

# The Sundarbans Ecovillage in Bangladesh





# The Sundarbans

World's largest single mangrove forest





## Editorial

**Dr. Mohammed Muzammel Hoque**  
National Coordinator  
GEF Small Grants Programme  
United Nations Development Programme

**Md. Maksudur Rahman**  
Chief Executive, Bangladesh Environment &  
Development Society (BEDS)

**Dr. Sarder Safiqul Islam**  
Professor  
Agrotechnology Discipline  
Khulna University, Khulna, Bangladesh

**Md. Raqibul Hasan Siddique**  
Associate Professor  
Institute for Integrated Studies on the Sundarbans  
and Coastal Ecosystems  
Khulna University, Khulna, Bangladesh

**Md. Shafiqul Islam**  
Director Program, Bangladesh Environment &  
Development Society (BEDS)

**Md. Ashraful Hoque**  
Project Coordinator, Bangladesh Environment &  
Development Society (BEDS)

**S.M. Mahfuzur Rahman**  
Project Manager, Bangladesh Environment &  
Development Society (BEDS)

**Md. Shamsur Rahman**  
Project Manager, Bangladesh Environment &  
Development Society (BEDS)

**Md. Omar Faruk**  
Project Manager, Bangladesh Environment &  
Development Society (BEDS)

## Design

**Buddho Dev Mondal**  
Head of Design and Animation, Bangladesh  
Environment & Development Society (BEDS)

## Photo credit

**Md. Maksudur Rahman**  
**Buddho Dev Mondal**  
**Md. Shamsur Rahman**

## Content

1. Ecovillage.....	06
2. The Sundarbans Ecovillage.....	08
3. Community of the Sundarbans Ecovillage.....	11
4. The Sundarbans Ecovillage region.....	12
5. The Sundarbans Mangrove Ecosystem.....	14
6. The Sundarbans Ecovillage campus.....	16
7. Journey towards the Sundarbans Ecovillage.....	18
8. The key components of the Sundarbans Ecovillage.....	24
9. Green Housing.....	27
a. Mangrove restoration.....	28
b. Integrated Mangrove Aquaculture (IMA).....	30
c. 10 steps solution.....	32
d. Safe drinking water.....	34
e. Renewable energy.....	37
f. Cyclone shelter cum training center.....	38
10. Green Education.....	41
11. Green Business.....	42
a) Mangrove products of the Sundarbans coastal community (BANOJIBI).....	43
b) Responsible tourism.....	49
12. GEF Small Grants Programme.....	52
13. Future plan.....	62
14. Major challenges.....	64
15. Awards.....	66
16. Message from Partners and Donors.....	70



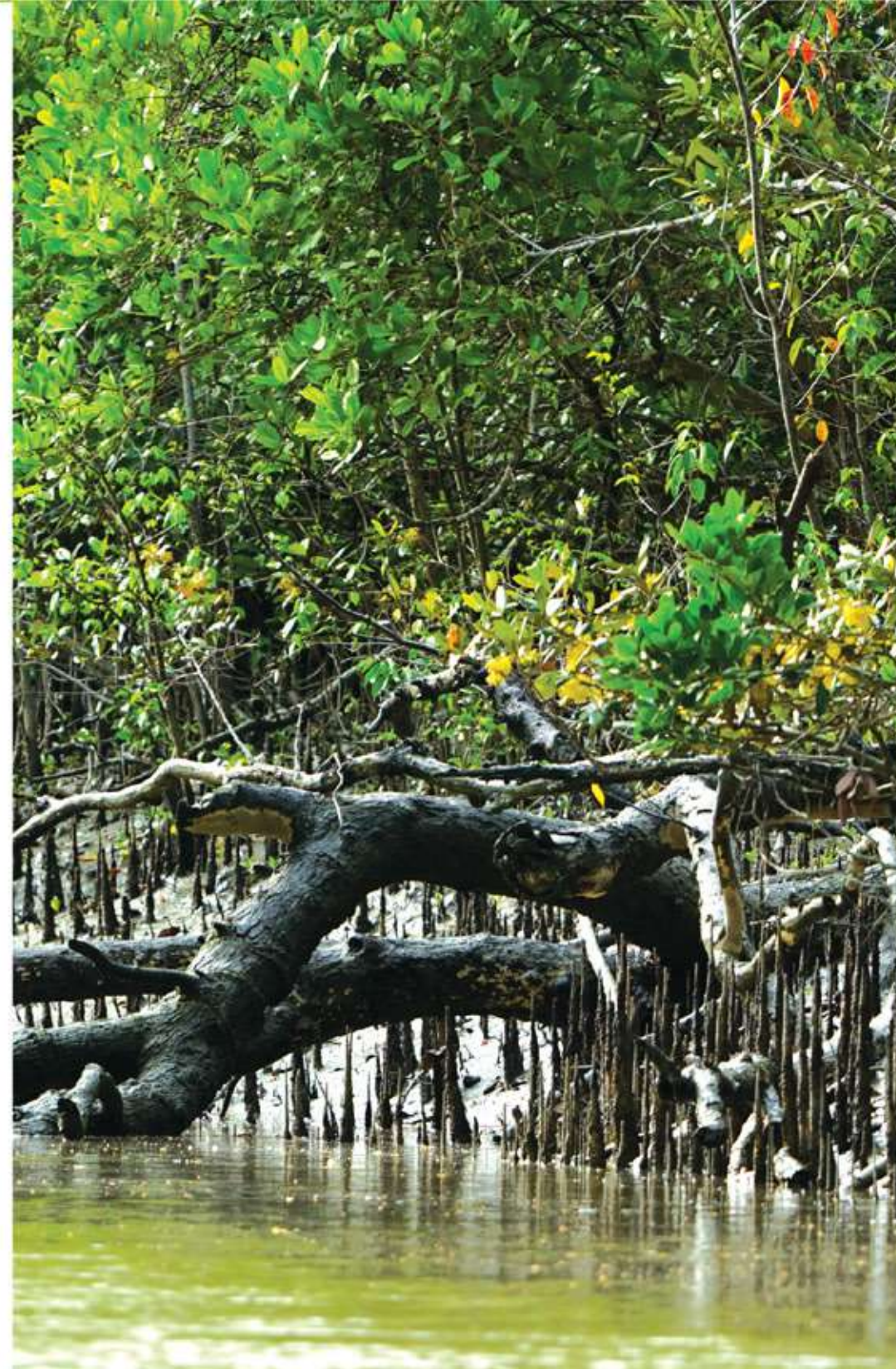


**Message from National Coordinator  
GEF Small Grants Programme, UNDP Bangladesh**

Mangrove restoration and conservation with the active involvement of coastal communities is a very praiseworthy and successful programme of BEDS. The mangrove products, such as mangrove tea, juice, pickle, molasses, mats, etc., produced by the communities of the Sundarbans Ecovillage are not only playing significant roles in reducing their poverty but also helping themselves to be responsible for the conservation and protection of the Sundarbans mangroves. I am personally very pleased to be part of this programme which may be replicated in any other mangrove areas of the world.

