



# Report 2020-21

## Updates & Progress

**BALIPARA FOUNDATION**

Assam • India

**Naturenomics™ : Building Rural Futures**

# CONTENTS

01	FORESTS FOR ALL	02
	• What we do	

02	IN THE UNPRECEDENTED TIMES: 2020 AN OPPORTUNITY	04
	• Forests at the Heart of Green Recovery	

03	FOUNDER'S MESSAGE: ECOLOGY IS ECONOMY	08
----	---------------------------------------	----

04	THE EASTERN HIMALAYAS: FROM THE SNOWLINE TO THE SEALINE	10
----	---	----

05	HIGHLIGHTS OF 2020-21: GEOGRAPHICAL FOOTPRINT	14
----	---	----

06	HOLISTIC COMMUNITY DEVELOPMENT: COMMUNITY CASE STUDIES	25
----	--	----

07	RURAL FUTURES: HABITAT RESTORATION – Introduction	
	• Udalguri Landscape Mission	
	• Balipara Reserve Forest Management	
	• Rural Futures Community Nurseries	28

08	AGROFORESTRY & LIVELIHOODS	34
	• Fungal Diversity	
	• Bioresources and Sustainable Livelihoods in Northeast India	
	• Ghor Bari: The RuFu® Agroforestry Model	

09	EASTERN HIMALAYAN BOTANIC ARK	41
	• Explore the Ark	

10	NATURE-EDUCATION	46
	• Eastern Himalayan Naturenomics™ School	

11	EASTERN HIMALAYAN NATURENOMICS™ FORUMS	48
	• Eastern Himalayan Naturenomics™ Forum 2020	
	• Naturenomics™ Dialogues	
	• Balipara Foundation Awards	

12	DIGITAL STORYTELLING	54
----	----------------------	----

13	PUBLICATIONS	55
----	--------------	----

14	RURAL FUTURES VOLUNTEERING & INTERNSHIP PROGRAMS	56
----	--	----

15	PLANS 2021 & BEYOND	58
----	---------------------	----

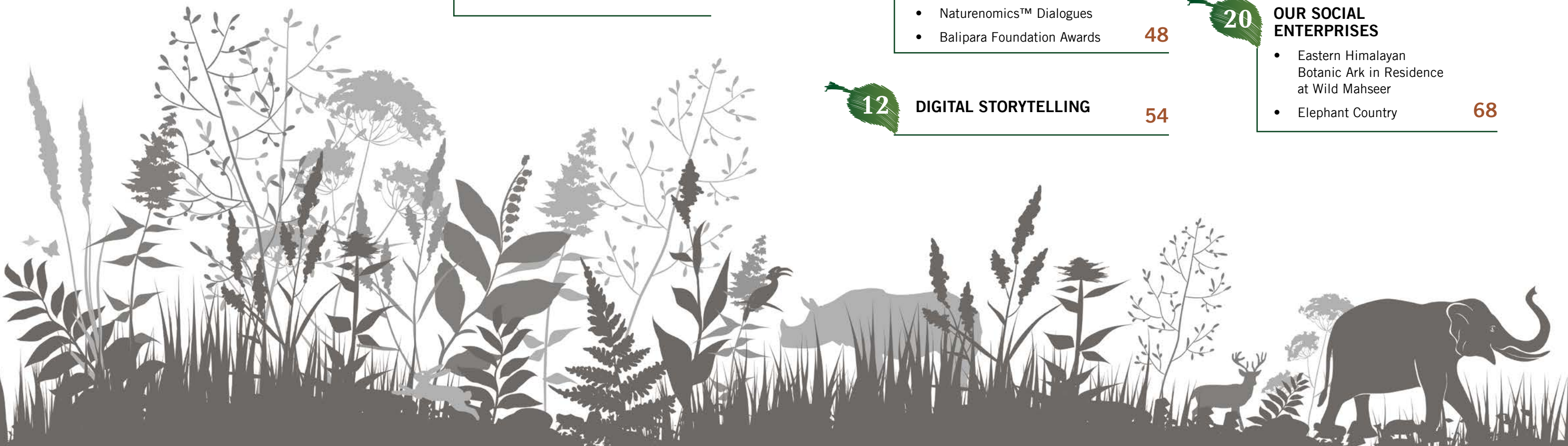
16	OUR 2030 VISION	62
----	-----------------	----

17	FINANCIALS	64
----	------------	----

18	OUR PARTNERS	66
----	--------------	----

19	TEAM BALIPARA FOUNDATION	67
----	--------------------------	----

20	OUR SOCIAL ENTERPRISES	68
	• Eastern Himalayan Botanic Ark in Residence at Wild Mahseer	
	• Elephant Country	







# FORESTS FOR ALL

## WHAT WE DO

### Building Rural Futures

Creating **self-sufficient, self reliant autonomous networked forest-fringe communities** with sustainable livelihoods & businesses based on regenerative habitat management

A natural capital-based system for communities to independently deliver **equitable access to universal basic assets**

A regenerative, **cooperative natural capital based economy** that securitizes LEWWAC (Land, Energy, Water, Waste, Air, Carbon)



Trees don't discriminate.  
Why should we?





# IN UNPRECEDENTED TIMES :2020 AS AN OPPORTUNITY

## FORESTS AT THE HEART OF GREEN RECOVERY



## COVID-19 – THE RELEVANCE OF FOREST RESTORATION

Forests provide the essentials of life—clean air, fresh water, food, fuel, medicines, and livelihoods—for billions of people. They are also critical to the fight against climate change. Trees already capture and store nearly a third of human-caused climate pollution and forests naturally cool the planet's surface and regulate rainfall. Roughly 60% of India's \$3 trillion economy is mid to highly dependent on the healthy functioning of ecosystems for their future growth and sustainability. 57% of rural Indian livelihoods depend on healthy forests – forests which are rapidly disappearing across the country today. Deforestation in India's Eastern Himalayas alone represented 74% of India's total deforestation between 2017 – 2019 (FSI, 2019).

With COVID-19, leaders around the world are realizing how crucial a role forests play in managing our lives. The spillover effect – wild viruses exiting wild ecosystems as they come into contact with domesticated livestock, or people – has moved from scientific and conservation circles to mainstream news now, as politicians and businesses begin to acknowledge the danger that lies ahead in the further depletion of natural resources. Recent estimates suggest that at a global annual cost of \$9.6 billion, direct forest-protection payments to outcompete deforestation economically could achieve a 40% reduction in areas at highest risk for virus spillover – India among them, as one of the world's zoonotic disease hotspots.

In this context, habitat restoration takes on an urgency never reached before. The creation of natural assets and restoration of healthy forest ecosystems will be a critical tool in India's kit for combating climate change and creating resilient communities in the coming years: enriching soil, reducing land degradation, enhancing biodiversity and critical pollinator species, reducing silting of riverine systems, reduction of damaging flooding, carbon sequestration, nutrient cycling, and so many other functions essential to life on Earth today.





## COVID-19 – FORESTS & LIVELIHOODS THROUGH RURAL FUTURES

For many of the communities, the early COVID-19 lockdown disrupted their traditional planting schedules and closed down jobs and livelihood streams that carried them through non-cultivation/harvest months. Habitat restoration programmes in this period played a critical role in boosting the income security of vulnerable communities, in the absence of access to city-based jobs – which are unlikely to recover to their previously levels, within the next year – and the disruption to traditional cultivation, and harvests down the line. Both young people and other community members are increasingly interested in being part of these habitat restoration programmes, because of the employment security it has provided at an increasingly unpredictable time for rural communities.

For youth returning home from cities because they had lost their jobs in the lockdown, the Rural Futures programme offered an opportunity for employment and stability that plugged a gap that had been torn wide open by COVID-19. The reforestation programme is relatively easy to participate in and offers an immediate stream of income, which was crucial for returning workers who had lost their jobs or more as they returned home. It also allowed for an easy transition into work in their home towns and villages.

Restoring habitats has a positive impact on rural livelihoods, especially when coupled with agroforestry as in our Rural Futures model. Our initial pilots already indicate a 40% increase in community incomes, with greater scope as natural assets mature. More importantly, it builds resilient support systems for rural communities, preserving livelihoods for future generations – paving the way for a circular economy that puts nature back in the heart of economics: Naturenomics™.

In total, during this lockdown period, habitat restoration work around Bhairabkunda, Udalguri and Balipara Reserve Forest, Assam was able to create 28,209 mandays of employment, providing incomes to 465 households, while planting 625,000 trees across over 1000 hectares. In nearby Baligaon village, near Balipara Reserve Forest in Assam, climate-smart agriculture and agroforestry created employment for over 100 households, while positively reinforcing and enhancing their food security.

## CASE STUDIES

Strict nation-wide restrictions on movement during the early phases of the lockdown in India resulted in farmers being unable to procure seeds to be sown in that season. This resulted in a further lowering of the dwindling annual incomes of many subsistence farmers. Through the Rural Futures reforestation programme, we were able to compensate for this loss in annual incomes by engaging farm based workers in habitat restoration and also creating household agroforestry models and local seed banks that would create a local nature based economic ecosystem that would be resistant to future disruptions and therefore, increase community resiliency & self-sufficiency.

A resident of Tarabari village, Balipara Reserve Forest said – “Our community was not really bothered about the pandemic as our lives went on, till we were unable to procure seeds and realized that therefore would lack the money that we use for many essentials. We were happy to be engaged in planting trees and getting paid for it – this not only maintained a sustained income but also provided employment to many of the returning young people who have returned home.”

What came to the community’s rescue is the revival of an ancient food-forest practice just a few months before the pandemic’s outbreak. Generally known as agroforestry, this is a form of farming where trees, shrubs, herbs and vegetables are grown together in a group mimicking a forest; the plants provide others benefits like shade, protection from predators, life-giving humidity and nutrients.

“We didn’t feel the economic pressures,” says Pabitra Mili, a member of the Mishing community from Baligaon Miri village in Sonitpur district. By June 2020, some 200 migrant workers returned to the village as businesses shut down. “We took it as an opportunity to involve them in expanding our agroforestry,” Mili said. He initiated a plantation drive of commercially lucrative species like bamboo and amla on June 27 on village lands.

Baligaon Miri experiment is a successful example of natural capital regeneration. Natural capital indeed is the biggest income generator for rural Indians.







## FOUNDER'S MESSAGE

### ECOLOGY IS ECONOMY

#### Ranjit Barthakur

Founder

We are living in the Anthropocene. Humans are the direct and primary driver of systemic changes in our planetary system, terraforming the great forests and wildernesses of our time, shaping our geological underpinnings and transforming interspecies worlds. In the past, the relationship between people and planet was symbiotic, each helping the other to thrive. Today, the relationship has turned into one of unilinear exploitation, driven by our economic mandate of better, brighter, faster, cheaper.

This past year has lifted the veil on what the future might look like if we continue to exploit and destroy nature at the same rate as we do today. The pandemic and multiple disease outbreaks – bird flu, African swine flu and Ebola – are the result of people and domestic animals coming into increasing contact with wild animals: the result of rampant deforestation, land degradation and rising extreme weather events. 2020 was also the hottest year on record and climate-linked natural disasters cost the world \$210 billion: an increase of 26.5% on 2019. Despite pandemic fears, environment and biodiversity related risks remained at the forefront of both business and youth leaders in the World Economic Forum's 2021 Risk Report.

2020 has conclusively demonstrated, our interdependence with nature: economic, social and cultural. Around the world, governments and business leaders are slowly waking up to the fact that good ecology is good economy. But the move to adopt this principle has been a slow and uphill struggle – and the move to redesign economies and businesses for interdependence with nature has so far been inadequate to respond to the enormous scale of the challenges of our time.

Since 2007, the Balipara Foundation has been advocating for this redesigning of our economy around principles of interdependence with nature – Naturenomics™. This push for Naturenomics™ is what led us to design a holistic approach to conservation. A new design was needed for rural economies, to reconcile both human and ecosystem needs. For an approach to holistically tackle the conflict between these needs, we realized we had to centre the rural and forest-fringe communities who depend most on nature, face huge challenges to their livelihoods from ecological degradation and have traditionally been the main stakeholders if not managers of habitats and ecosystems. The result was the Rural Futures model, which recognizes that conservation is not just a science, it is also social, economic and cultural. Successful conservation means working with people to meet the human that drive habitat degradation, biodiversity loss and species extinction.

