

PROJECT SHYAMOLIMA

ANNUAL PLANTATION
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Deltas of Sundarbans,
West Bengal

INTRODUCTION

One of the greatest challenges facing our world is humans' insatiable hunger for fossil fuels, and the natural world is paying for it, including humans themselves!

This causal chain leads to the degradation of our natural habitat, our home- our planet! **This is the reason we are witnessing hotter temperatures, more severe storms, loss of species, increasing man-animal conflicts, warming-rising oceans, poverty & displacement, more health risks, food & water scarcity, overshooting,** and more. All of this continues to impact the people, communities and economies we depend on.

At SankalpTaru Foundation, we take pride in being one of the organisations that are actively working on restoring the biodiversity of the planet by practising afforestation & reforestation activities, raising awareness about the sustainable methods to adopt, and encouraging people to take action to save their planet.

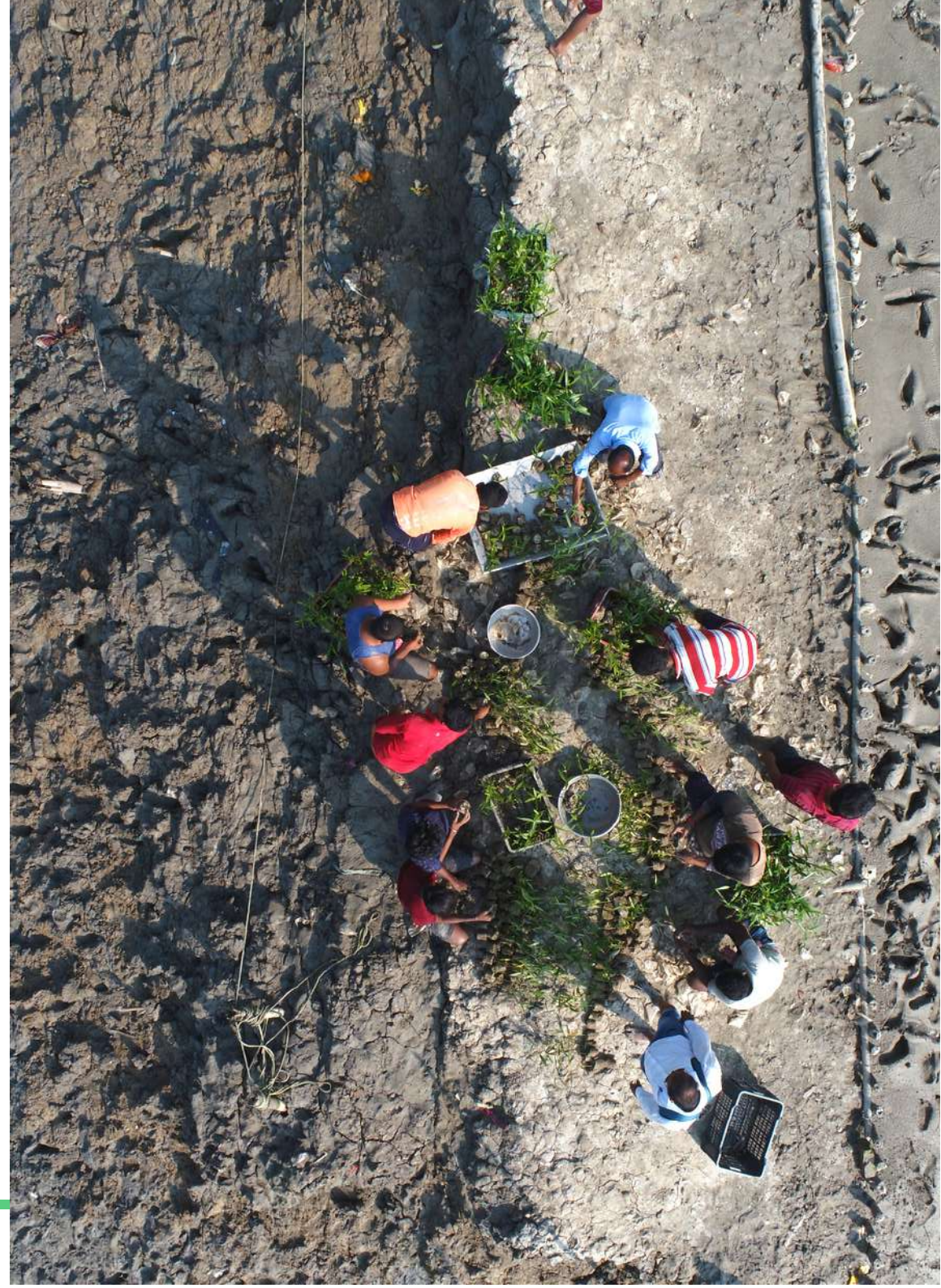


transporting saplings
moukhali, July'22

WHY PROJECT SHYAMOLIMA?

West Bengal is one of India's most treasured states in terms of history, culture, agriculture, industry, and development. The state also features multiple geographical regions ranging from hills to plateaus to alluvial plains and dense mangroves.

Although a major producer of staple crops like rice and potatoes, agriculture in West Bengal subsumes reliance on monsoons. Farmers of the state's North-Western region have **been facing dwindling water levels and loss of agricultural income**. Bearing this, SankalpTaru Foundation introduced **Project Shyamolima** to West Bengal in the year 2018.





nursery setup, August '22





Cyclone Yaas makes landfall over Odisha, West Bengal coasts dated May 26th 2021 ©Hindustan Times



West Bengal likely to face famine-like situation as rainfall deficit recorded above 45%, dated Aug 2nd, 2022 ©India Times

CHALLENGES

Initiated in the year 2018 in the Bankura district in West Bengal, the project revolved around a mission to empower and strengthen rural livelihoods while resolving **water distress** in the region.