**Dr. Mohammed Muzammel Hoque**

National Coordinator, GEF Small Grants Programme  
United Nations Development Programme (UNDP)



**Message from Chief Executive of BEDS**

The Sundarbans Ecovillage in Bangladesh is one of the prime initiatives of BEDS. This initiative represents the scenario of BEDS's activities, such as mangrove restoration, the production of diverse mangrove products, rural reconstruction, etc., with the active involvement of local communities in the Sundarbans coastal region of Bangladesh. The Ecovillage programme has been designed considering the local people's needs, emphasizing their present challenges related to socio-culture, environment and economy. The local communities are the key actors in this initiative and BEDS has been supporting them as a backbone organization. It represents a sustainable development strategy and a holistic approach to livelihood improvement and ecosystem restoration.

It creates opportunities to recognize BEDS's initiatives at the national and international levels. The Ecovillage project is the winner of the UN Equator Initiative Prize 2024 and was also selected to showcase in Expo 2020 Dubai's Global Best Practice Program. While it is a small-scale initiative, it has the potential to be scaled up across the entire Sundarbans coastal region. This initiative is directly linked to the Bangladesh Delta Plan 2100, the NAP 2022, and the SDGs. On behalf of our community, we are grateful to all of our donors, supporters, collaborators, and network members. We believe that all of you will keep your hands with us for further development of our Ecovillage initiatives.

**Md. Maksudur Rahman**

Chief executive

Bangladesh Environment &  
Development Society (BEDS)





The Ecovillage serves as a model for socio-cultural, ecological, environmental, and economic development, respecting indigenous knowledge and culture while preserving the natural ecosystem. It adopts an Ecosystem-based Adaptation (EbA) or Locally Led Adaptation (LLA) approach, alongside Nature-based Solutions (NbS), to regenerate both social and natural environments, with a focus on ecosystem conservation and poverty reduction. These initiatives contribute to the achievement of the Sustainable Development Goals (SDGs).

**Nature-based solution**

**Indigenous knowledge & culture**

**Locally Led adaptation**

**Climate change adaptation & mitigation**

## Regenerating social and natural environment





# Inclusive and sustainable future for all

## The Sundarbans Ecovillage

*Rural reconstruction and mangrove ecosystem restoration*

The theme of the Sundarbans Ecovillage is rural reconstruction and mangrove ecosystem restoration. The Sundarbans Ecovillage initiative by BEDS is an exemplary model of combining environmental sustainability with community development. It has made notable progress in mangrove conservation and restoration through education, eco-friendly livelihoods, renewable energy, and the provision of safe drinking water. The initiative also promotes community-based tourism and integrates agriculture, fisheries, and forestry in the Sundarbans coastal region of Bangladesh.

Local solution for  
nature and climate

Climate mitigation

Resilience and  
just transition

Climate adaptation





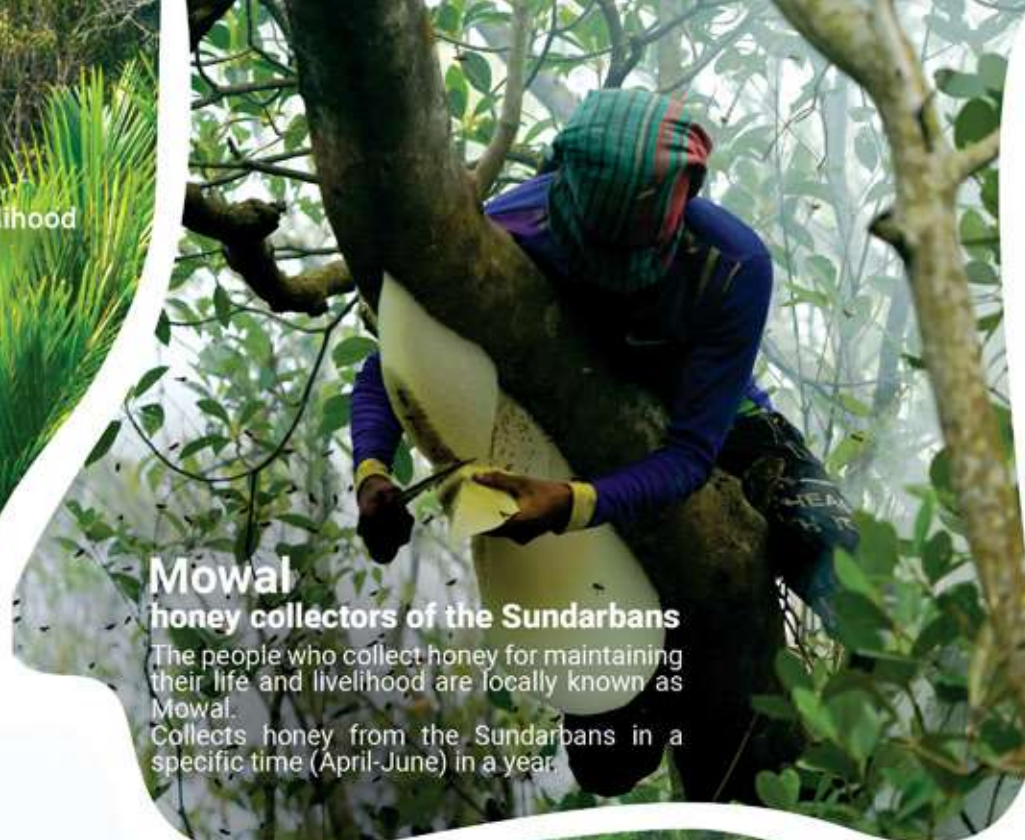
## Bawal Sundarbans' Golpata harvesters

The people who collect Nypa leaves for their livelihood from the Sundarbans are called Bawal or Bawali.



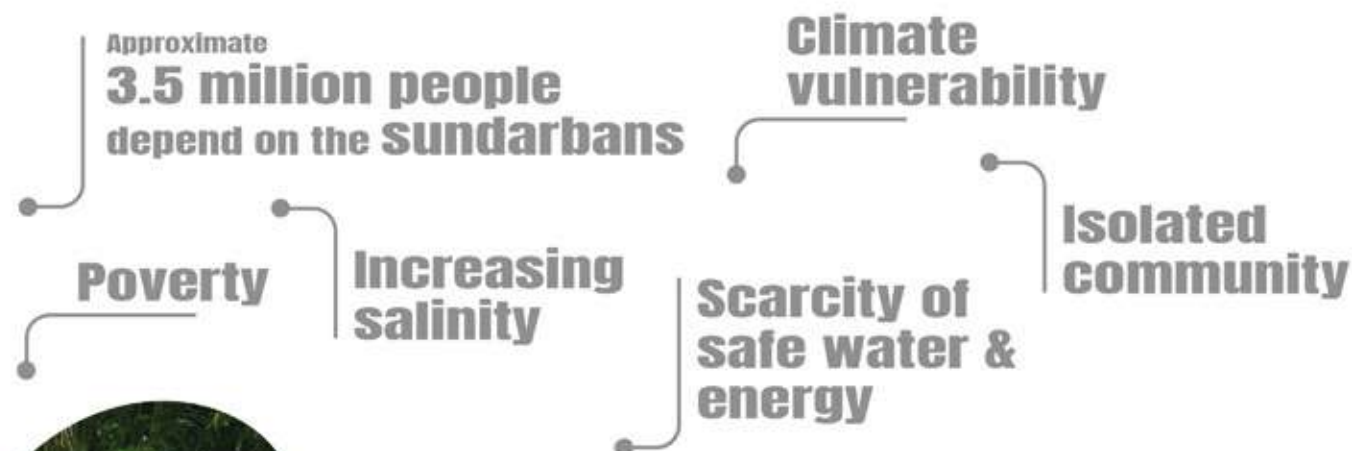
## Mowal honey collectors of the Sundarbans

The people who collect honey for maintaining their life and livelihood are locally known as Mowal. Collects honey from the Sundarbans in a specific time (April-June) in a year.



