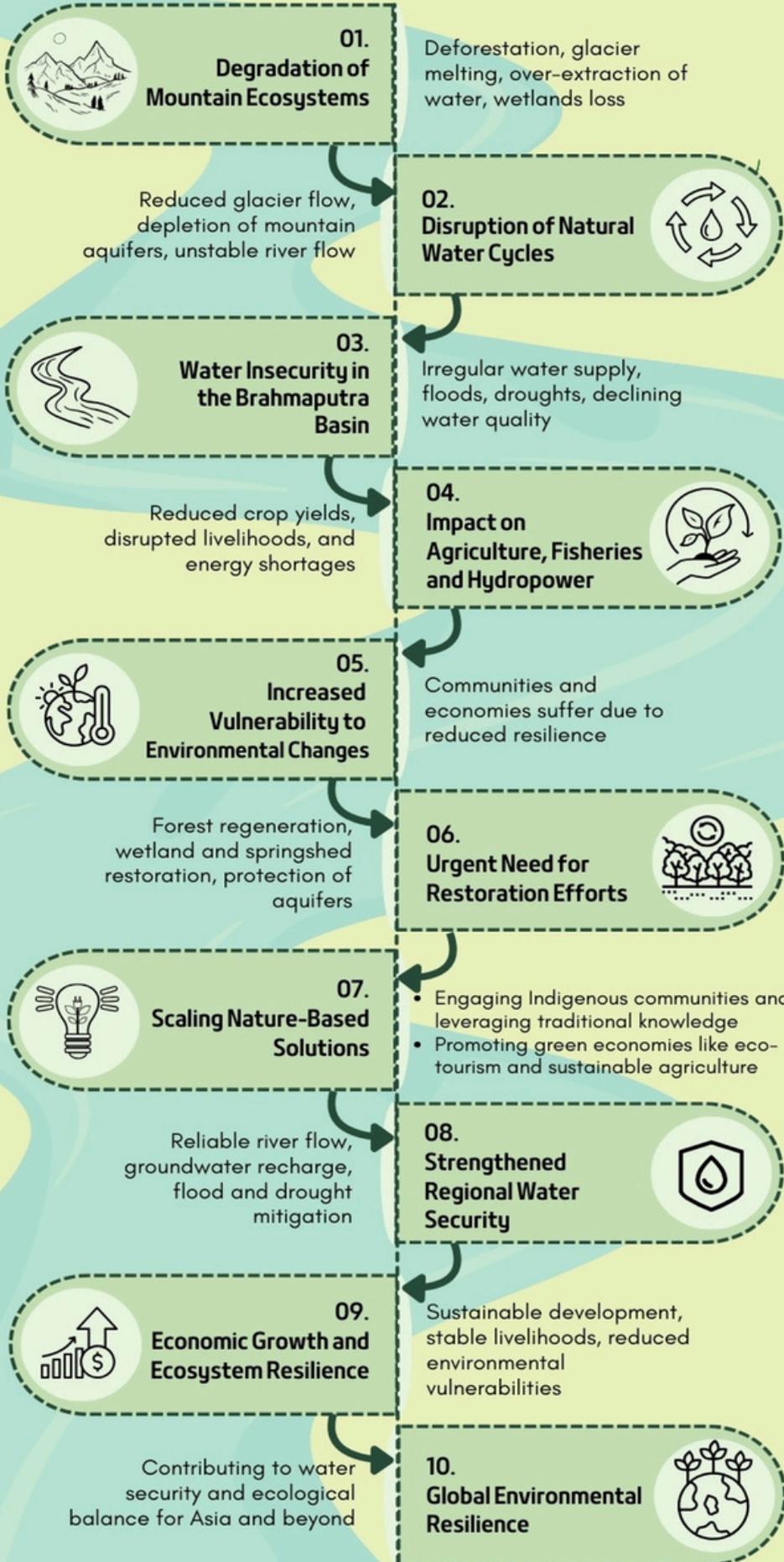
**13<sup>TH</sup>**   
**EASTERN HIMALAYAN  
NATURENOMICS™ FORUM**  
**2025**