Over the years our vision and programmes have been honed to meet our evolving understanding of how ecology, economy and people intersect – understanding, in other words, the social dimensions of conservation. Today our programmes reflect this interdisciplinary ethos for creating interdependence, towards the goal of restoring the fragile forests of the Eastern Himalayas, from Nepal to Myanmar.

The need for a holistic, multidimensional approach to action in this region has never been more critical. The Eastern Himalayas retain 60% its forest cover today, but only 25% of the region's original habitats survive today. Deforestation in the region is rampant. According to the 2019 Forest Survey of India, 74% of net deforestation in India occurred in the North

East states. These shrinking forests have cascading effects on the regional landscape. On average, approximately 23% of the land in the region is desertified. Human-wildlife conflict is accelerating, particularly with large species like elephants: in Assam, over 300 people have died from this conflict between 2014 and 2019.

These forests are under threat today from development pressures, businesses and from communities seeking to augment their shrinking incomes. In a primarily agrarian region where the vast majority of farmers are smallholders, this has created a downwards spiral where communities seek to augment incomes by exploiting forests, accelerating the degradation that ultimately takes a toll on their farmlands – and their agricultural incomes.

Holistic conservation starts by breaking this cycle of poverty, natural asset overexploitation and deforestation. It also begins with understanding the relationships people have with forests, past and present, and the unmet needs that make exploiting forests a lucrative proposition.

Years of research and conversations with communities have taught us to re-examine many of our assumptions about this relationship. For many, their primary concern is a stable income which allows them to access basic assets like healthcare and education for their families. Many are aware of how this exploitation undermines their lives, livelihoods and futures – but simply cannot afford to think as far as five or ten years into the future. They are aware of how degrading ecosystems threaten the future of their homes and their lands, but lack the resilience and means to act on this knowledge and because of income limitations, are forced to act against it. Others mourn the disappearance of traditional ecological knowledge, but as youth migrate in search of better livelihood opportunities, the opportunities for this intimate knowledge of ecosystems to be passed from one generation to the next are limited.

Through these conversations with communities, our understanding of conservation has further been perfected and expanded, to include universal basic assets i.e. the natural capital based access and delivery of the basic assets people need to live well: education, healthcare, food security, etc. to energy & water, transformative living spaces, etc. In this past year, we piloted the RuFu® lab experiment in reforestation and agroforestry, with the aim of supporting communities to reinvest the wealth earned from this in independently delivering and accessing these universal basic assets.

If we mapped the intellectual value chain of conservation, it would cover a wide range of subjects ordinarily siloed off from each other: botany, zoology, geology, anthropology, economics, history, geography and more. As our work through Rural Futures expands, we see these interlinkages emerging ever more clearly and in turn, shaping our initiatives. From habitat restoration, our programmes have expanded to include natural capital for delivering universal basic assets, and research into indigenous knowledge through ethnobotany and rural/indigenous understandings of well-being and quality of life to strengthen conservation practice and enhance how we measure our outcomes and successes. We have moved from single approaches to human-elephant conflict by taking multidimensional approaches through monitoring, insurance schemes and alternative agroforestry models which all enhance income resilience for communities. In all of these, the interplay between the social, economic and ecological has been the backbone of our successes, which this report explores in further detail.

The future of the Eastern Himalayas today lies in recognizing ecology is economy. Last year at the Eastern Himalayan Naturenomics™ Forum, business and government leaders endorsed the need to develop an ecological budget, and the need to measure and value our natural capital. Change is happening slowly but surely. Our goal now is to accelerate this change and transformation in both thinking and action to restore, revitalize and rewild the Eastern Himalayas for resilient people, biodiversity and economies.



# THE EASTERN HIMALAYAS :

## From the Snowline to the Sealine



### Background

The Eastern Himalayas lie at the center of South Asia and East Asia, connecting two of the world's largest economies: India and China. Stretching from the eastern provinces of Nepal in the west to China's Southwestern mountains in the east, it extends across India's North East and West Bengal, Bhutan, Bangladesh and Myanmar. It bridges over 246 million people from over 400 different ethnic groups, across 2 key biodiversity hotspots and over 30 ecoregions. The strategic value of this region cannot be overstated, from its centrality as a water source for India, China and Southeast Asia, to its importance as a global biodiversity hotspot.

The region is endowed with rich natural capital which remains largely untapped and underleveraged, viewed either as an impediment to economic growth through a developmentalist lens, or else viewed as a battleground for increasingly embattled, endangered endemic species. Both views obscure the aspirations and rich cultures of the region's indigenous and local communities, most of whom still depend heavily on the region's natural capital for their livelihoods, albeit at a largely subsistence level.



### The Problem

Since 2000, the Eastern Himalayan region has lost over 9.5% of its green cover – an area larger than that of Bhutan and the state of Sikkim put together. However, these figures, sourced from Global Forest Watch, do not capture the full complexity of the picture: the loss of primary, dense natural forests, the conversion of forests into plantation forests and the incursion of invasive species in natural forest areas. Together, these three factors have created a cascading series of effects: declining ecosystem health, declining soil health, rising desertification and the rapid depletion of water tables across the region.

80% or 197 million people in the region are employed in highly nature dependent industries (e.g. agriculture, forestry, energy production, food & beverages, tourism). Of these 80% are smallholder farmers. 40-50% of the region faces poverty intensity over a 40% threshold. Poor rural incomes force communities to turn to forest exploitation to augment their incomes, to access universal basic assets like healthcare & education. Most of these people live in the region's valleys, at high risk because of deforestation and climate risks. Forests play a key role in regulating the hydrogeology of the region – river flows, groundwater & aquifer regeneration, flooding & soil erosion prevention – without which life in the valleys would be impossible.

These problem have been further compounded by burgeoning climate risks: rising temperatures in the mountains have caused glacial melt, creating volatility in water access and adding further stresses

to an already geopolitically tense area. Over a quarter of the land in the region is degraded – the result of rampant deforestation and severe flooding. Despite shared interests for development and economic growth opportunities, the region remains divided by geopolitical interests. As a result, communities have few livelihood opportunities and many look for better socioeconomic mobility by migrating from the region.

This migration has led to the fragmenting of communities, the loss of rich traditional ecological knowledge and unsafe human trafficking. In some cases, migration between countries in the region has led to the escalating inter-community tensions and the rise of ethnonationalism. Coupled with a history of insurgency and conflict in the region, ordinary people, wildlife and ecosystems have suffered as forests are cleared in huge swathes and wildlife is traded illegally to fuel this conflict.

Long-term ecological degradation has contributed to declining incomes & yields in a primarily agricultural region, forcing people to exploit forests to augment incomes & access basic assets – spurring further ecological degradation. Today, livelihoods in the region are at threatened by the vicious cycle of degradation > shrinking incomes > deforestation > degradation: declining incomes, declining yields and rising human-animal conflict in states like Assam are symptomatic of this vicious cycle.

Combatting these twin problems of forest loss and poverty requires a united approach, to break this vicious cycle and link healthy ecosystems with better livelihood and earning opportunities for rural & forest-fringe communities.



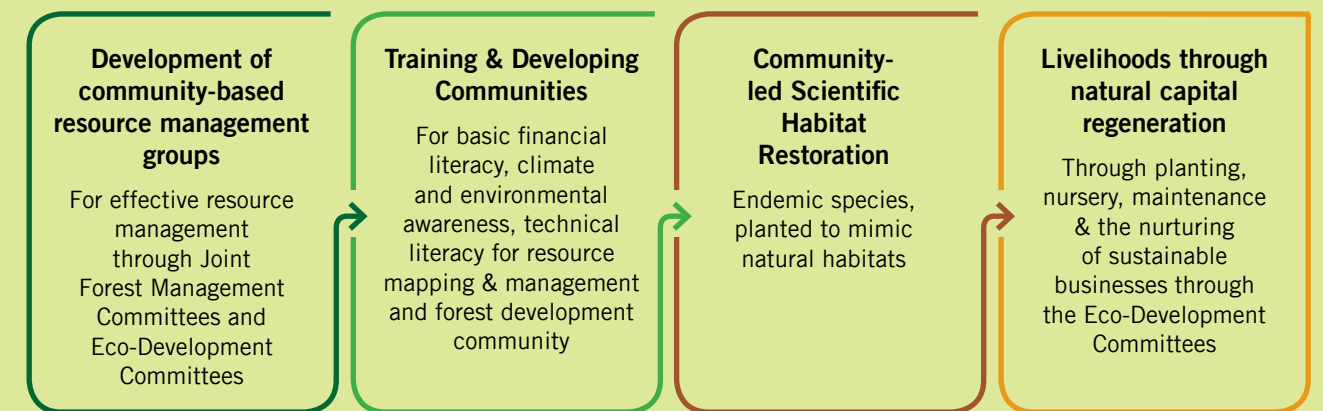


## Opportunities

At the confluence of 2 billion people, the Eastern Himalayan region has a young demographic and its rich cultural diversity supply a plethora of rich perspectives and traditional knowledge yet to be fully understood by scientists and policymakers, for developing sustainable livelihood opportunities. Though young people migrate to nearby regions for work, they still retain strong relationships with their communities and seek opportunities to work in their ancestral lands among their communities while earning enough to foster wellbeing for themselves and their families.

The region still retains a quarter of its primary natural forest and 60% of forest cover, home to 12,000 species of flora and fauna with new ones being discovered every year. Approximately 6 million hectares of degraded forest land must be restored across the Eastern Himalayas to reverse two decades of deforestation, and within the North East region, over 1.8 million hectares could potentially be restored through agroforestry. An ambitious programme for restoration would create employment for up to 20 million people and enhance regional GDP growth by 2-3% annually through natural capital.

## The Solution – Creating Rural Futures



The solution to these interlinked challenges is the creation of a natural capital based system to deliver universal basic assets (education, healthcare, water, energy, food security, transformative living spaces) to rural & forest-fringe communities

The Rural Futures framework functions as a positive feedback loop model. Rural Futures entails holistic community development, and the creation of rural ecosystems through optimisation of natural capital & assets. Central to the Rural Futures framework is the restoration and management of wild habitats across the Eastern Himalayas, which, in turn, strengthens the natural capital pool of the region, i.e. increases the overall worth/hectare of land.

Initial payment for restoration rewilding programmes create sustainable incomes and businesses for forest-fringe communities, incentivizing them towards natural capital regeneration. Sustainable businesses through agroforestry, bamboo, mushrooms and mindful tourism enhance natural capital values, enabling communities to become self-sufficient, accessing and delivering universal basic assets & services such as healthcare, education, renewable energy and access to water.

## How?

**Payment for Restoration** – scientific restoration of forests led & managed by communities through a payment for restoration programme that creates immediate livelihoods for forest-fringe communities