## Community of the Sundarbans Ecovillage

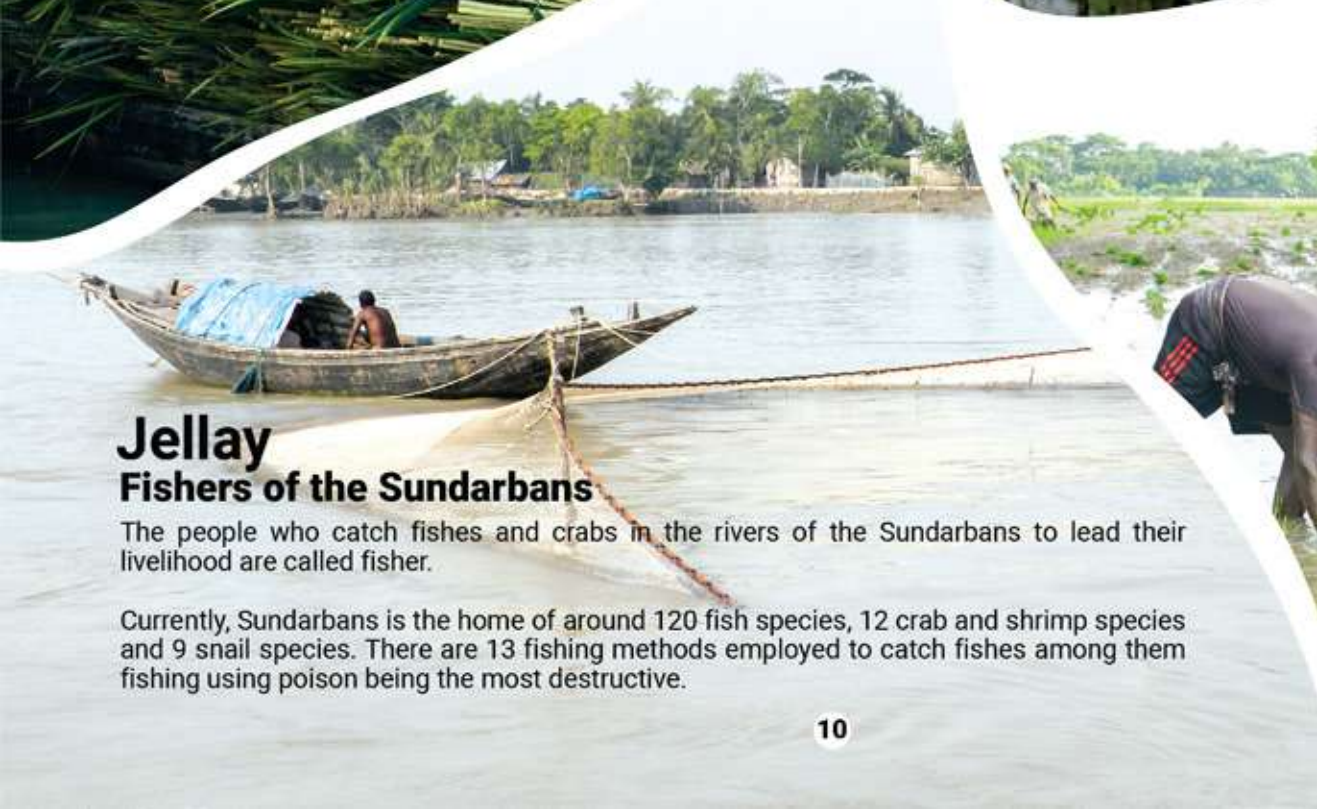
Our communities are typical coastal communities and living nearby the World single largest mangrove forest Sundarbans ecosystem. Most of them depend on forest resources and agriculture for their livelihoods. However, our community is forest-dependent people and marginal farmers.



## Jellay Fishers of the Sundarbans

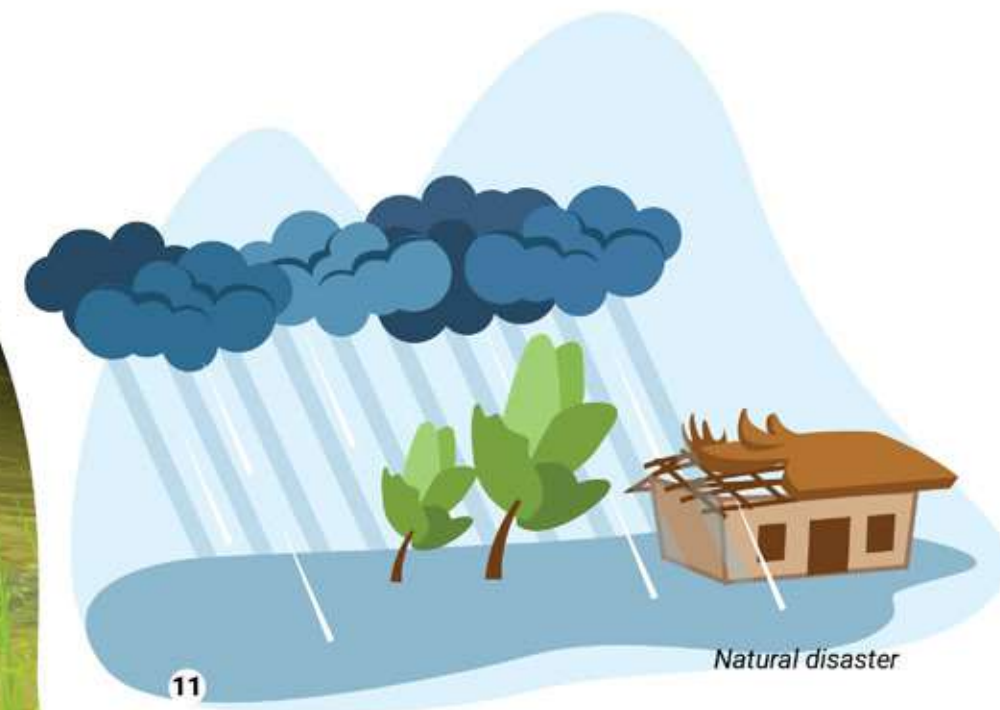
The people who catch fishes and crabs in the rivers of the Sundarbans to lead their livelihood are called fisher.