10th & 11th December  
Guwahati, Assam

**THE FUTURE OF THE THIRD POLE AND THE HIMSAGAR  
(EASTERN HIMALAYA)**

**CONCEPT NOTE**

# THE THIRD POLE AND THE FUTURE OF THE EASTERN HIMALAYA



13<sup>TH</sup> EASTERN HIMALAYAN NATURENOMICS™ FORUM 2025

# WHAT IS THIRD POLE?

**Largest Ice Reserve:** The Third Pole is the region with the largest concentration of ice and freshwater outside the Arctic and Antarctic Poles. These two regions, the Arctic (around the North Pole) and the Antarctic (around the South Pole) hold the majority of Earth's ice and freshwater reserves. The Third Pole, located in the Himalayas' and Tibetan Plateau, contains over 46,000 glaciers, making it the third-largest ice reservoir on the planet.

**Lifeline Rivers:** The Third Pole is the source of some of Asia's most crucial rivers, including the Brahmaputra, Ganga, Teesta, Mekong, and Yangtze. These rivers provide freshwater to nearly 4 billion people across South Asia, Southeast Asia, and China. They support agriculture, drinking water, hydropower generation, and biodiversity. For example, the Brahmaputra is particularly significant for Northeast India and the surrounding regions, feeding essential livelihoods and ecosystems.

**Biodiversity hotspot:** The Third Pole's ecosystems are a biodiversity hotspot, home to unique flora and fauna. The Eastern Himalaya and surrounding areas house a wide variety of plant and animal species, many of which are found nowhere else on Earth. This biodiversity is not only important for conservation but also for maintaining healthy ecosystems that regulate air, water, and soil quality, contributing to human well-being. Additionally, these ecosystems provide essential medicinal plants and wildlife resources for local communities.

**Indigenous Knowledge:** Indigenous communities in the Third Pole region, particularly in the Eastern Himalaya, have a deep connection with the environment. They possess valuable traditional knowledge about sustainable land management, farming, and resource conservation. This knowledge is increasingly important as climate resilience becomes a key focus, as these communities have learned to live in harmony with their surroundings for centuries.

**Global Environment Role:** The Third Pole plays a crucial role in regulating the global environment system. It affects monsoon patterns and helps moderate weather patterns in South and East Asia. Changes in this region, such as glacier melt or shifts in rainfall, can have far-reaching effects on agriculture, water supply, and the stability of climate systems worldwide. The region's glaciers also influence the Asian monsoon, which is critical for food and water security in many parts of the continent.



# THE EASTERN HIMALAYAN REGION

**Biodiversity:** It is home to more than 10,000 plant species, 1,500 species of birds, and 800 species of mammals, many of which are endemic, such as the Red Panda, Himalayan Wolf, and Snow Leopard.

**Water resources:** The Eastern Himalaya is the source of major river systems, including the Brahmaputra, Teesta, and Salween, which provide water to millions of people. The Eastern Himalayan rivers support agriculture, hydropower, and fisheries, making the region vital for the livelihoods of communities in the broader Southeast Asia region. It Contains 8,000+ glaciers, storing approximately 600 billion tons of ice; major rivers like the Brahmaputra and Teesta originate here.

**Population and Communities:** Home to over 50 million people, including 400+ indigenous communities, each with unique languages and traditions.

**Protected Areas:** Includes 25 national parks and 75 wildlife sanctuaries, such as Kaziranga National Park, a UNESCO World Heritage Site.



# THE INTERCONNECTEDNESS AND THE GLOBAL SIGNIFICANCE : THIRD POLE AND THE EASTERN HIMALAYA

Its influence extends globally, impacting climate regulation, water security, and biodiversity.