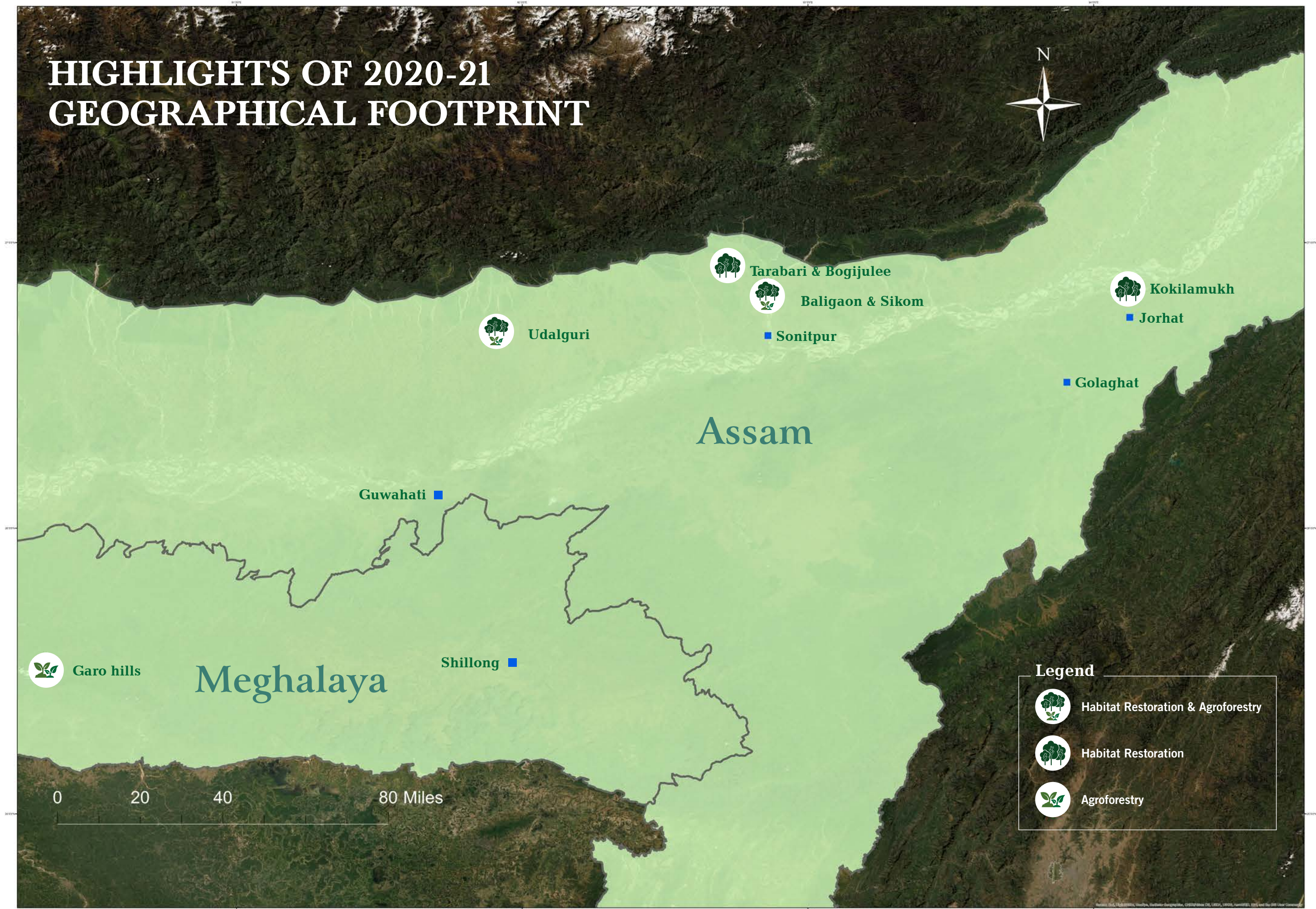
**Agroforestry** – restoration of fallow or degraded land holdings through organic cultivation of food forests, with produce that can be sold on local markets or consumed at home, increasing incomes and food security

**Sustainable businesses** – such as mushrooms, weaves & homestays which extend the value chain of forest restoration and agroforestry, generating higher value for communities through sustainable use of natural assets

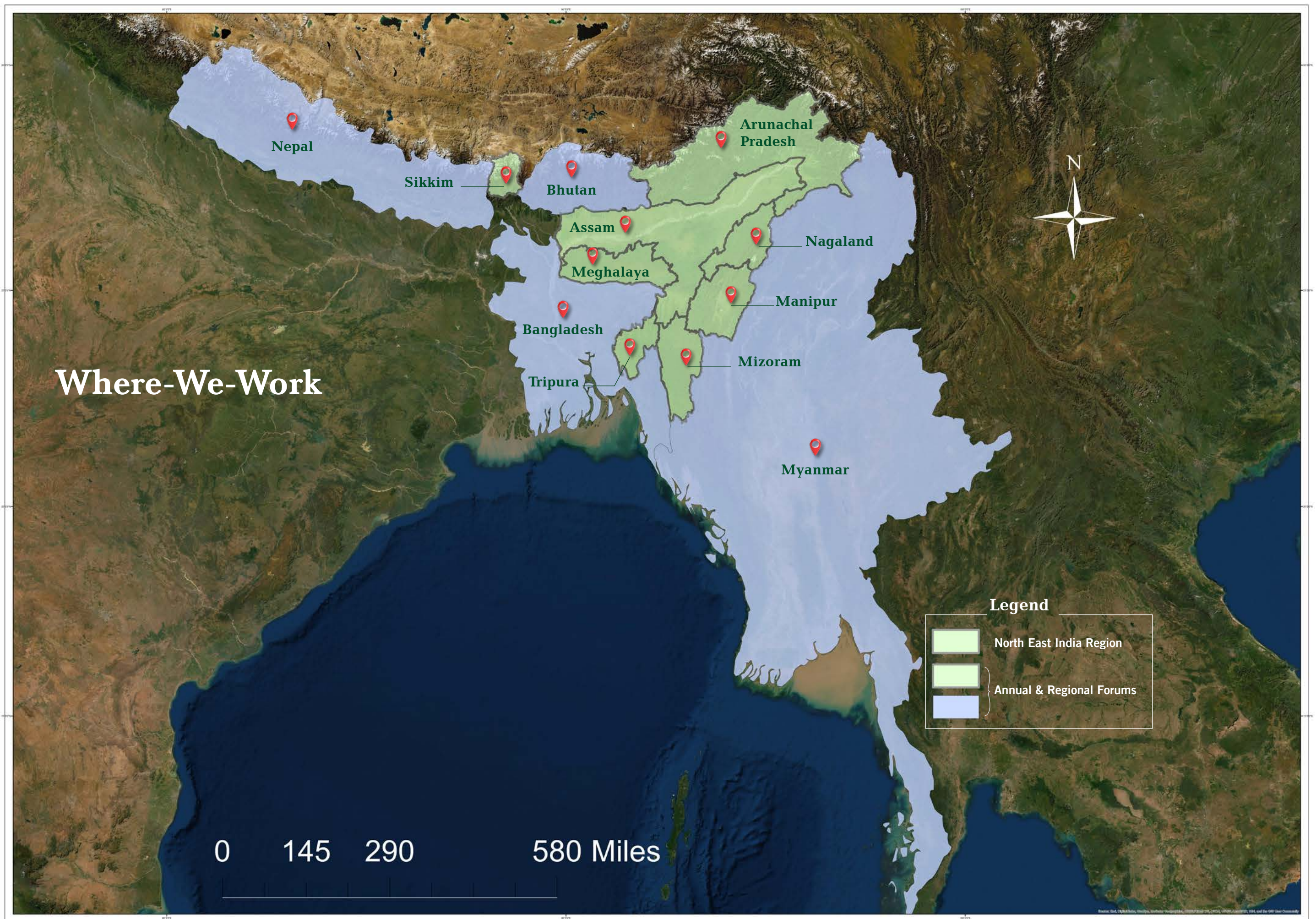
**Scientific natural asset management & maintenance** – communities are trained in techniques for managing forests and agroforestry, including natural resource management, monitoring forests, and conducting ecosystem assessments including biodiversity assessment and soil health measurement



# HIGHLIGHTS OF 2020-21 GEOGRAPHICAL FOOTPRINT









# HIGHLIGHTS OF 2020-21

## HABITATS

### Community Partnership (6 sites)

- Balipara Reserve Forest - {Tarabari-2,20,795 trees, Bogijuli-30,000 trees, RuFu® Lab (Baligaon, Sikkom)-1,00,815 trees}
- Udalguri Landscape Mission - {Sonai Rupai (74,240),Khalingduar,Bhairabkunda(2,19,870)}

### Corporate Partnership (2 sites)

- Hathipahar Conservancy - Botanic Ark Landscaping consultation
- Kanchanjuri Tea Estate - Botanic Ark Landscaping consultation

### Government Partnership (1 site)

- RuFu® Plantation Model in Eraliloga pothar - Forestry plantation consultation

### Community Agroforestry (2 sites)

- Baligaon - 4834 saplings grown in the nursery and distributed for plantation in Baligaon
- Garo Hills - Pilot 10 households in South west Garo Hills
- 0.3 Million saplings raised in community nursery
- Livelihood Opportunities to 1196 households, 40% per capita income increase

Area	Planted (#NatAssets)	Productivity (NatAssets/ Man-day)	Man-days	Revenue to community (INR) (incl. dweeding)
Balipara Reserve Forest	2,50,795	30	8490	73,20,996
Baligaon RuFu® lab	1,00,530	55	1816	12,90,435
Udalguri Landscape Mission	2,19,870	36	6058	40,42,831
Sonai Rupai(SR)*	74,240	59	1248	16,04,254
Total/Avg	6,45,435	45(avg)	17612	1,42,58,520

### Since 2017

2 Million over 2000 ha	5 million over 5000 ha	INR 140 million	8500+
Total Natural Assets created	Total Natural Assets managed	Direct community revenue generated	Individuals impacted

## LIVELIHOODS

### RuFu® Agroforestry

(Initiated implementation from March 2020)

- 4834 saplings grown in the nursery and distributed for plantation
- 10 households Pilot in South west Garo Hills

Crop	Planted/ Unit set up	Households covered	Harvested till date (Kgs)	Revenue till date (INR)	Expected Revenue by Dec 2021/household (INR)	Revenue per year / household** (INR)
Plant species	86,500	176	600	18,000*	39,500	2,59,000
Mushroom	5	50	250	50,000	2,50,000	24,000

\* Harvested crop - Turmeric

\*\* on maturity of 7 crops from 4th year





## RESEARCH AND MODELLING

### Biodiversity Research

- 1st baseline data collected across Balipara Reserve Forests plantation sites

- No of quadrates: 115
- No of flora- 359
- No. of fauna- 105

### Fungi

- New bioluminescent species, scientific paper published in journal Phytotaxa - “Roridomyces phyllostachydis (Agaricales, Mycenaceae), a new bioluminescent fungus from Northeast India”
- Publication in journal Comprehensive review in food science and food safety- “Reviewing the world’s edible mushroom species: A new evidence -based classification system”
- 380 species under analysis, +1 paper submitted for publication

### Bioresource and Sustainable livelihoods in North East India-

#### Quantitative inventory of the distribution and diversity of flowering plants and biological resources in Assam

- No. of markets covered: 5
- No. of species: 59 flora and 4 fauna species.
- Total since inception- No. of species: 427

## EASTERN HIMALAYAN NATURENOMICS™ FORUM – REGIONAL & GLOBAL

### EHNF – Global

- Leading influential 112 speakers (Global leaders, ministers, academicians, NGOs, activists)
- Participation of 25 countries
- Digital Reach of 1.5 million connecting the global audience
- Forum Features and publications with 128 releases and 12 publications
- TV coverage with 5 talk shows, 17 episodes in North-east and National channels

### EHNF – Regional

- 15 Regional EHNFs hosted in 8 North-eastern states and 4 Eastern Himalayan countries
- 3 Workshops

### Naturenomics™ Dialogues

- 1st Digital Dialogue hosted 7 sessions with 40 eminent speakers

### Balipara Foundation Awards

- 13 Balipara Foundation Awards Recipients
- 113 recipients so far
- 2000+ hectares forest land restored
- 3000+ livelihoods positively impacted





## Communications



1.9 million



384 connections



Followers-27,136  
Reach-9,61,000



511 subscribers



Followers- 3478  
Reach-99,200



28 Volumes  
Subscribers - 1,600



Followers-2008  
Reach-12,800



Users - 8,166  
Page Views - 28,770

## Publications

### Print Articles

Total - 49 articles

-Bioluminescent mushroom glows in the forests - a new Mushroom Species picked by national outlets

-RuFu® programmes and Ecology is Economy featured in national outlets like Down To Earth, The Hindu & India Development Review

### Press releases

- 45 pieces

### Digital Articles

8 stories, 401 reads, 1230 views

### Publications

The Himalayan

The Naturenomics™ Ecological Revolution

RuFu® Vol. 1 signed with Elsevier

Ethnobotany Book

## Partnerships

### ATREE

### Envirate & Earthbanc

-P2P investment for growing trees & restoration & agriculture

### Google India

-AI for Social Good Workshop

-Google Arts & Culture

### Hindustan Unilever Limited

### HT Parekh Foundation

### Impulse NGO Network

-Rural Futures Impulse Model prevention Co-Creation

### India Climate Collaborative

### Tata Steel Foundation

### Tata Trusts

## Internships & Volunteering

### Internships & Volunteering

~32 interns

Elephant research & monitoring

Indigenous Storytelling







# HOLISTIC COMMUNITY DEVELOPMENT:

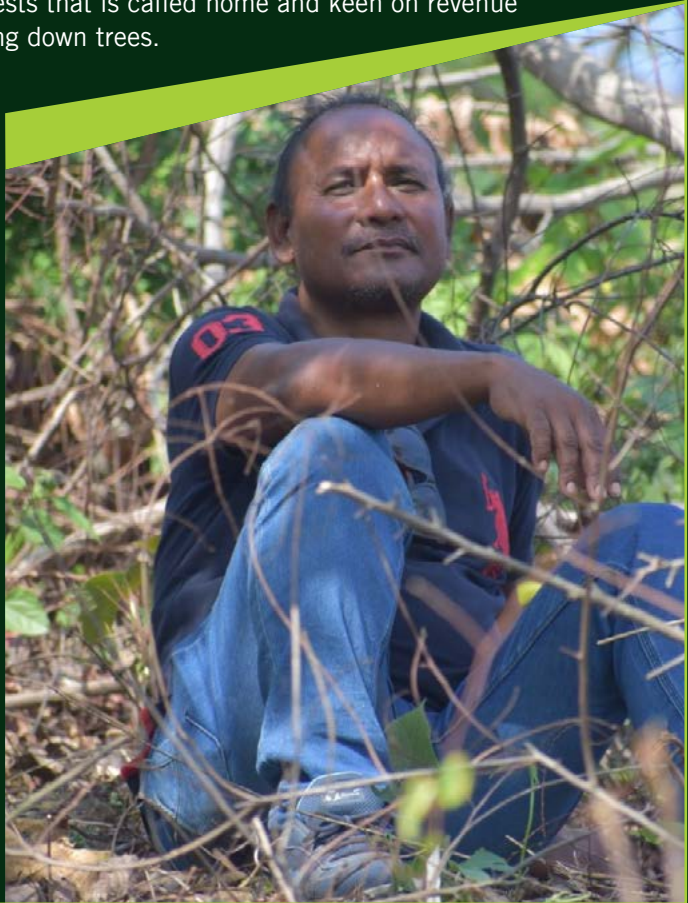
## COMMUNITY CASE STUDIES

### Case Study I: Dimbeshwar Brahma

Having been associated with Agriculture and Forestry for a huge span of his life now, Dimbeshwar Brahma has attained extensive knowledge over several crops and numerous cultivating techniques. Being associated with the Forest Department for a few years, he has attained a vast knowledge on use of plants, herbs and trees endemic to the forest. A member of MASK, he has also worked on projects on Asiatic Elephants leading to a decline in human-elephant conflicts. Hailing from a rural area close to forest he has witnessed the grave consequences of deforestation.