Currently, Sundarbans is the home of around 120 fish species, 12 crab and shrimp species and 9 snail species. There are 13 fishing methods employed to catch fishes among them fishing using poison being the most destructive.



## Farmer

Those who work in agriculture fisheries, and animal production are known as farmers.





## The Sundarbans Ecovillage region

The Sundarbans Ecovillage is located at Dacope Upazilla under Khulna district of Bangladesh adjacent of the Sundarbans mangrove forest. The Sundarbans, a region of immense ecological and economic significance, is under severe threat due to both climatic and anthropogenic pressure. Due to the poverty the Sundarbans communities, residing near the world's largest tropical mangrove forest, rely heavily on agriculture for their livelihoods which is not sustainable for them. So, they depend on the forest and maintain their livelihood by harvesting forest resources. But they get marginal profit from this practice meanwhile they disrupt mangrove regeneration by destroying seeds and seedlings while catching shrimp fries from the nature or collecting seeds for cooking fuel. These forest-dependent people, known locally as Bawal (Nypa collectors), Mowal (honey collectors), and Jelley (fisherfolk), possess rich indigenous knowledge and cultural traditions. For generations, they have contributed to nature conservation through practices rooted in their culture, such as the worship of the forest goddess during the "Bonbibir Puja" festival. Recognizing and integrating their cultural heritage is essential for sustainable natural resource management.

**Lack of alternative  
Income source**

**Indigenous  
knowledge & culture**

**Anthropogenic pressure  
disrupting mangrove  
ecosystem**

**Bonbibir puja**

**Unsustainable  
resource harvesting**

Despite their crucial role, many community members have lack of alternative income source, lack awareness of mangrove conservation, scarcity of safe drinking water and energy and poverty hinders their participation. BEDS focuses on resolving complex environmental and social issues by emphasizing the value of indigenous knowledge and empowering local communities for a sustainable future.

**Underprivileged  
women community**

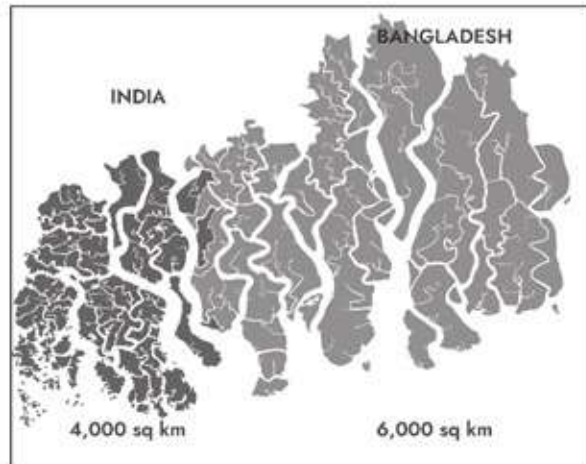
**Ecologically  
critical area (ECA)**





## The Sundarbans mangrove ecosystem

The Sundarbans, the world's single largest mangrove forest and a World heritage site and RAMSAR site, is located in southwestern Bangladesh, between the Baleshwar river in the east and the Harinbanga river, which connects to the Bay of Bengal in the west. It includes Khulna, Bagerhat and Satkhira districts of Bangladesh. The Sundarbans is both the pride and tradition of Bangladesh. It is home to a diverse range of flora and fauna, including the world-famous Royal Bengal Tiger. The Sundarbans act as a lifeline of coastal communities in protecting the coasts from various disasters, like cyclones, tidal surges etc. and as a source of income of coastal communities.



**Bangladesh's mangroves  
reduce flood risk 1.9 million  
people & product USD\$18  
billion in infrastructure**

-CRI (Coastal risk index)

**Unique mangrove  
ecosystem**

**World Heritage site  
and RAMSAR site**

**Largest fish  
nursery ground**

**Total 10,000 km<sup>2</sup>,  
60% in Bangladesh**

**World's largest single  
track mangrove forest**

**Transboundary  
ecosystem**

**Lifeline of  
coastal  
community**



**Total 334  
species of plants**



**400 wildlife  
species**



**114 Royal  
Bengal tigers**

**Home of the globally  
endangered species including  
the royal bengal tiger**



## Mangrove learning center

## Demonstration unit

## Knowledge hub

## Location

Uttar Banishanta, banishanta dacope, khulna  
Mob: + 8801968809518  
Email: banojibi@gmail.com  
Website: www.banojibi.com

## Cooperative business unit

## The Sundarbans Ecovillage campus

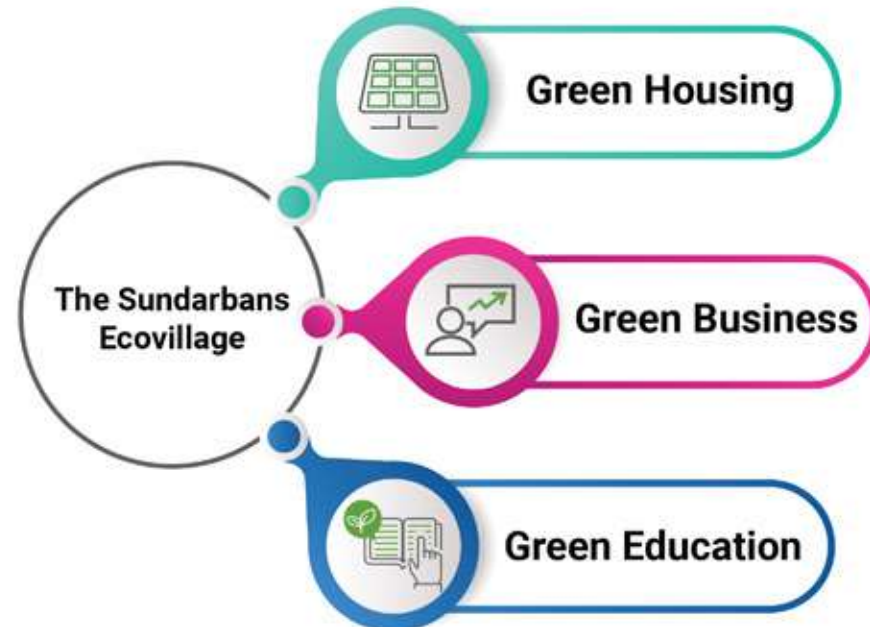
The Ecovillage presents a holistic approach to environmental conservation and community development in the disaster-prone coastal regions of the Sundarbans. The campus includes a hub for mangrove and environmental education, research facilities, integrated farming, and waste management systems. It also features a cooperative building dedicated to producing mangrove-based products such as juice, pickles, tea, molasses, and mats. The Ecovillage provides training and workshop spaces, ensures access to safe drinking water for the community, and utilizes renewable energy from a solar power station. Visitors can stay in eco-cottages and enjoy fresh, farm-to-table meals prepared with locally sourced ingredients.