## BIODIVERSITY AND ECOLOGICAL SHIFTS

The Eastern Himalaya, part of the Third Pole, harbors rich biodiversity, including endemic species like the red panda and the golden langur. Rising temperatures and habitat fragmentation due to glacial melt are pushing species to higher altitudes, disrupting delicate ecosystems. Research on alpine flora shows that plant species are shifting upwards at an average rate of 20-30 meters per decade, altering ecological balances and threatening local livelihoods dependent on these ecosystems.



## WATER AND CLIMATE REGULATION

The Third Pole feeds major rivers like the Brahmaputra, Ganges, and Yangtze, crucial for water and food security. For example, the Brahmaputra River supports millions in India and Bangladesh, providing irrigation and hydropower. Glacier melt and climate shifts disrupt global weather patterns and raise sea levels, as seen in the increasing flood risks in Assam and Bangladesh. Increased glacial melt initially leads to higher river flows, causing flooding, but over time, depletion of ice reserves threatens long-term water availability. Studies show that the Brahmaputra River's sediment load has increased by 30% in recent decades due to intensified glacial erosion, impacting agriculture and hydropower infrastructure.



## EXTREME WEATHER EVENTS AND DISASTER RISKS

Scientific modeling indicates that climate change is intensifying extreme weather events in the Eastern Himalayas. More frequent glacial lake outburst floods (GLOFs) threaten mountain communities, while erratic monsoons increase landslide risks. In 2023, satellite imagery confirmed the rapid expansion of South Lhonak Lake in Sikkim, triggering a catastrophic flood. Strengthening early warning systems and community-led adaptation strategies is critical to mitigating such risks.



## GEOPOLITICAL AND ECONOMIC IMPACT

The region's rivers are essential for multiple nations, making water-sharing and climate resilience key geopolitical concerns. The India-China disputes over the Brahmaputra's water diversion highlight the need for transboundary cooperation. Hydropower projects, such as the Teesta Dam in India and the Yarlung Tsangpo Dam in Tibet, showcase the region's economic potential while also raising ecological concerns. Collaborative action is needed to balance ecological security with economic growth.

# STRATEGIC FOCUS AREAS: 13<sup>TH</sup> EASTERN HIMALAYAN NATURENOMICS™ FORUM 2025

## 1. REGENERATIVE FOREST ECONOMIES & THE THIRD POLE'S ECOSYSTEM STABILITY

### Why it matters

The Eastern Himalaya's forests regulate carbon cycles, influencing the permafrost and glacial systems of the Third Pole. Deforestation increases soil erosion, accelerating glacial melt and impacting water security downstream.

### Key Actions

- Restore high-altitude forests and grasslands to stabilize permafrost zones and reduce landslide risks.
- Scale agroforestry and sustainable NTFP (Non-Timber Forest Products) economies to create forest-based livelihoods.

## 2. WATER SECURITY & TRANSBOUNDARY RIVER RESILIENCE

### Why it matters

The Third Pole supplies fresh water to over 4 billion people across Asia. The rapid melting of Himalayan glaciers threatens rivers like the Brahmaputra, Teesta, and Irrawaddy, creating both flooding risks and long-term water shortages.

### Key Actions

- Strengthen transboundary water governance for sustainable river basin management.
- Expand nature-based flood resilience solutions, such as restoring wetlands and floodplains.
- Promote water stewardship models that integrate traditional water conservation techniques with modern hydrological research.

## 3. YOUTH LEADERSHIP & MOUNTAIN RESILIENCE

### Why it matters

The Eastern Himalaya is a frontline climate region of the Third Pole, yet there is a lack of local youth engagement in environment action. Building a skilled generation of nature-positive entrepreneurs, researchers, and policymakers is crucial for long-term resilience.

### Key Actions

- Launch an Eastern Himalayan Youth Leadership Initiative focused on Third Pole research and conservation entrepreneurship.
- Introduce naturenomics programmes in universities, integrating science with Indigenous ecological knowledge.
- Create an innovation hub for mountain climate solutions, including sustainable tourism and regenerative agriculture.