After having worked with the community people on the RuFu® programmes, that has led to plantation of over 4 lakh trees, in the Balipara Reserve Forest area for two years, he is confident on the idea of restoring the forests that is called home and keen on revenue generation from it in future without chopping down trees.

“I started working with my community on the Rural Futures programme in the Balipara Reserve Forest early last year and what drove me was the idea of restoring the forests that we call home and the idea that we would be able to generate future revenue from it without chopping down trees. We’ve seen the grave effects of deforestation in our area – reduced rainfall, reduced fertility of our soils and an increase in human-elephant conflict. The Rural Futures programme has not only planted over 4 lakh trees in our forest area but has also immediately increased our annual incomes by 40-50%; In my case, over 50%. We look forward to continuing this work to restore our forests and are glad about this avenue of being able to mix forestry and farming for revenue – our communities have also started growing a lot of our indigenous medicinal crops again and the benefits of this are many”





## Case Study II: Senai Mili and Maheshwar Mili

The agroforestry model under Balipara Foundation's RuFu® programme integrates trees on farms and agricultural landscapes, diversifying and sustaining production for increased social, economic and environmental benefits for our indigenous communities at all levels.

Senai Mili and Maheshwar Mili from Baligaon Green village, Sonitpur district are entrepreneurs who have implemented the agroforestry model on their land. The model has helped them earn livelihoods with a profound ecological impact addressing soil, health, water sequestration, income and biodiversity revival all in one go.

"We have begun planting and nurturing papaya, turmeric, ginger and many other plants in our homestead, and this model is helping us earn revenue by selling in the market and the village. Agroforestry has helped increase resilience of farming systems in the village and has supported us to open homestay doors for tourists from all over the world. We serve the tourists vegetables and food from our agroforestry land, and make ethnic Mishing delicacies. This entire model has helped us add value to environment securities, and has been providing us better economic returns"



## Case Study III: Dusila Mili

In Baligaon Miri village, women entrepreneurs have set up mushroom incubation units as a way for food security and securing livelihoods.

Dusila Mili, an entrepreneur of Baligaon Miri Village (Baligaon RuFu® lab) with her local women's group, has been working tirelessly with Balipara Foundation's agroforestry based livelihood program, cultivating mushrooms and further integrating their livelihood opportunities into a holistic, eco-friendly market based solution. Not only she has been benefitted financially, to sustain her family needs, but she has also been successful in driving the local groups of her village towards conservation and cultivation of mushrooms.

"It's profitable to do mushroom cultivation. My household expenses are fulfilled by it and additionally, I can save some time and money as well. The procedure also offers mitigation co-benefits, as the mushroom farming uses rice straw waste, which would otherwise be burned and cause noxious smoke and greenhouse gases. The leftover from the mushroom cultivation can also be used as bio-fertilizer and thereby helps in replenishing soil and reducing both the amount of chemical fertilizer needed and the costs and pollution from excess chemicals in the soil."

Dusila now earns up to Rs 10-15K per month through mushroom farming and cultivation. The mushroom farming she is engaged with also includes and employs as many as ten locals in one unit.





# RURAL FUTURES HABITAT RESTORATION

The Eastern Himalayan region is amongst the last remaining bio-cultural hotspots of the world with 2 biodiversity hotspots and over 400 different indigenous communities sharing space with biodiversity. Ever-increasing human population in this broader region has led to a 'battle' for resources leading to a situation where increasing human aspiration is a constant threat to biodiversity. Through this programme, we aim to make indigenous communities the stewards of their natural inheritance through pilot programmes towards restoration of degraded forest habitats & enhancing natural assets, creating a system for sustainable natural capital optimization – liquidation for delivery of universal basic assets to forest-fringe communities.

The first pilot was launched in 2016 in Udalguri district, Assam along Indo-Bhutan border areas. This was followed, in 2018, by an expansion into the adjoining Sonitpur district at the Balipara Reserve Forest. In 2020, we launched a new site adjoining the Sonai-Rupai wildlife sanctuary in the Udalguri-Sonitpur belt, along with further operations with new Joint Forest Management Committee partners.

All our work is led by a team with expertise in botany, ecological sciences, zoology, anthropology & geology. We do all our work in collaboration with local communities, and are supported by the local government through the Forest Department, the Govt. of Assam, the Ministry of Environment and its supported subsidiary, the Eco-Task Force.

## OUR VISION

**100 million  
trees**

**INR 107 billion  
in income**

**400,000  
people**

Through habitat restoration, we seek to impact over 2000 households by generating interim revenue of over INR 100 million and sustained nature-capital driven revenue over INR 1.5 million/household. This will be achieved from expanding our current sites to include 7 transboundary sites in the Assam-Arunachal Pradesh border areas and from 2000 Ha to 10,000 Ha. In the long-term, we believe this will provide a sustainable route for delivering Universal Basic Assets & Income to communities.

## Project Overview



Community-led seed-collection  
& sapling propagation



Community-led sapling  
plantation



Community Skills Training  
& Capacity Building



Biodiversity & Indigenous  
knowledge research



Citizen science  
programmes

## Impacts So Far



**2 million** Natural Assets  
created across 2000 hectares

**5 million** Natural Assets  
managed across 5000  
hectares



**INR 72 million**  
In community incomes  
through habitats



**INR 5.3 billion**  
In sustainable livelihoods  
on forest maturation



**Enhancing Community  
Institutions**

JFMCs, patrolling & monitoring groups,  
building alternate livelihood sources (e.g.  
ecotourism, weaves)



**Natural Resource  
Management Skills**

Towards autonomy and self-sufficiency for  
communities





# Udalguri Landcape Mission

The ULM project is located in the Udalguri District of northern Assam. It shares its northern borders with the mountain regions of Bhutan & Arunachal Pradesh, making it a foothills region and, thus, prone to flash floods from the many rivers that run down from the mountains and through the district. Its western, southern and eastern boundaries are shared by the Baksa, Darrang and Sonitpur Districts Across its entire northern range runs a network of Forest Reserves spreading across 6763 km2 and providing refuge to 40% of India's population of Asian Elephants.

In 2017, the Balipara Foundation launched this programme as the first habitat restoration project as the culmination of a decade of learnings in the conservation sphere. As a first project, the learning curve was steep, as we negotiated unfamiliar terrain : social, cultural and even within the conservation sphere. At the end of it, however of all the learnings we accrued through the ups and downs of the project, a single key learning has emerged - habitat restoration is a socioculturally embedded process and it was specifically that social and cultural history, here in Udalguri, that had paved the way for the project's highest points.



**0.688 Million**  
natural assets created through plantation



**Reforested**  
**289 Hectares**



**43 species**  
of saplings planted



**INR 4.651 Million**  
in community incomes through habitats

# Balipara Reserve Forest Management

The Balipara Reserve Forest Project (BRF) was launched in 2018 with a mission to identify drivers of conservation and development, with a focus on human-centricity to maintain the region's ecological balance in a sustainable fashion.

This ongoing process of regaining ecological functionality and enhancing human-well being across deforested and degraded forest landscapes has helped us build approaches and practices that provide opportunities for enhancing socio-ecological resilience in landscapes. A success of this model has been a realisation amongst the indigenous communities that restoring habitats is more than just planting trees – it is restoring a whole landscape, providing a habitat for biodiversity, contributing to soil and water conservation, preventing flooding and soil erosion to mitigate climate challenges and resulting in a multitude of ecosystem goods and services, adding to people's livelihoods, food and water security, and risk reduction.

With an endeavour to provide direct socio-economic mobility in the communities in the forest fringe areas, the model over the span of 3 years has helped shape resilience and livelihoods through agroforestry, habitat restoration, natural regeneration, mushroom farming and development of Universal Basic Assets amongst the communities.

2020-2021



**2,50,975**  
Natural Assets restored



**INR 73,20,996**  
revenue generated





# Rural Futures Community Nurseries

From paddy fields back in the day, to present day nursery which is around 2.5 hectares in size, the Seeds & Roots nursery at the Eastern Himalayan Botanic Ark is the first community nursery implemented by the Foundation under community mentorship and ownership. Today, this nursery includes seeds of endemic and indigenous species of forest trees, medicinal, ornamental and economically important plants which are collected from forests, wholesale nurseries and commercial gardens, following which these are germinated and propagated ex-situ and plays an important role as a centre for conservation of plant diversity, environmental awareness on plants, enhances the botanical education and supports in leading research. The nursery has also helped generate revenue for the communities as local botanists have played their roles in nurturing the seeds of this nursery.

Followed by successfully community ownership and a nursery model which has helped livelihoods, the Baligaon and Tarabari community nurseries in the Sonitpur district was introduced in the year 2019-20, allowing entrepreneur farmers to collect seeds from the forests throughout the year, nurture and grow them in the nursery till the next planting season of the Foundation’s restoration program. The saplings grown in the nursery are used in afforestation & agroforestry programmes and post-exit from a site, these nurseries continue to serve community needs for natural assets, as well as to feed the Foundation's afforestation programmes in other areas.



## 2020-2021

<b>Tarabari</b> <b>1,0,9000</b> <b>Saplings planted</b>	<b>Baligaon</b> <b>70,000</b> <b>Saplings planted</b>	<b>Seeds &amp; Roots</b> <b>10,1931</b> <b>Saplings planted</b>
---	---	---

**The plan for 2021-22 is to grow 1 million saplings in these Community Nurseries.**



**Jermia Muchahary**  
Rural Futures Community Lead

*“Exactly one year ago, there was no plantation work going on in the area but now with the help of MASK and Balipara Foundation, the Tarabari village residents have taken initiative to restore habitats. Eventually we will be able to cover the entire Gunesia mountain with trees through our Rural Futures plantation work. I hope in future we keep working together towards planting more trees for the benefit of the community”*

*Rural Futures Community Nursery in Tarabari*



# AGROFORESTRY & LIVELIHOODS

## Fungal Diversity

Mushroom cultivation has helped directly improve livelihoods through economic, nutritional and medicinal contributions. Increasing consumption of whole, unprocessed foods, like mushrooms, appears to decrease the risk of obesity and overall mortality, diabetes, and heart disease. However, it is essential to note that some mushrooms are poisonous and may even be lethal, thus the need for extra caution in identifying those species that can be consumed as food. Separating edible from poisonous species requires meticulous attention to detail - there is no single trait by which toxic mushrooms can be identified, nor one by which most edible mushrooms can be identified. With fungal biodiversity assessment, the global biodiversity of fungi has been extensively investigated and it has become easier for the rapid identification, characterization and detection of important plant fungus.