## Ground of local culture



## Journey towards the Sundarbans Ecovillage

The Sundarbans Ecovillage concept was initiated in 2015 with the financial support of the Korea Green Foundation (KGF) in order to rural reconstruction and mangrove ecosystem restoration by giving priority to the local culture and knowledge. During 2015-2017 the project focused on mangrove restoration, establishment of solar station, distribution of solar lights, environmental education, and development of eco-tour guides etc. The Ecovillage approach was divided into three key components, such as Green Housing; Green Education and Green Business.





## Journey towards the Sundarbans Ecovillage

The Ecovillage project was supported by the Japan Environmental Education Forum (JEEF), adding infrastructure development in 2019. With the support of JEEF, BEDS formed a cooperative society in the Sundarbans coastal region, such as Sundarbans Resources Harvesters Cooperative (BANOJIBI), to promote green business under the Ecovillage project. The cooperative helps promote green businesses by manufacturing, marketing, and branding mangrove-based products (such as mangrove pickle, mangrove molasses, mangrove tea, mangrove juice, mangrove souvenirs, mangrove honey, honey candy etc.).

2018-2024

**Mangrove education**

**Mangrove restoration**

**Community based eco tourism**

**Safe drinking water**

**Solar energy**







**2018-2024**

## Journey towards the Sundarbans Ecovillage

As a sandwich program, the Ecovillage Project has been supported by the Global Nature Fund (GNF) to scale up cooperative based mangrove products; mangrove restoration through the introduction of Integrated Mangrove Aquaculture (IMA) since 2019. The Global Giving, Give2Asia, One Tree Planted, Earthday.org and Milkywire Foundation have all contributed to scaling up various activities of the Ecovillage during 2017-2024. In 2023, UNDP-GEF Small Grants Programme (SGP) also provided support, helping to strengthen and promote the BANOJIBI brand through mangrove restoration and women-led community livelihood improvement initiatives based on the Ecovillage project. All three components of the Ecovillage initiative contribute to strengthening coastal resilience.

**Women-led community livelihood improvement**

**Integrated Mangrove Aquaculture (IMA)**

**Mangrove based products**

**Community-based Ecological Mangrove Restoration (CBEMR)**

**Mangrove nursery**





## The key components of the Sundarbans Ecovillage:

**Green housing:** Mangrove restoration, safe drinking water, renewable energy (solar stations and home solar systems, solar lights), local seed banks (crop and vegetables), integrated farming, bee keeping, etc.

**Green education:** Mangrove education center, mangrove education in schools and at the community level, waste management, local weather information services, cyclone shelter and training center, wildlife and biodiversity conservation, environment friendly fishing and farming practices, etc.

**Green business:** Mangrove-based products, green energy, cooperative initiative, responsible tourism, etc.

### Green Housing

Safe Drinking Water



Local Seed Bank



Solar Lamp



Integrated Farming

#### Mangrove Restoration

River Bank Plantation & Restoration  
Integrated Mangrove Aquaculture



#### Beekeeping



#### Tourist vessel



Green Energy



Battery Charging Station

### Green Business



Mangrove Products



Cooperative Initiative



Honey processing & packaging



Banojibi Cottage & Dormitory

A comprehensive initiative to deal with complex environmental and social problems in the Sundarbans coastal region of Bangladesh

### Green Education



Mangrove Education Center  
(Proposed)



Local Weather Information Service



cyclone Shelter and Training center



Waste management



Wildlife conservation



environment friendly fishing and farming





## Green housing

Green housing is an environmentally sustainable approach that utilizes community-managed resources, promotes local involvement, and reduces energy consumption by incorporating renewable energy. It also focuses on efficient waste management and minimizes other negative environmental impacts, contributing to a more sustainable and resilient environment.



**Mangrove restoration**



**Portable water supply**



**Renewable energy**



**Local seed bank**



**Integrated farming**



**Bee keeping**



# 2015-2024

Community engagement  
**15,858 coastal people**

Approximate **150 hectare**  
Approximate **75,6088 seedlings**



## Mangrove restoration

Two methods are followed for mangrove restoration (CBEMR & IMA)

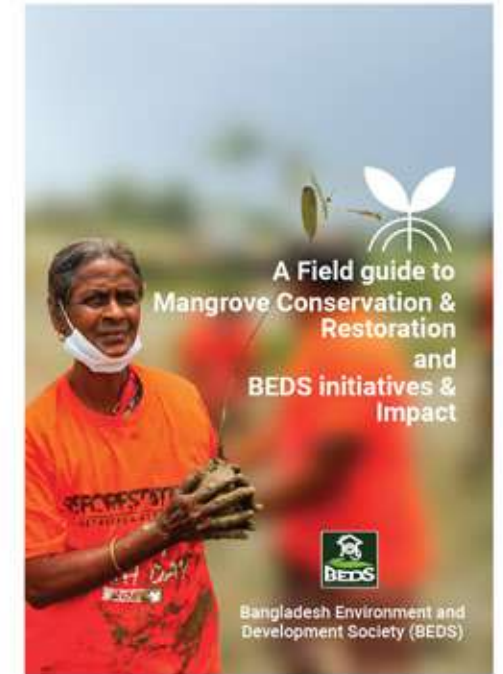
### **Community-based Ecological Mangrove Restoration (CBEMR)**

Direct involvement of the coastal communities in the ecological mangrove restoration processes Active participation of local communities in the plantation activities



**Coastal women entrepreneurs established 8 mangrove nurseries and produced 7,50,000 saplings**

**Restored 150 hectares of riverbank with diverse mangrove species**





## Integrated Mangrove Aquaculture (IMA)

An environment friendly shrimp farming method that ensures mangrove restoration and conservation, improves shrimp quality and quantity, avoids fish feed supplementation and chemicals applications, and reduces production costs.

**Multi-purpose IMA building with the facilities of fish landing, ice making, safe drinking water, and boat landing station**

**Capacity building for 664 farmers, from 114 farms**

**Restoring 75 ha area by planting mangrove with IMA model**

**07 women led mangrove nurseries**





# 10 STEPS SOLUTION

## for Mangrove Conservation & Restoration

The 10-step solution has been developed based on BEDS's practical experience, applied expertise, and insights from local community knowledge. A complete guideline for Mangrove conservation & restoration steps



01

SITE SELECTION



02

ENGAGEMENT OF  
THE LOCAL PEOPLE



03

SECURE LAND



04

SPECIES SELECTION  
AND NURSERY RAISING



05

MANGROVE RESTORATION  
TRAINING OF LOCAL COMMUNITY



06

SOCIAL MAPPING



07

FENCING & PROTECTION



08

MANGROVE PLANTATION



09

MONITORING



10

IMPACT ASSESSMENT







## Safe drinking water

Around 73% of the population in Bangladesh's Sundarbans coastal region lacks access to safe drinking water, relying on untreated pond water that causes frequent waterborne diseases. High groundwater salinity makes tube wells unusable, while the limited number of freshwater ponds falls short of community needs. Women and girls must travel long distances to fetch water, straining their time and health, and the absence of proper infrastructure hinders rainwater storage for dry periods.