## 4. NATURE-POSITIVE FINANCE & THIRD POLE ECOSYSTEM SERVICES

### Why it matters

The Third Pole's glacial and forest systems provide trillions of dollars in ecosystem services, yet current financial models do not adequately invest in conservation or nature-based economies.

### Key Actions

- Understand biodiversity-linked finance models that monetize Eastern Himalayan ecosystem services.
- Partner with businesses to integrate nature-positive supply chains that benefit local communities.

## 5. RESILIENT INDIGENOUS COMMUNITIES & THE THIRD POLE'S CULTURAL HERITAGE

### Why it matters

The Eastern Himalaya's Indigenous communities are custodians of ancient ecological knowledge that supports climate adaptation and biodiversity conservation critical for the survival of the Third Pole's fragile ecosystems.

### Key Actions

- Recognize and integrate Indigenous governance models for land and resource management.
- Support community-led renewable energy solutions (solar, micro-hydro, bioenergy) to reduce dependency on forest resources.
- Develop sustainable ecotourism initiatives that protect Indigenous cultures while driving economic resilience.

## KEY OUTCOMES

### ANCHORING THE FUTURE OF THE THIRD POLE THROUGH THE HIMSAGAR

#### SCALING COMMUNITY-LED RESTORATION LANDSCAPES ACROSS THE HIMSAGAR CORRIDOR

**Geographies:**

Arunachal Pradesh, North Bengal, Assam

**Activities:**

- Initiate nurseries-to-forest models using native and wild species
- Establish community-managed seed banks and agroforestry demonstration plots
- Build local capacity for ecosystem stewardship through technical training and livelihood integration

**Target Audience:**

Community-based organisations, local youth, state forest departments, rural development agencies

**Relevance to Third Pole:**

These ecologically fragile catchment zones form the easternmost buffer of the Third Pole. Their restoration contributes directly to safeguarding glacial river systems and stabilising the region's water and biodiversity cycles

01.

#### LAUNCH OF THE EASTERN HIMALAYAN NATURENOMICS™ YOUTH LEADERSHIP PROGRAMME

**Partners:**

TERI, Gauhati University, Balipara Foundation

**Structure:**

1-week, 4-week, and 12-week certified formats

**Core Competencies:**

- Forest nursery management and seed preservation
  - GIS and biodiversity mapping
  - Scheme linkage and social protection access
  - Storytelling, documentation, and oral tradition recording
- Target Audience: Students, rural youth, community leaders, educational institutions

**Relevance to Third Pole:**

Cultivates a new generation of Eastern Himalayan youth equipped to lead nature-positive restoration efforts across Third Pole ecosystems, fostering long-term local custodianship.

02.

#### CREATION OF A CROSS-BORDER KNOWLEDGE EXCHANGE PLATFORM

**Partners:**

Kunming Institute of Botany, ICIMOD, Bhutanese and Nepalese ecological research bodies

**Components:**

- Eastern Himalayan–Third Pole Roundtable (annual)
- Community-to-community learning exchanges
- Shared toolkits on seed saving, watershed conservation, indigenous agricultural practices

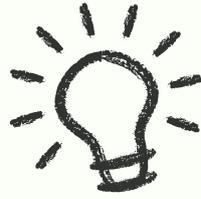
**Target Audience:**

Academic institutions, think tanks, indigenous knowledge holders, CSOs across Third Pole nations

**Relevance to Third Pole:**

Encourages regional collaboration to preserve and adapt shared natural heritage and indigenous knowledge critical to the Third Pole's resilience.

03.