Today, mushroom farming and cultivation play an important role in supporting the local economy by contributing to subsistence food security, nutrition, and medicine; generating additional employment and income through local, regional and national trade; and offering opportunities for processing enterprises. Mushroom production represents one of the most commercially important steps towards diversification of agriculture based microbial technology for large-scale recycling of agro-wastes in an agricultural country like India. It relieves the pressure on arable land, because its cultivation is indoors, it doesn't affect the forest and its diversity. Due to its high demand and value, both economic and nutritive, makes it an absolute alternate source of livelihood for north eastern landscape of India.

Started in the year 2018, the Fungal Biodiversity programme has been designed in two phases over the period of 4 years. The Phase 1 has been started in 2018; the chronology is as follows -

### Phase 1:

- A) Assessment of the Mushroom Biodiversity in the North-Eastern region of India
- B) Create scientific Journal and seminal book documenting and cataloging the Mushrooms of the area
- C) Passing this knowledge to the local communities
- D) Equip communities with mushroom cultivation techniques by advocating cultivation of Oyster species through community cultivation units

### Phase 2:

- A) Domestication of potential wild varieties of mushroom and culture
- B) Establish research station to assist in the cultivation of these Mushrooms
- C) Workshops and consultations to the local growers for cultivation of these varieties to prevent malnutrition & ensure food-security
- D) Production of quality spawn and distribute to growers



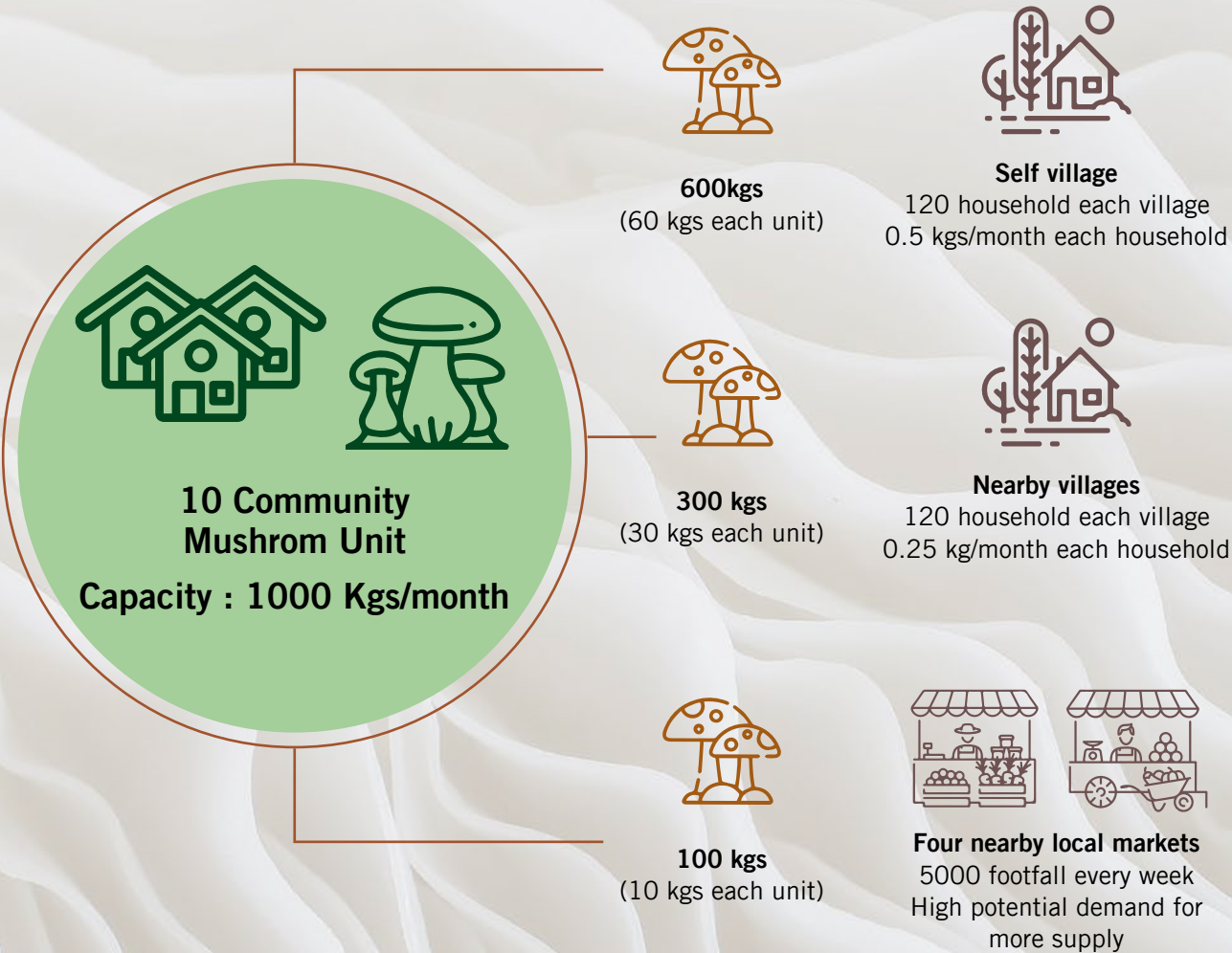


# Mushroom Farming: Community Cultivation Units

Over the period of 4 years, the programme envisions to expand the footprint of mushroom farming in the Eastern Himalayas and set up community cultivation units - mushroom units that will the villagers, and provide livelihood opportunities. In Baligaon Miri village, 5 out of 10 mushroom incubation units have been set up as a way for food security and securing livelihoods. This community participatory project is helping empower communities and increasing self-sustainability of the villagers by providing health benefits. This has helped generate livelihoods to 50 livelihoods, harvesting 250 kgs over the past year and earning community income of INR 50,000 from the 5 units.



# The Implementation Model





# Bioresources and Sustainable Livelihoods in North East India



Collection of wild bioresources documented during household survey

## Quantitative assessment and mapping of plant diversity and biological resources in Upper and Lower Assam

The Eastern Himalayan state of Assam has a heterogeneous population of diverse ethnic communities having a wide range of socio-cultural background. These communities depend on biodiversity, bioresources and ecosystem services for their subsistence. Thus, the project aims to examine bioresource-based livelihoods and develop adequate institutional and policy response to mitigate the negative impacts of global environmental change, while also ushering the region into a new bioeconomy. The study is principally being undertaken in the Brahmaputra valley of Assam, with a target to encompass major ethnic communities (Adivasi, Ahom Bodo, Karbi, Dimasa, Kachari, Mishing, Rabha, to name a few) apart from the Assamese.

### Key project activities:

- Quantitative assessment and documentation of the diversity of flowering plants and biological resources available in the selected grids of the upper and lower regions of Assam.
- Maintenance, archiving and digitalization of collected specimen of flowering plants and bioresources.
- Computation of data on forest mensuration and community parameters for study and analysis of species richness and diversity patterns of flowering plants documented during the transects studies.
- Computation of data on wild bioresources available in Assam and study of their distribution and uses.
- Publications related to distribution and diversity pattern of flowering plants, use pattern of biological resources and traditional knowledge related to use of bioresources by local communities in the region, checklist and monographs of flowering plants from the region.



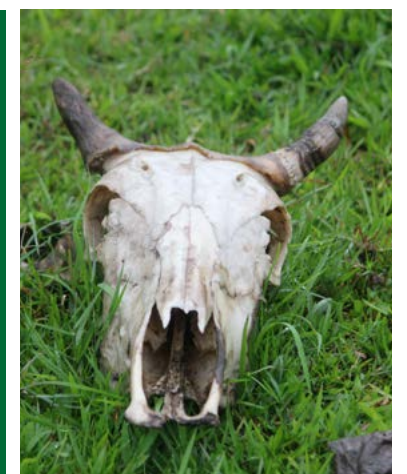
Team Members

### Impacts so far:

- Ecological: Documentation of the flowering plants of the protected and community forests of upper and lower Assam serves to understand the rich diversity, species richness and distribution of flowering plants and other bioresources in Assam.
  - 1582 species of angiosperms have been enumerated from a thorough study of data from secondary sources on the habitat and distribution pattern of the vegetation of Assam.
  - Population studies by transects method have been conducted in protected areas of Assam such as Balipara reserve forest, Behali reserve forest, Dibru-Saikhowa National park, Kaziranga National park, Orang National park, Nameri National park and Sonai-Rupai wildlife sanctuary. In total, 137 tree species, 54 shrub species and 236 herbs have been recorded during those transects studies.
  - To document the wild bioresources used by local communities, household surveys have been conducted in 550 households (in 50 forest-fringe villages across five districts of Assam), as well as in 32 weekly markets (seasonal replicates for 30 markets, plus 2 new markets across 15 districts of Assam). In total, 190 wild species of bioresources have been recorded from those surveys.
  - The 2 newly surveyed markets had a total of 50 products of 43 plant species and 4 animal species. 80% of the products were edibles while 10% were household utility items such as brooms, bamboo products, jute ropes, etc.
  - Curation of collected specimen of plants includes a herbaria of 372 species.
- Socio-economical: From the market and household surveys, it was found that 68% of the different communities depend on wild bioresources for their sustenance and livelihood (5 – 75% of the total income). The study has brought into light economically important wild bioresources such as bamboos and rattans, resins, gooseberry, wild species of bananas, mushroom, and spices, etc. The traditional knowledge of the medicinal values of several wild products used by different communities has also been documented.

### Literature/Publications:

- A manuscript titled “Economic significance of wild bioresources to rural communities in the Eastern Himalayan state of Assam, northeast India” is under review (revisions being processed) at the journal *Trees, Forests and People* (Manuscript no.TFP-D-20-00181R1).
- A manuscript titled “Potential wild bioresources for commercialization in Assam, northeast India” has been accepted to be presented at the International Conference on Emerging Trends In Environmental Science and Technology organized the Department of Environmental Science, Tezpur University (Assam).





# Ghor Bari – The RuFu® Agroforestry Model

RuFu® Agroforestry which is termed as Ghor Bari is a concept of creating food forests on empty lands belonging to families and the communities. The model provides maximum benefit by optimally leveraging soil, water and sunlight flourishing without any human interference; producing ample food, healthy growth and contributing to a balanced ecosystem. Agroforestry involves planting 7/8 different varieties of saplings of trees and shrubs which require less management but has great revenue returns. The saplings which are planted are Moringa, Papaya, Lemon, King Chilly, Sweet Potato, Turmeric, Pumpkin, Ginger and Black Pepper. However, the execution of Agroforestry requires meeting a checklist which are



- 1) 1 bigha land
- 2) Availability of water
- 3) Clear land without any existing trees or plants

In the year 2020-2021, 86,500 saplings have been planted covering a total of 176 households. Revenue generated till date is INR 18,000 and expected revenue by December 2021 is 39,500 (per household). Total revenue that will be generated per year/household is INR 2,59,000. 5 mushroom units were set up covering 50 households through which revenue generated is INR 50,000 till date and by December 2021 expected revenue generation is INR 2,50,000.







# EASTERN HIMALAYAN BOTANIC ARK

The Eastern Himalayan Botanic Ark is the seed of all our operations, growing since the first saplings were planted in 2005. Formally launched in 2016, the Ark has radically transformed the landscape of the 22-acre campus it shares with our social initiative Wild Mahseer, restoring once decimated green cover.

Today, the Eastern Himalayan Botanic Ark is haven to a rich sampling of Eastern Himalayan biodiversity, serving as an ex-situ conservation centre and nursery for our afforestation programmes in Balipara Reserve Forest. It is also the heart of all our research operations, seeking to become a centre for research, experimentation, documentation and education of the natural biodiversity of the region, as well as the rich traditional knowledge of its communities, starting with the Mishing, Garo, Assamese and Nyishi communities.