### The key solutions:

- Re-excavation of Ponds: Increasing water storage by re-excavating ponds.
- Pond Sand Filter (PSF) Systems: Using local technology to purify pond water for drinking.
- Solar-Powered Reverse Osmosis (RO) Systems: Desalinating and improving water quality with renewable energy.
- Water ATM Installation: Ensuring efficient water distribution and sustainability through Water ATMs.

**25 community members actively engaged in this social business**

**42,000 liters per day among 12,000 community members**







**3,100 coastal household**

**03 solar stations**

**52.9 KW electricity**



## Renewable energy

Many remote areas of the Sundarbans Coastal Region lack electricity, forcing marginalized communities to rely on kerosene for lighting, including for students studying or doing homework at night. This reliance not only increases greenhouse gas emissions, driving global warming and climate change, but also threatens the fragile ecosystems of the Sundarbans' mangrove forests. Additionally, conventional power systems frequently fail during natural disasters or emergencies, leaving these communities without reliable energy and amplifying their vulnerability.

### The Key Solutions:

- Renewable energy solutions, such as solar power, are providing consistent and reliable electricity to homes, schools, and businesses in the remote Sundarbans.
- Replacing kerosene with solar-powered lighting has increased study hours for poor students by allowing them to complete their homework at night using clean and affordable solar energy.
- The fishing community in the Sundarbans benefits from solar energy for their fishing activities in rivers and seas, improving their livelihood opportunities.
- The adoption of solar energy has led to a reduction in fuel costs for communities, providing economic relief to households and local businesses.
- Renewable energy initiatives enhance women's access to employment, education, and essential services, fostering gender equity and community development.
- Eco-friendly renewable energy options contribute to protecting the Sundarbans' delicate ecosystem and support broader environmental preservation efforts.







## Cyclone shelter cum training center

A multipurpose Cyclone Shelter and Training Center was constructed to provide safe shelter during cyclones, protecting both lives and valuable assets. The center is community-managed and self-sustaining, offering year-round training facilities, accommodation, and food services.

However, the multipurpose cyclone shelter and Training Center still faces challenges in effectively supporting the broader coastal communities of the Sundarbans region. These challenges include limited accommodation capacity for guests and training programs, as well as restricted access to emergency services, which affects its role as a safe evacuation hub.

**50-person in house  
training capacity**

**21 visitors  
accommodation  
facility**

**500-person shelter  
facility during disaster**

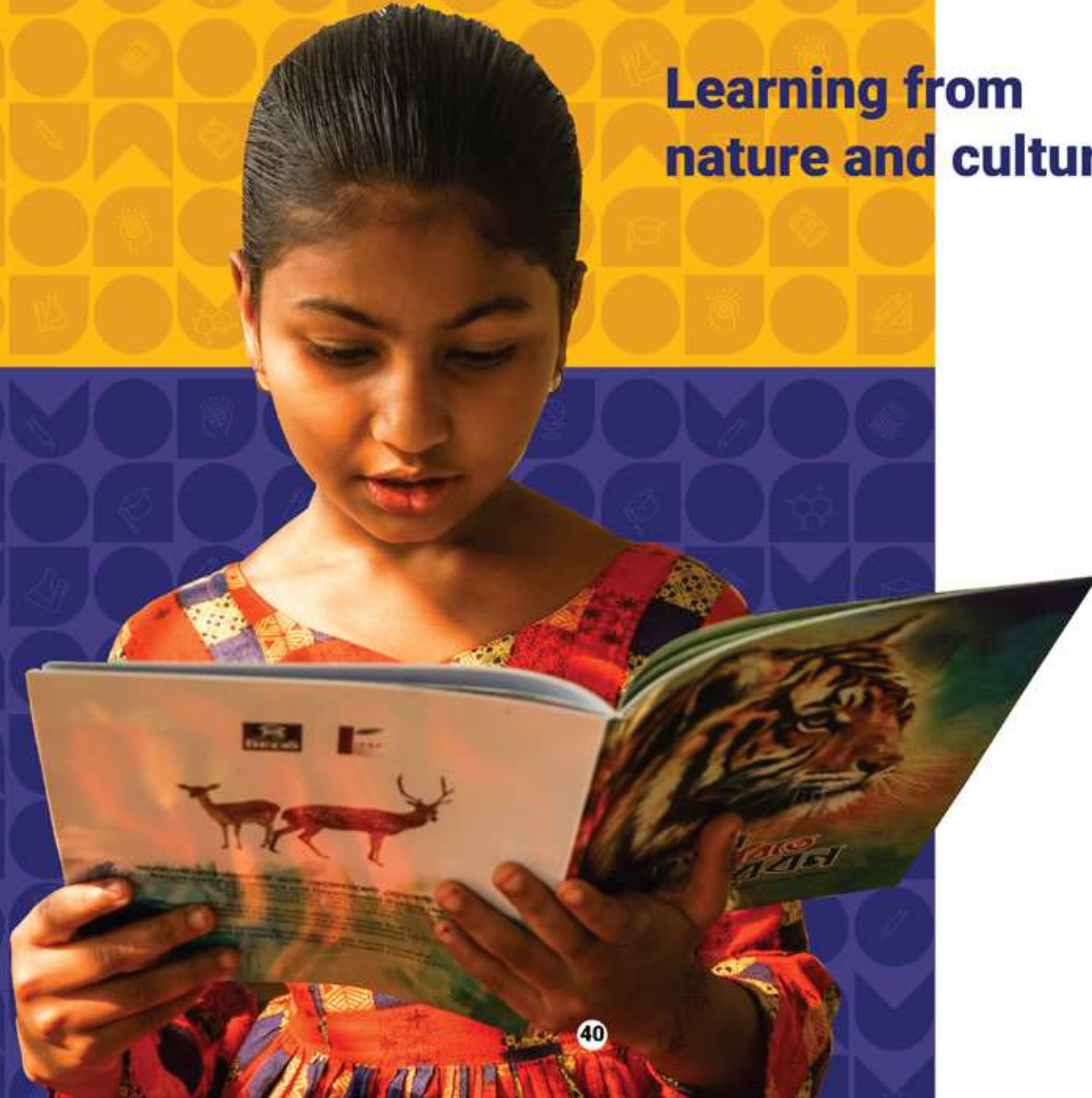
**To reduce vulnerabilities of 113  
self-help groups, consist of 3,375  
coastal people through capacity  
building on disaster preparedness**





## Classroom to field

### Learning from nature and culture



## Green education

Mangrove Education focuses on raising awareness about the ecological importance of mangrove forests among students, teachers, and local communities. It aims to address environmental degradation, ensure the sustainability of mangrove forests, and strengthen the capacity of coastal-dependent communities. Through communication, education, and awareness programs, it builds leadership among coastal students and community members, empowering them to tackle complex environmental and social challenges.