### KEY POLICY RECOMMENDATIONS

Based on contributions from key experts, thought leaders, practitioners & businesses, policy recommendations for key action points to foster climate resilience & community wellbeing through rewilding, leveraging carbon markets & enhancing biodiversity

### KNOWLEDGE SHARING

Through keynotes from leaders & experts, panels, exhibitions, paper presentations, workshops & roundtables

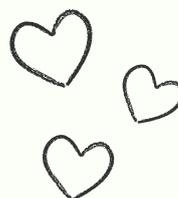
## HOW?

### KEY ACTION PARTNERSHIPS

Between businesses, communities & practitioners for rewilding – including leveraging carbon markets & technology for rewilding

### EXPERT NETWORKS

PRE-LAUNCH EVENTS BRINGING TOGETHER DIVERSE EXPERTS & STAKEHOLDERS TO SHARE THEIR KNOWLEDGE AND CONTRIBUTIONS BOTH AT THE FORUM & THROUGH PUBLICATIONS & THOUGHT LEADERSHIP



## About

# EASTERN HIMALAYAN NATURENOMICS™ FORUM

Understanding the need for exploring the ingredients of success in conservation and sustainable livelihoods, the Balipara Foundation launched the Eastern Himalayan Naturenomics™ Forum in 2013 to find solutions leading to important lessons for the communities and others, at all levels, from local to global.

Starting the dialogue with Asian Elephant conservation to exploring the crucial role of rural communities in the Eastern Himalayas and supporting rural economies and livelihoods, eleven editions (2013-2024) of Eastern Himalayan Naturenomics™ Forum has led to participation from over 20+ countries, 2000+ distinguished speakers and participants from multi-disciplinary fields and recognized 156 Balipara Foundation Awardees.

The Forum seeks to generate grassroots, actionable solutions to rewild the landscapes of the Eastern Himalayas and empower local communities to be the stewards of their natural assets.

Over the years, it has emerged as an interdisciplinary platform bringing together stakeholders across the spectrum to foster knowledge sharing, for future collaborative efforts on community-led conservation.

With this vision and endeavor to bring together local stakeholders in communities, conservation and livelihoods to debate pressing issues and opportunities for action, Regional Eastern Himalayan Naturenomics™ Forums were launched in the year 2019, with successful deliberations held across India's Eastern Himalayas.



# BUILDING NATURENOMICS™ IN THE EASTERN HIMALAYA

## Building Collaborative Networks

### For Learning, Action & Investments

The Eastern Himalayan Naturenomics™ Forum has convened various experts across diverse fields over time, enhancing the scientific, business, and social aspects of the Balipara Foundation's Rural Futures model for rewilding. Serving as a nexus, the Forum facilitates the establishment of fresh partnerships, identifies novel areas and requirements for intervention that the organization can address, and engages with emerging communities and young leaders eager to catalyze change in their localities. Under the new thematic focus of "The Future of the Third Pole and the Himsagar (Eastern Himalaya)," the forum has transformed into a platform for devising strategies and fostering action networks to restore degraded lands throughout the region. This involves linking interested investors and businesses with communities capable of spearheading these rewilding initiatives.



## IMPACT



**200+**  
Projects  
through earth  
heroes



**2000+**  
forest land  
restored through  
grant recipients



**2800+**  
supported through  
sustainable  
livelihoods linked  
to rewilding



**600+**  
species conserved  
through earth  
heroes



**530+**  
Publications  
supported



### REWILDING THE INDIAN

#### EASTERN HIMALAYAS GRANT

Launched in 2021, the grant delivers INR 5,00,000, to a grassroots individual or community organization working towards implementing a human-centric conservation model that restores healthy ecosystems.



### INDIGENOUS HUB

The platform was launched in 2020 to empower indigenous people as researchers, documenters of their knowledge, advocates for their own climate resilience and storytellers of the lived realities on the frontlines of climate & biodiversity crisis



### LOCAL NETWORKS

#### FOR REWILDING

Through the Regional Eastern Himalayan Naturenomics™ Forum platforms, communities in Nagaland, Arunchal Pradesh, Manipur, Assam initiated rewilding programmes in their community-conserved area in partnership with us.