## Our Impacts so far:

 <b>3</b> Journal Publications In peer-reviewed journals	 <b>300+</b> Plant Species	 <b>70+</b> Butterfly Species	 <b>75+</b> Bird Species Through ex-situ conservation
--	--	---	---



# Explore the Ark



ORCHIDARIUM AND FERN HOUSE



BIHU-XHAAK CONSERVATORY



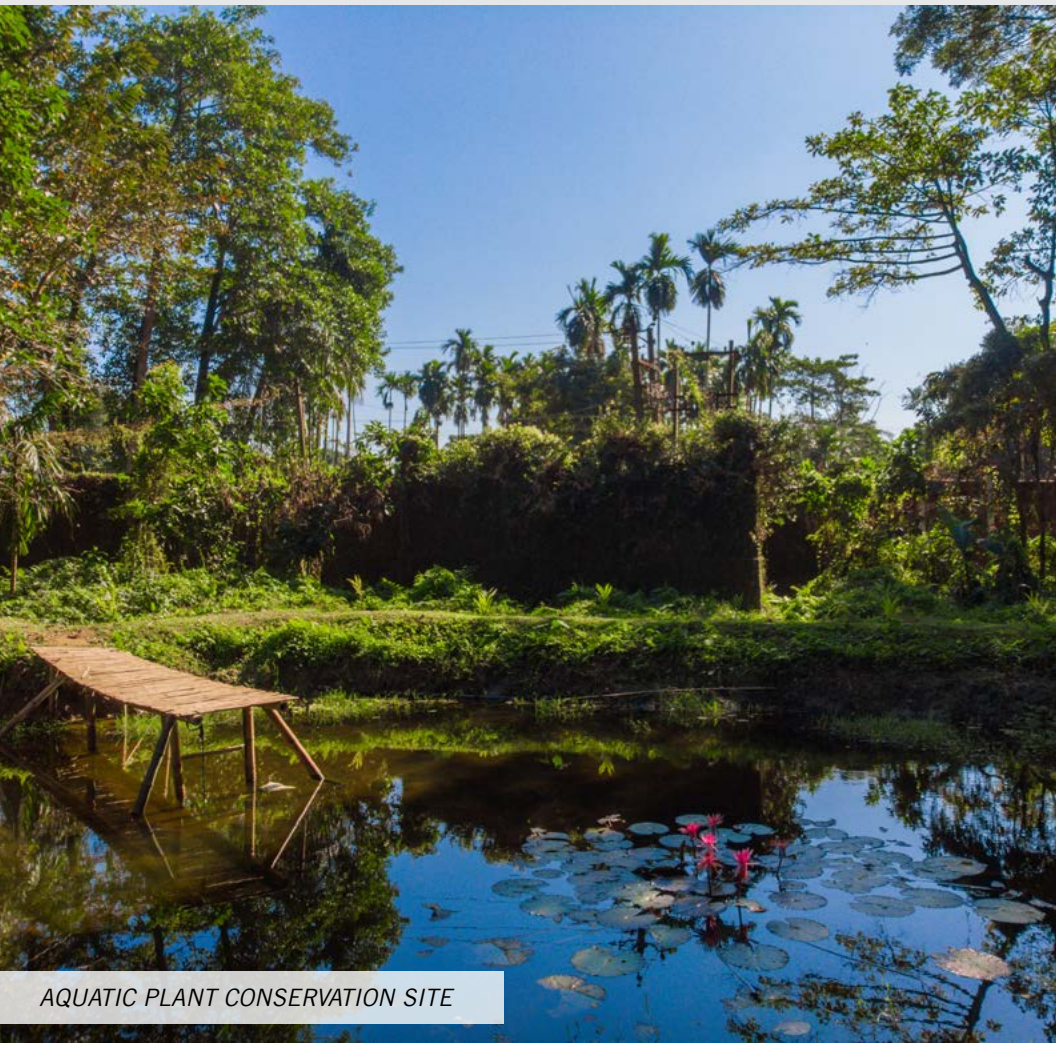
BAMBUSETUM



MUSHROOM UNIT



SEEDS & ROOTS NURSERY



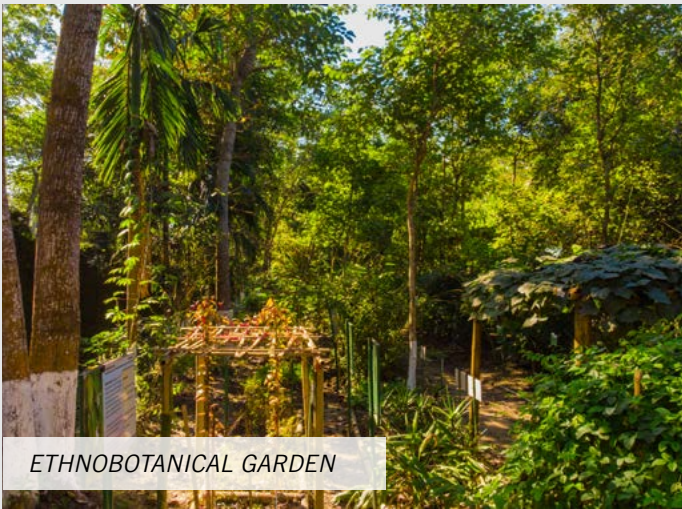
AQUATIC PLANT CONSERVATION SITE



FOOD FORESTRY



ORGANIC MANURE



ETHNOBOTANICAL GARDEN



AGROFORESTRY GARDENS





*"The main objective of our Botanic Ark is to preserve, collect and replant the species that have diminished from Assam and the forests. We also give out saplings to the Forest Dept, villages. The environment has been very depleted, so we give out saplings to the people from the Botanic Ark nursery to young people to create awareness."*

**Rajen Kurmi**

*Supervisor & Local Botanist  
Eastern Himalayan Botanic Ark*





# NATURE-EDUCATION

## Eastern Himalayan Naturenomics™ School

Located in the Eastern Himalayan Botanic Ark the Eastern Himalayan Naturenomics™ School is 'dedicated to inspiring the Eastern Himalayan community and promote the culture of interdependence'. Through the principles of Naturenomics™ we engage people of all ages and cultures and 'sensitise them to nature through practical activities'. We encourage and empower local experts from the community around the Eastern Himalayan Region who know their surroundings to enhance the learning of our participants. The School presents a unique opportunity to learn about Nature through a combination of indoor-outdoor learning. Through the various programmes at the school students will have an opportunity to learn from the local communities and encounter the myriad perspectives on the interdependence between Nature and Economics.

### Objective

To create a unique learning experience combining Nature, traditional knowledge and new learning techniques to inspire a new generation of eco crusaders



Naturenomics™ Workshop - Women Entrepreneurship with a special focus to farming



World Environment Day:  
Importance of plants and its preservation



Citizen Science Programme Among  
7 Communities of Balipara, Assam



Photography Workshop



Understanding Geographic Information System (GIS)



Importance of Conservation of Birds

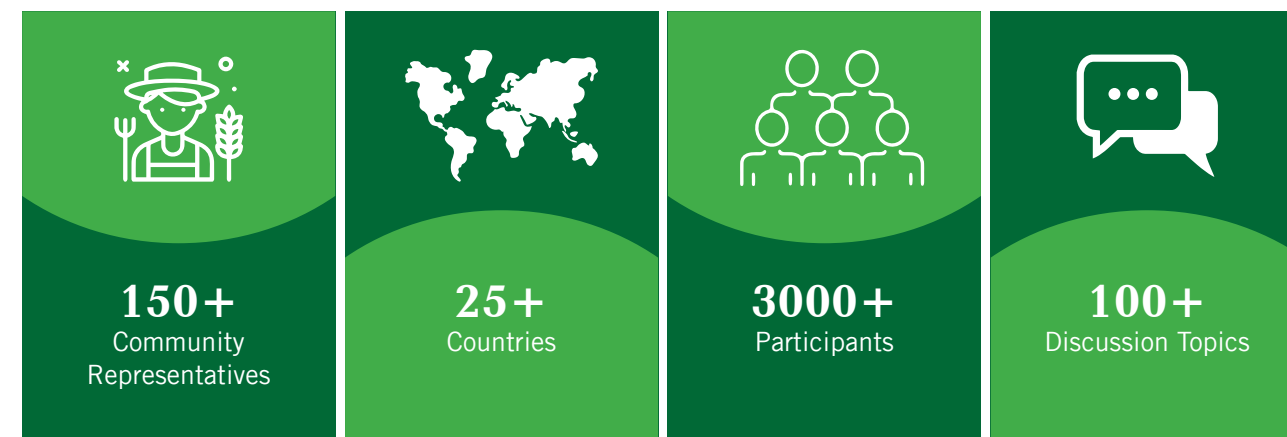




# EASTERN HIMALAYAN NATURENOMICS™ FORUMS

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, eight years (2013-2020) of Eastern Himalayan Naturenomics™ Forum has led to participation from over 25+ countries, 3000+ distinguished speakers and participants from multi-disciplinary fields and recognized 113 Balipara Foundation Awardees.

The platform is a space where voices and thoughts manifest in various forms – panel discussions, individual talks, and Balipara Foundation Awards.



## 1st EHNf Virtually Hosted

### Ecology is Economy | 1st - 5th Dec 2020

The COVID-19 pandemic has been a stark reminder of human's dysfunctional relationship with nature, as the existing economic system has always acted as a great pressure on our natural environment, and the unfolding pandemic has shone a light on the domino effect that is triggered when one element in this interconnected system is destabilized. Through the Eastern Himalayan Naturenomics™ Forum 2020, we took this as an opportunity to discuss how do we ensure that forests continue to play a central role in people's wellbeing, without raising the risk of deforestation and forest degradation. Rethinking how we use natural capital, can help us think a revolution to bring ecology back to economy Connecting over 25+ nations from across the globe Virtually reaching over 100+ resource persons/speakers from across the globe, an amalgamation of global leaders, corporate leaderships, government leaderships, academicians, scholars, NGOs and community representatives

Extensive solution driven deliberation on topics in context to the theme of Ecology is Economy' diversified under the key thematic zones of :

<b>Government Sessions -</b>	<b>2</b>
<b>Business Sessions -</b>	<b>5</b>
<b>Leadership Sessions -</b>	<b>3</b>
<b>Global sessions -</b>	<b>7</b>
<b>Regional sessions -</b>	<b>11</b>

## ROADMAP FOR THE FUTURE : EHNf 2020 OUTCOMES





## The Naturenomics™ Dialogues

The first edition of the Naturenomics™ Dialogues, Ushering in the Ecological Revolution, explored how we can rethink our use of natural capital, to start a revolution to put ecology back in economy – the Naturenomics™ vision.

Joined by over 30 diverse experts, the dialogues extended across 7 sessions exploring a natural capital recovery in the Eastern Himalayas and India.

The series brought together eminent speakers such as Dr. Vandana Shiva (Navdanya), Amb. Shyam Saran (Center for Policy Research), Amb. Chandrashekhar Dasgupta, Amb. Gautam Mukhopadhyaya, Dasho Paljor Dorji (Govt. of Bhutan), Dr. Ashok Khosla (Development Alternatives) and S. Ramadorai (ex-TCS).

Through hour long deliberations broadcasted to a live audience on both Zoom & Facebook, our eminent speakers explored the following themes:

1. Transforming Business & Policy
2. Rural Resilience
3. Redefining Growth
4. Women's Voices
5. Restoring & Managing Habitats



## Balipara Foundation Awards 2020

### 13 Recipients Across 7 States and 3 Countries



**Trinity Saioo**

Meghalaya, India

**Annual Balipara Foundation Award**

Organic Turmeric Farming & Women Empowerment

**Seno Tuhah**

Nagaland, India

**Naturenomics™ Award**

Community Conservation and Gender Justice



**Sangti Wanmei Konyak**

Nagaland, India

**Naturenomics™ Award**

Biodiversity Conservation and Documentation

**Association For Environmental Preservation**

Mizoram, India

**Annual Balipara Foundation Award**

Awareness and Action towards wildlife and biodiversity conservation







**Jorjo Tana Tara**  
Arunachal Pradesh, India  
**Naturenomics™ Award**  
Environmental Activism



**Nosang Limboo**  
Sikkim, India  
**Green Guru Award**  
Conversation of butterflies

**Akshar Foundation**  
Assam, India  
**Green Guru Award**  
Provides secondary education that balances vocational training with conventional academics



**Arannayk Foundation**  
Dhaka, Bangladesh  
**Nature Conservancy Award**  
Habitat Restoration, Climate Mitigation & Natural Resource Management



**Parimal Das**  
Tripura, India  
**Food For the Future Award**  
Organic Dragon Fruit Plantation



**Tin Tin Saw**  
Myanmar  
**Lifetime Service Award**  
Community Forestry

**Gyem Tshewang**  
Bhutan  
**Forest Rangers and Guards Award**  
A dedicated forester who coordinates with all tiger research and conservation work in the field at Bhutan



**Komison Mili**  
Assam, India  
**Special Recognition: Indigenous Leadership Award**  
Exceptional community leader and change maker for Baligaon