### Environment/Mangrove education in schools and the community

#### Climate change education

6,000 students  
10,000 villagers

#### Mangrove education

28,500 students  
1,209 teachers

#### Renewable energy education

10,000 students  
and Villagers

#### Disaster preparedness education

6,000 students  
5,000 villagers

#### Wildlife conservation education

9,000 students  
10,000 villagers





## Green business

- Mangrove-based products
- Battery Charging Station
- Drinking Water supply
- Responsible tourism

Green business is a vital part of the Ecovillage, promoting sustainable, small-scale ventures that utilize local resources, knowledge, and culture. Coastal community members produce goods like mangrove pickle, tea, juice, and mats under the brand name "BANOJIBI" and engage in responsible tourism, contributing to both conservation and livelihood improvement.



Sundarbans coastal women, members of a cooperative society, are packaging mangrove products.

42

## Products of Sundarbans coastal community (BANOJIBI)



Honey processing center

43





Sonneratia apetala peel processing for Mangrove Pickle

Products of Sundarbans coastal community (BANOJIBI)



Collecting Nypa palm juice for mangrove molasses



Mangrove pickle production unit



Training on Mangrove molasses production



Packaging of mangrove molasses



Products of Sundarbans coastal community (BANOJIBI)

**Mangrove Tea**  
Acanthus tea



Established two cooperative societies comprising of 315 community members for manufacturing, processing, packaging, and marketing of mangrove-based products to sustain green businesses.



Acanthus plant



Mangrove tea (Acanthus tea) processing and packaging

Products of Sundarbans coastal community (BANOJIBI)

**Mangrove Mat**  
*Cyperus javanicus*

Mangrove Mat is produced from *Cyperus javanicus*. It is a type of grass native of the Sundarbans area.





Products of Sundarbans coastal community (BANOJIBI)

### Mangrove Juice

*Sonneratia caseolaris*

*Sonneratia caseolaris*, is a tree of Sundarbans, commonly known as mangrove apple. The mature fruits are processed to produce mangrove juice, which is slightly sour but tasty, and a popular drink in the Sundarbans.



## Responsible tourism

Responsible tourism is a sustainable, eco-friendly initiative that supports local communities by preserving natural heritage and cultural practices. BEDS is promoting responsible tourism involving local community members in its initiatives. Tourists visiting the Sundarbans can stay in eco-cottages and enjoy farm-to-table foods at the Ecovillage campus. The cooperative members produce fresh vegetables, fish, and meat on-site following organic farming protocol, free from chemical fertilizers and pesticides.

### Farm to table

#### Ecocottage

Fresh vegetables, fish meat are produced in the Ecovillage campus

#### Organic farming

#### Local culture

#### Conservation and tourism





## Responsible tourism

Conservation by tourism/volunteer4conservation

Two water vessels are available to take visitors to their destinations. The BANOJIBI members serve as guides, ensuring a smooth and informative experience for tourists exploring the Sundarbans. Additionally, a mangrove living museum is also in place, allowing visitors to learn about the rich biodiversity of the Sundarbans. This initiative is a collaborative effort between the private, public, and NGO sectors to promote sustainable tourism in the region.

Two water vessels operated in collaboration with private organizations, NGOs, and community members.



A collaborative effort between the private, public, and NGO sectors

Two Tourist Water Vessels

## Local Culture Presentation



The people of Bangladesh's Sundarbans coastal region celebrate their culture as a living tradition through folk songs, dances, and rituals like Bonbibi-r Pala, Dakshin Rai's Pala, Manashamanga, and Munda traditions, reflecting their syncretic cultural identity and honoring folk heroes, gods, and goddesses.

Spotted deer in the Sundarbans mangrove forest

Beauty of the Sundarbans





## GEF Small Grants Programme

### United Nations Development Programme (UNDP)

GEF Small Grants Programme of United Nations Development Programme also supported Sundarbans Ecovillage initiative under the project title **“Women-led social business promotion based on Mangrove products and ecosystem restoration in the Sundarbans coastal region of Bangladesh”** from August 2023 to July 2024. The goal of project was to promote women-led social business focused on mangrove-based products and to restore mangroves for coastal protection.



A warm welcome at the Ecovillage Campus

**Dr. Mohammed Muzammel Hoque**

National Coordinator, GEF Small Grants Programme  
United Nations Development Programme (UNDP)

## GEF Small Grants Programme



Training on mangrove pickle production

Through this initiative, one hundred (100) coastal women received hands-on-training to develop their skills in the production and packaging of mangrove-based products along with facilitating to sell their products by utilizing the existing BANOJIBI brand.



Mangrove product packaging



## Mangrove tea



Training on mangrove Tea production



54

Dr. Mohammed Muzammel Hoque met the mangrove tea producer group during his visit

## GEF Small Grants Programme

## Mangrove molasses



Training on Nypa juice collection



55



Mangrove molasses production



## Mangrove mat



Training on Mangrove mat (Cyperus javanicus)



Coastal women painted their dreams on mat



## GEF Small Grants Programme



Group photo of mangrove mat painting workshop





Training on Mangrove juice production



Community expression after learning the art of mangrove juice production

## GEF Small Grants Programme

10,000 mangrove species have been planted in two hectares land of coastal riverbank side with the involvement of the local community using the Community Based Ecological Mangrove Restoration (CBEMR) model which will play role to improve the environment & ecosystem while also serving as a sustainable source of raw materials for the production of mangrove-based products in the future.



Mangrove nursery

Dr. Mohammed Muzammel Hoque, National Coordinator of the GEF Small Grants Programme under the United Nations Development Programme (UNDP), attended a community based Mangrove plantation Programme.





Mangrove  
plantation

Social mapping before plantation



Community-based plantation



December, 2023

The Sundarbans Coastal Women are building sustainable futures for their families while protecting and restoring the vital mangrove ecosystem. The "Guardians of the Mangrove" are a group of women who are demonstrating the strength of group action in the face of hardship and having a significant impact on their communities and the environment.



The coastal community expressing gratitude



December, 2024





## Future plan

The Bangladesh Environment and Development Society (BEDS) aims to scale up its Ecovillage initiatives inclusively in the Sundarbans periphery to drive regional change in environmental and nature conservation by 2030.

# 2025-2030

- To restore 2,500 hectares of mangrove forest and plant 13 million mangroves along the Sundarbans coastal areas.
- To train artisans, empower 1,000 women, and establish a Sundarbans Information Education and Research Centre to educate 1 million people on mangrove ecology, sustainable farming, and fishing practices through research, training, and academic programs.
- To develop a community-based solar home system village, focusing on climate-resilient housing over the next five years.
- To expand the green business in the community household level and develop a market linkage to adopt the inhouse production.
- Other key initiatives in the future plan include providing safe drinking water, integrated farming technology, offering homestay tourism services for income generation, and biogas cooking facilities for improved health and sustainability.







## Major challenges

- Lack of community awareness social development.
- Inadequate community participation in the planning and implementation of development activities.
- Insufficient income-generating activities in coastal areas.
- Limited access to resources, assets, and mobility, particularly for coastal women.
- Food insecurity among coastal communities.
- Lack of opportunities to address local issues at national and international forums.
- Frequent natural disasters, including cyclones, floods, storm surges, salinity, and riverbank erosion.
- Remoteness and difficulty in reaching geographical locations.
- Lack of technical support, inadequate funding, and a shortage of skilled manpower.

**Lack of community awareness**

**Inadequate participation of community**

**Insufficient income-generating activities in coastal areas**

**Limited access to resources**

**Desirable opportunities**

**Natural calamities**

**Inadequate funding and skilled manpower**

**Lack of income generating activities**







The Sundarbans Ecovillage initiative has been recognized national and internationally and received the following prestigious awards;

Award ceremony for the 2024 Equator Prize, Cali, Colombia



National environment award 2022



**NATIONAL  
ENVIRONMENT  
AWARD  
2022**

People of nature awards 2024



**We Naturalists**

**WE  
NATURALISTS  
AWARD WINNER**

**2024**





Energy Globe national award in 2024 and 2018



Top 20 district development award in 2018



The Ecovillage in Bangladesh" also selected for showcasing at Expo 2020 Dubai's global best practice program





## Message from partners and donors

We are deeply grateful for the kind words and encouragement from our esteemed donors, partners and collaborators. Your well wishes inspire us to continue striving for impactful outcomes. Together, we are building a stronger, more sustainable future, and your support fuels our journey toward meaningful change and resilience.



**Dr. Hideki SATO**

Associate Professor  
Faculty of Sociology Edogawa  
University, Japan

Mangrove reforestation is a very important initiative that sustainably supports the lives of local communities. BEDS continues to collaborate and work together with local people to create forests, which is also a valuable activity from the perspective of social education. Practice makes perfect!



**Thies Geertz**

Programme Manager  
Global Nature Fund

I have always been fascinated by the commitment and expertise of our partner organization BEDS in protecting and preserving the mangrove forest in the Sundarbans. The focus is not only on the conservation of Bangladesh Sundarbans natural heritage but also on the people who live there. Whether these are shrimp farmers, agriculturalists or honey collectors. BEDS is committed to the sustainable preservation of their livelihood. I particularly appreciate the unwavering commitment of the young team at BEDS. Every day, the team advocates for the needs of disadvantaged residents of the rural fringes. In this regards, the work of BEDS offers lots of hope. Many more hopeful examples are needed, such as those of partnership working between the Global Nature Fund and BEDS and local communities.



**Mika Otsuka**

Overseas Project Group  
Project Manager  
Japan Environmental Education Forum  
(JEEF)

BEDS and JEEF have had a good relationship for many years and have worked together for Bangladesh. We have many achievements, including the Banojibi brand. I'm proud of the BEDS staffs who work hard for Bangladesh and it is an honor to work with them.





**Dr. Laura Michie**

Program Manager & CBEMR Trainer  
Mangrove Action Project

At Mangrove Action Project, we have had the privilege of working with BEDS for several years. BEDS has shown a deep commitment to improving the lives of communities in the Sundarbans and protecting their coastlines through effective mangrove restoration and conservation. Their restoration work has shown impressive results, highlighting their dedication to both the environment and the local community. BEDS' work is a great example of the positive impact that collaborative and locally-driven conservation initiatives can achieve.



**Dana Ali**

Associate at Dare

I would like to extend my sincere gratitude to Maksudur Rahman and the team from the Bangladesh Environment and Development Society 'BEDS'. Our partnership comes at a critical juncture where the need for community-led restoration has never been more pronounced. The work undertaken by BEDS means that women like Nomita Mondol (insert picture) are able to establish their own mangrove nurseries, defying societal expectations and empowering other women in the local community.



**Jill Raval**

The Fund Manager  
for the Oceans Fund

Since our collaboration began in 2021, supporting BEDS has been immensely rewarding. Our content reporting has given us a glimpse into their efforts to plant these 'super trees,' that are critical in protecting the Sundarbans ecosystem. Over the years, we have witnessed BEDS's growing capacity to manage and expand their work, demonstrating a strong commitment to ecosystem resilience and community empowerment.



**Yunmi Ku**

Project Director  
K-GREEN FOUNDATION

Hello, I'm Yunmi of the K-Green Foundation. We first connected with BEDS for mangrove plantations since 2015. BEDS's Community-Based Ecological Mangrove Restoration Project (CBEMR) system for responding to climate disasters in Bangladesh was more systematically established. This helped us a lot in understanding the business direction and Bangladesh society/culture in the field. In addition, we were able to enjoy more in-depth knowledge of Bangladesh's environmental ecosystem by quickly checking the detailed data requested to secure the results of carbon absorption/biodiversity research on our business site. In June 2023, the KGF team visited the Bangladesh planting site and I remember meeting with the people in charge of BEDS. They welcomed us warmly and shared the economic, social and ecological influence of mangrove planting in detail on the site. Once again, I would like to thank the BEDS team for leading the business in the field, and the KGF will always share BEDS's wishes for a sustainable environment in Bangladesh.





**Mr. Chase Williams**

Associate Director of  
Disaster Response at GlobalGiving  
GlobalGiving team

GlobalGiving is immensely proud of our long-term partnership with BEDS. For nearly a decade, our organizations have worked together to drive important change across Bangladesh. As the world faces the enormous challenges of the climate crisis, we know that we must act quickly to restore the natural habitats around us that are the most effective solutions to supporting vulnerable communities. BEDS has made incredible progress across coastal areas of Bangladesh when it comes to planting and regenerating mangroves in partnership with local communities. GlobalGiving remains a committed partner in supporting the critical efforts of BEDS.

All the best



**KM Reyes**

Project Manager, Asia Pacific  
One Tree Planted

It has been a pleasure working with the Bangladesh Environment & Development Society (BEDS) since 2023. We were lucky enough at One Tree Planted to have visited BEDS on-ground in the Sundarbans and see the powerful & wholistic work they're doing not just in mangrove & restoration work, but across climate change adaptation, sustainable livelihood & finance, & integrated agriculture + fisheries, among others! We look forward to working alongside BEDS now and in the future, toward the protection & restoration of the Sundarbans and its resilient communities.

With the appreciation of our Donors, partners and collaborators







## *An organization for Excellence in Nature*

Bangladesh Environment and Development Society (**BEDS**) is a leading community-based non-profit, non-government organization that won the prestigious Equator Prize in 2024 and top national environment award in 2022 as well as a number of national and international awards. Its mission is to promote harmony between humans and nature while preserving ecological balance to achieve the Sustainable Development Goals.

The Sundarbans Ecovillage initiative, introduced by BEDS, is a remarkable example of integrating environmental sustainability with community development. It has achieved significant success in mangrove restoration, renewable energy adoption, and securing safe drinking water in the Sundarbans coastal region of Bangladesh. The Ecovillage project has improved the socio-economic conditions of the Sundarbans coastal communities while contributing to biodiversity conservation and mitigation of climate change impacts.



Bangladesh  
Environment and  
Development  
Society

H# 6/3, R# 01 Prantika R/A, Khulna-9100  
Tel + 88 02477721123  
Mob + 88-01791 323255  
info@bedsbd.org    www.bedsbd.org