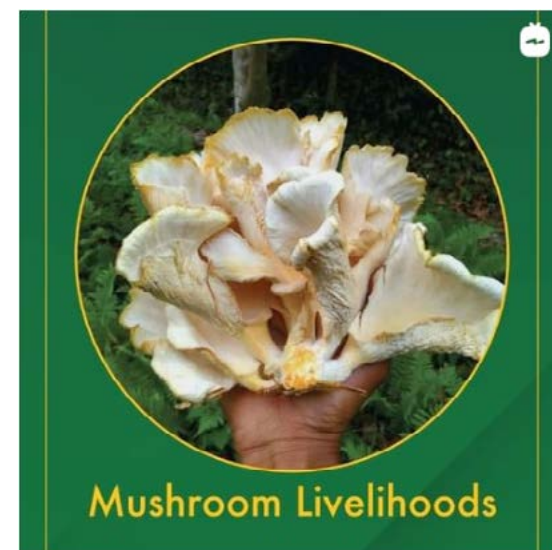
**Dr. Parimal Chandra Bhattacharjee**  
Assam, India  
Lifetime Service Award  
Icon of Wildlife Conservation



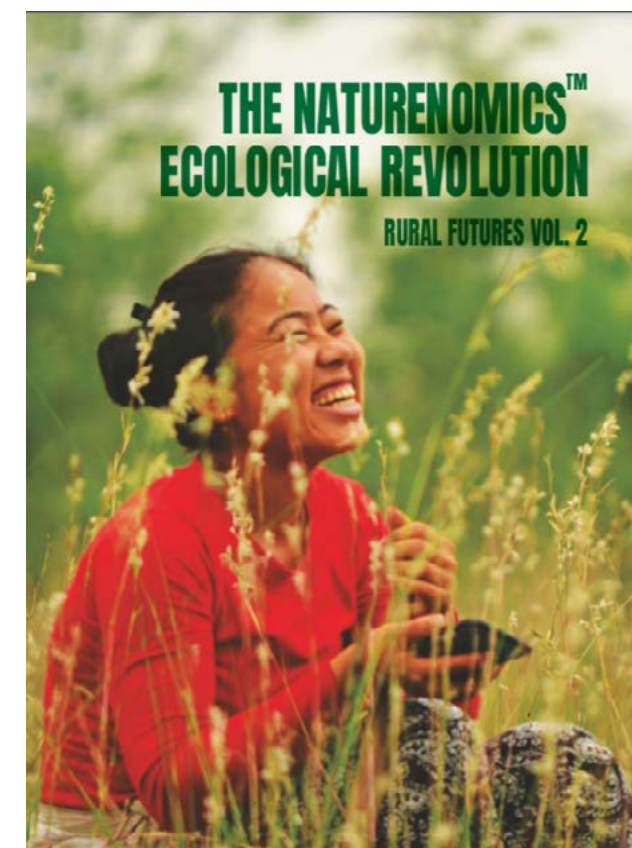
# DIGITAL STORYTELLING

Organizations are understood through the values they live, the actions they take and the emotions they spark in their audience. In Balipara Foundation, through digital storytelling we want to give a voice and a platform to the forest fringe communities of the Eastern Himalayas.

Rural Futures stories should tell a tale about “who the communities are” and “what gives their lives meaning” through community and livelihood stories and the general Eastern Himalayan scenario. Our vision is to create digital awareness on the Naturenomics™ civilization with stronger narratives that would enhance engagement and thus create a digital roadmap for our online audience to relate and be a part of our journey.

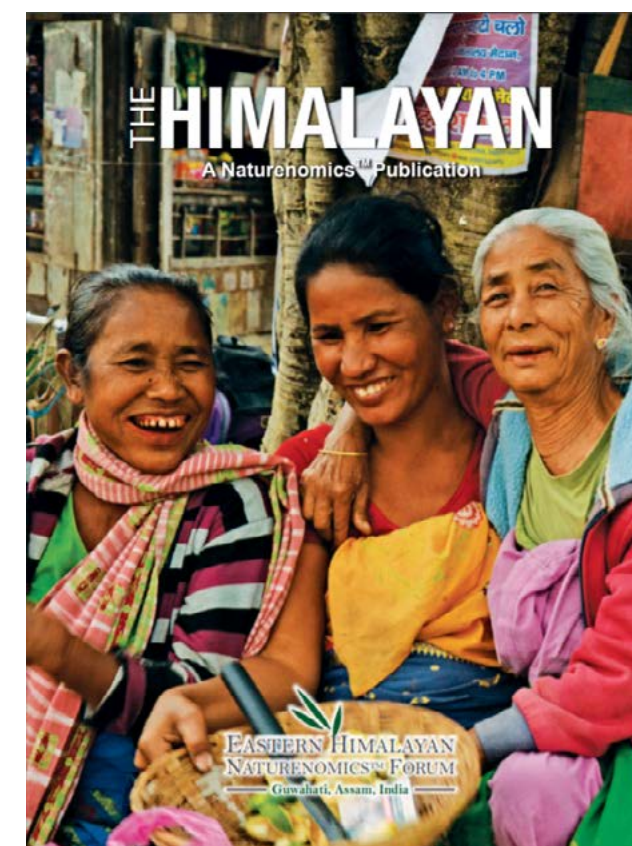


# PUBLICATIONS



## Rural Futures Vol. 2 - Naturenomics™ Ecological Revolution

In June 2020, the Balipara Foundation hosted the first edition of the Naturenomics™ Dialogues - Ushering in the Ecological Revolution. The Naturenomics Ecological Revolution builds on conversations from the series, exploring the way forward for a full transformation of the Eastern Himalayas towards key goals such as net zero, rewilding and natural capital linked employment. The publication also featured expert viewpoints from experts who were part of the series' panels, sharing their perspectives on strengthening women's livelihoods and employment, the role technology can play in the transition and the diverse needs of the different geographies of the Eastern Himalayan region.



## The Himalayan - A Naturenomics™ Publication

The 4th edition of The Himalayan travels to each of the states and countries within the Eastern Himalayan region, exploring the unique critical challenges each geography faces in managing its natural assets - and the opportunities for change and transformation. The publication was supported by experts who were part of the regional Eastern Himalayan Naturenomics Forum 2020, as they reflected on the most urgent action and policy needs - from sustainable Jhum in Mizoram, to indigenous cultural heritage and hydropower in Sikkim, to halting deforestation in Myanmar.



# RURAL FUTURES VOLUNTEERING & INTERNSHIP PROGRAMS

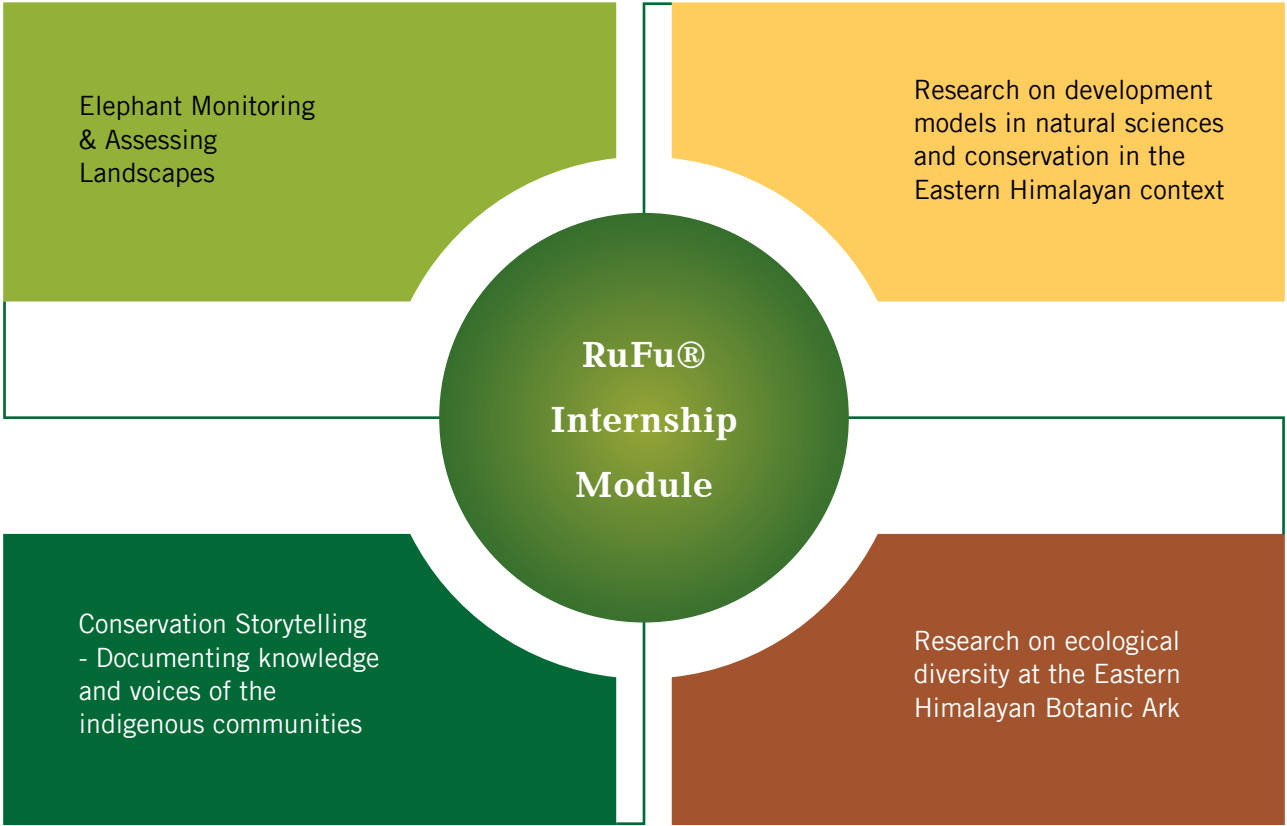
The Rural Futures Internship Program is a dynamic engagement of volunteers, interns and overall youth from across the globe by imparting them with rich indigenous traditional knowledge to understand and sustainable practice of the various ecological services provided by nature through the various verticals and flagship programs of the Balipara Foundation.

The idea behind creating this volunteering module is to create an open space learning platform for youth across the globe, which acts as a potential classroom to disseminate and amalgamate knowledge on the need to sustainably use natural capital, enhancing rural economies through the Rural Futures framework, and furthering the Naturenomics™ vision of ecology is economy.

Apart from access to the Balipara Foundation team and projects, the Rural Futures volunteering platform creates an opportunity to work with organizational partners such as Mahila Shakti Kendra, Impulse NGO Network amongst others. Through these interactions the interns and volunteers gain an insight into the unique challenges the Eastern Himalayan region faces in the face of changing social and environmental dynamics.

Through the Rural Futures Volunteering/ Internship platform, Balipara Foundation developed an integrated learning module for its volunteers/interns, that comprises to a series of curricular activities in lines to the projects, scientific research and global discussions, the organization is currently initiating or aims to achieve in the near future.

2020-21





# PLANS 2021 & BEYOND

## HABITAT RESTORATION

- Livelihood to 1300 households, min 40 % per capita income increase
- 5 community nurseries producing 1 million saplings
- Introducing revenue crops for communities - Bamboo, cane and Timber
- Elephant insurance schemes across all habitat sites

Area	Scaling Up (#NatAssets)
Balipara Reserve Forest	4,00,000
Baligaon RuFu® lab	2,00,000
Panbari	1,00,000
Gibbon	1,00,000
Total/Avg	8,00,000

## LIVELIHOODS

### RuFu® Agroforestry

- Agroforestry Pilot 10 households in South west Garo hills, in 10 Bighas of land and 1 Mushroom unit
- Agroforestry 94 households in Panbari
- Extension Plan in Garo hills
- Cover 174 households of Baligaon under Agroforestry
- + 10 community cultivation Units in Baligaon covering 100 households
- 9 mushroom units in Panbari covering 90 households



## RESEARCH & MODELLING

### RuFu® Index/Impact Monitoring

- **Natural Capital modelling** - Effective modelling of natural capital prices & potential in the region & pathways for Universal Basic Assets investment
- **Eastern Himalayan Dossier** - Compiling data & information on state of forests, communities, policies & stakeholders in the Eastern Himalayas as a compelling needs assessment for the region
- **RuFu® Plantation model** - Set up plantation model and replicate at Balipara Reserve Forest department site
- **Elephant friendly plantation model** - Implement models in Balipara Reserve Forest department sites
- **Lifeplan Project** - A project in collaboration with University of Helsinki to Monitor and assess biodiversity parameters in Nameri and Balipara
- **Documentation of Biodiversity index** on all RuFu® sites
- **Mapping** – Eastern Himalayan forests along with Narsee Monjee Institute of Management Studies, Mumbai
- **Fungi** - Encyclopedia on edible species of North-east India, + 1 Scientific Paper





# Eastern Himalayan Naturenomics™ Forum – REGIONAL & GLOBAL

## Global

- EHNH 2021 Theme - Ecology is Economy
- Enhance relationship and engagement with the network of people

## Regional

- Expanding EHNH's through Regional Forums - 12 regional Forums
- Launch of the Indigenous Hub

## Naturenomics™ Dialogues 2.0

- Theme - Rewilding the Future

## Advocacy

### Advocacy - to drive the enabling conditions of RuFu®

- **Areas:** forests, indigenous land, rural entrepreneurship & agriculture, environmental accountability
- **Consultation workshops** - on EHNH roadmap for the region plans, in regional EHNHs
- **Naturenomics™ course modules** - introducing Naturenomics™ & allied concepts (natcap, nat assets) and new 21st century economic thinking on ecology in universities & among academic professors
- **RuFu® Farm networks** - on ground peer to peer learning & knowledge exchange



## Publications

### Articles

- Opinion editorials
- Coverage, longform, investigations
- Impact stories
- Digital Thought Leadership

### Publications

- RuFu® Vol. 1 Expanded edition with Elsevier
- The Himalayan
- RuFu® index - papers
- Ethnobotany

## Partnership Goals

- 100 million Natural Assets
- 10 Agroforestry communities, 50 Households each
- Net Zero Carbon Emissions by 2030
- Universal Basic Assets for communities





# OUR 2030 VISION



## Enhanced Natural Assets

Landscape ecological connectivity across the Eastern Himalayas



## Enhanced Social Mobility

Greater autonomy & decision-making, enhanced sustainable income opportunities for communities



## Universal Basic Assets

Universal access to healthcare, energy, water, education, quality livelihoods, food security, connectivity, transformative living spaces delivered through natural capital



**100 million**

Natural Assets



**INR 107 Billion**

Natural Capital Incomes



**400,000**

People



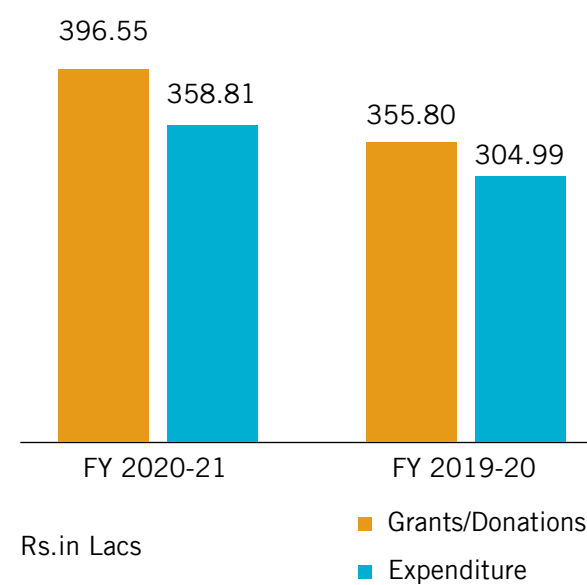
# FINANCIALS

## INCOME & EXPENDITURE ACCOUNT

For the Year Ended 31st March 2021

	Rs. In Lacs	
Income	FY 2020-21	FY 2019-20
Domestic Project Grants	391.39	346.99
FCRA Grants	-	2.13
Other Income	5.16	6.68
Total Income	396.55	355.80

Expenditure	FY 2020-21	FY 2019-20
Project Expenditure on Object of Trust	322.93	273.88
Depreciation	3.10	3.20
Admin & Operating Cost	32.78	27.91
Total Expenditure	358.81	304.99



## BALANCE SHEET

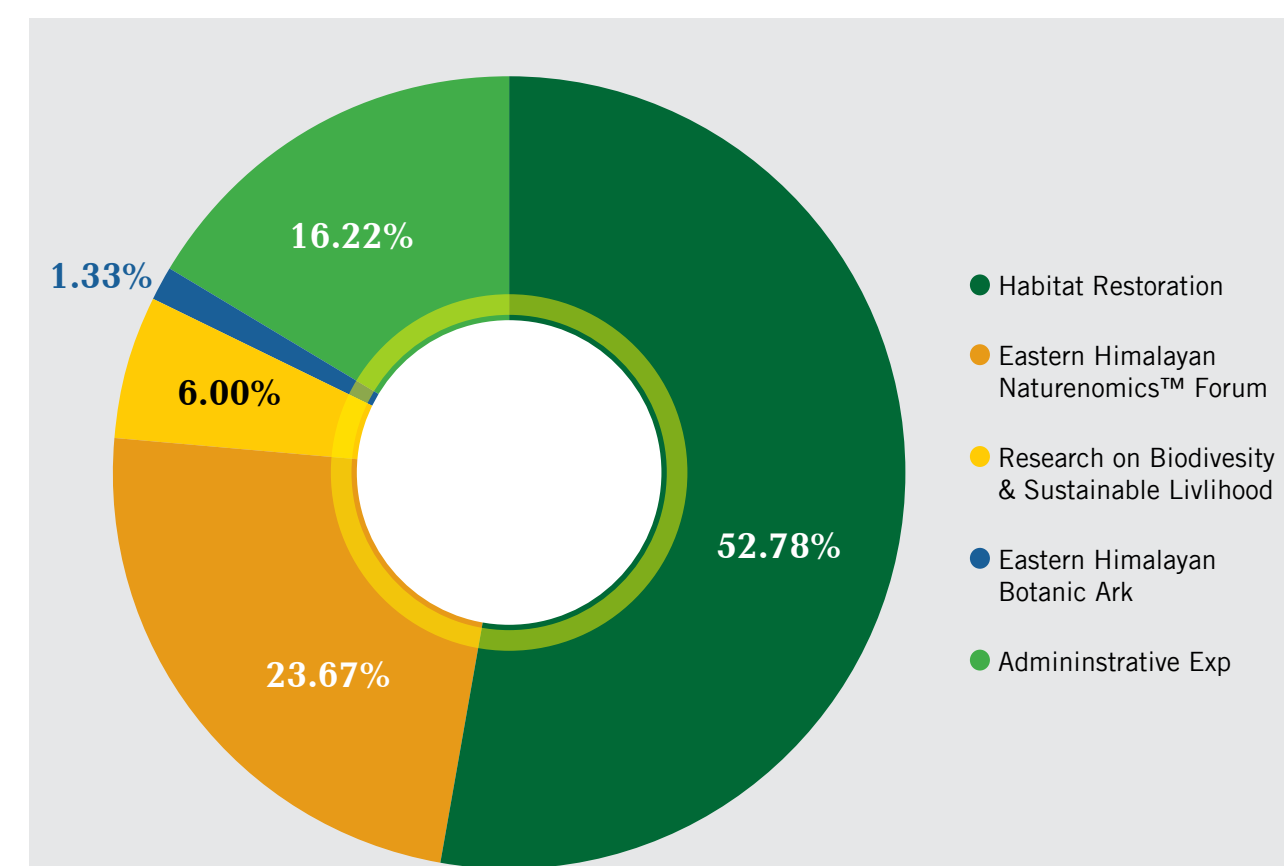
As at 31st March 2021

	Rs. In Lacs	
Fund & Liabilities	FY 2020-21	FY 2019-20
Trust Fund & Corpus	87.66	72.66
Grant Balances & Programme Fund	112.10	111.65
FCRA Fund	5.73	7.32
Non Current Libaility	33.15	33.15
Current Libaility & Payables	9.67	16.13
Total	248.31	240.91

Property & Assets	FY 2020-21	FY 2019-20
Fixed Assets	22.68	23.38
Investment	46.77	30.53
Cash & Bank in Hand	176.59	177.09
Other Current Assets	2.27	9.91
Total	248.31	240.91

## % Spent in Year of Total Expenses in FY 2020-21

Particulars	% Spent in Year of Total Expenses in FY 2020-21	Amount Spent for FY 2020-21 (Rs. In Lacs)
Habitat Restoration	52.78%	189.39
Eastern Himalayan Naturenomics™ Forum	23.67%	84.93
Research on Biodiversity & Sustainable Livelihood	6.00%	21.54
Eastern Himalayan Botanic Ark	1.33%	4.76
Administrative Expenditure	16.22%	58.19
Total	100.00%	358.81



\*These accounts are provisional

FCRA Consultant-  
AR Parikh & Co.  
Chartered Account  
Mumbai  
Ameet Parikh  
(Proprietor)  
M.No. 038188

Certified by-  
Prashant Joshi & Co  
Chartered Accountant  
Guwahati, Assam  
Prashant Joshi (Proprietor)  
M.No.313576  
FRN. 332423E



# OUR PARTNERS



# TEAM BALIPARA FOUNDATION





# OUR SOCIAL ENTERPRISES

## EASTERN HIMALAYAN BOTANIC ARK IN RESIDENCE AT WILD MAHSEER

Wild Mahseer is the hub of mindful tourism in Balipara County impacting community development and growth through rural livelihoods, social mobility and preservation of our Nature Capital.

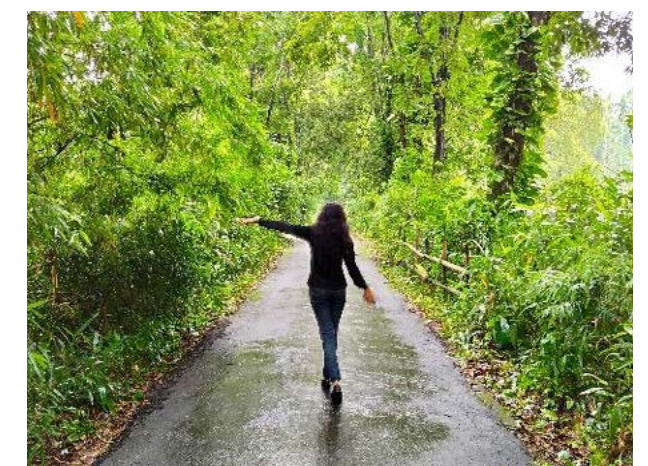
Your host here, is  
history & nature.



Spread over 22 acres and surrounded by tea gardens, the Wild Mahseer in Balipara, Assam is a British- era heritage bungalow that could easily become a habitual getaway. Nestled in the Adabarie Tea Estate the 145 years old Eastern Himalayan Botanic Ark in Residence at Wild Mahseer, will gently sweep you back in time.

Serenely tucked in the Brahmaputra valley and nurtured by the local communities of the Eastern Himalayas, the Eastern Himalayan Botanic Ark in residence at Wild Mahseer is an elusive natural and cultural paradise.

Located 25 kms away from India's cleanest city, Tezpur, Wild Mahseer is a bio-diverse Ark of 1,00,000+ plants, 90+ species of birds and 72+ species of butterflies and is also the gateway to the forests of Pakke, Kaziranga, Nameri and Orang. Imbued in history on a 22-acre land, it comprises of the Burra (visiting agent's) Bungalow (3 rooms), a mute spectator of the tea heritage that allows visitors to immerse in the nostalgia of the colonial lifestyle. Along with an additional 6 cozy tea bungalows (18 rooms), the First Flush dining pavilion and Two & A Bud conference facility all located on a certified organic property. So far 16,000 guests from over 42 countries have experienced the bio-cultural diversity of the region through the lens of Wild Mahseer.





# ELEPHANT COUNTRY



Incubated by Balipara Foundation, Elephant Country is a brand designed to synergise Asian Elephant conservation and community development. Elephant Country products are symbolic of the interdependent relationship between men and elephants. Crafted by local artisans of Eastern Himalayas these products tell a story of coexistence and a unique bond of nurturing and being nurtured. The idea behind these products is to provide alternate sources of revenue generation and livelihood to many forest-fringe communities.



## Partners and Associates

- Maati
- Das Handloom & Handicraft
- Aromica Tea
- NEST by Arpit Agarwal
- MASK
- Saneki
- Impulse Empower







A woman who grew up in the midst of nature,  
With the knowledge of the forest like none other.  
While touching and feeling innumerable leaves in her backyard,  
Can tell us tales of how they can cure ailments for centuries like art.  
This is the knowledge that needs to be preserved  
Let us think about the little bit that we can do to conserve.

- Mising Community, Sikom village



**Growing since 2007**

# BALIPARA FOUNDATION

Assam • India

[www.baliparafoundation.com](http://www.baliparafoundation.com)



Balipara Foundation



#baliparafoundation



@baliparafoundation



<http://www.medium.com/the-himalayan>