The Bankura district falls in the state's arid regions and serves as a bridge between the Chota Nagpur Plateau in North Bengal to the alluvial plains in the south. Due to its topography, **Bankura faces twin challenges** of floods from the Damodar River in the monsoon season and droughts in the dry season. Coupled with this, the district features one of the most backward districts in the state, with more than 70% population relying on their small landholdings to earn livelihoods.

When Project Shyamolima was introduced in the state, **identifying beneficiaries** from a large pool of farmers and **ensuring** additional **income** for them posed another substantial challenge.



SUNDARBANS WETLANDS source

Sundarban Wetland is located within the largest mangrove forest in the world, in the delta of the Rivers Ganges and Brahmaputra on the Bay of Bengal in India and Bangladesh. The Indian Sundarban constitutes over 60% of the country's total mangrove forest area. The mangrove forests **protect** the hinterland from **storms, cyclones, tidal surges**, etc.

They sustain the fisheries of the entire eastern coast. The Sundarban Tiger Reserve has been declared a “**critical tiger habitat**” under national law and a “Tiger Conservation Landscape” of global importance. The Site is also **home** to a large number of **rare** and **globally threatened species**.

The **uniqueness of the habitat, its biodiversity**, and the many tangible and intangible local, regional and global services they provide make these wetlands' protection and management a **conservation priority**.



MANGROVE FORESTS source

Mangroves are a specific variety of tropical forests with a special location at the dynamic land and water meeting point. They are capable of flourishing in saline water and are widespread along coasts and estuaries across the tropics and subtropics; they thrive in conditions to which only a few species have adapted.

A variety of species, many of which are **endangered**, can find shelter and food in the mangrove ecosystem, which is extremely **productive** and **biologically diverse**.

Mangroves are **extremely valuable ecosystems** that provide a variety of necessary products and services. These greatly contribute to the livelihoods, well-being, and security of coastal populations, although making up less than 1% of all tropical forests in the world.

THE STEPS TO CHANGE

Since its inception, generous Green Patrons like you have helped SankalpTaru Foundation plant thousands of fruit-bearing and mangrove saplings, benefitting small and marginal farmer-beneficiaries in the district and the coast.

The working forces are spirited up to practice intercropping and assisted training on the maintenance of saplings to ensure maximum benefits.



OUR GREEN



Swapan Suin is our operations coordinator from West Bengal. He is highly accomplished in the academic world and is one of our youngest coordinators. He is also compliant in communicating and managing our farmers in the coastal region.

WORKFORCE







plantation event
August'22



Arun Maity





Purnendu Panda(top)
Samir biswas(bottom)



Chanchal Das(left)
Prasanta Das(right)





Maya Das and Bidhan
suins' farm land





Apurva Kumar Das

SPECIES

Mangrove

Fruit-bearing

Baen

Cashew

Lemon

Mahogany

Areca nut

Mango

Garjan

Malta

Guava

Betel nut

Custard apple

Apple berry

Kankra

Sapota

Coconut

Jamun

Jamrul

Rose apple

IMPACT OF MANGROVE TREES

An aerial photograph of a mangrove restoration project. A long wooden boat is filled with green mangrove saplings and is positioned in a body of water. On the muddy shore, a group of people are working, some standing and some kneeling, near the boat. The background shows a vast expanse of dark, textured mudflats.

NUMBER OF TREES: 1.1 LAKH +

CO2 sequestered in a
tree's lifespan(25 yrs)
30,800+ Tons

The microbial mats growing around their roots, which
suck in CO2 from the air to produce oxygen, make them
even more efficient.

Survival rate
80 %

- These support more than half of household income.
- Honey of mangrove forests with 300 different types.
- The forests provide breeding grounds for fishes.



Deltas of Sundarbans,
West Bengal

An aerial photograph showing a riverbank where a group of people are engaged in planting trees. A long boat filled with green saplings is positioned near the shore. The river water is a murky brown color, and the bank is a dark, textured soil. The title 'IMPACT OF FRUIT-BEARING TREES' is overlaid in large, white, serif capital letters on the upper left portion of the image.

IMPACT OF FRUIT-BEARING TREES

NUMBER OF TREES: 1.06 LAKH +

CO2 sequestered in a tree's lifespan

130+ Kilo Tons

O2 produced in a tree's life span

260+ Kilo Tons

Economic value for farmers after 1st harvest cycle

INR 9 crore per season

Survival rate

70-90 %

No. of beneficiaries impacted

1060

Fruit production per season

3300 + Tons

The project has come a long way since fresh plantation in 2019 and has seen tremendous growth due to your contributions. A total of 1,06,297 trees of Mango, Guava, Jackfruit, Custard-apple, and other fruit-bearing trees and more than 1 lakh of mangrove trees have been planted to date. The farmer-beneficiaries have seen an increase in their income.

The farmers are hopeful that raising staple crops with new fruit saplings will add to a sustainable and fixed income from their farmlands. The trees will also prevent soil erosion during flood season, improve water availability, and increase biodiversity and soil fertility, leading to holistic growth in their lives.

THE STORY TODAY



Mangrove Trees

July-August is the ideal season to prepare the seeds and create a nursery; this is done by the women beneficiaries raising women's employment. It takes a period between one and one and a half months to do this process. The seeds are planted in September.

Post-plantation, the problems they face include water seeping, which results in the tiny plants requiring daily maintenance. Our two-member team and volunteers from the village cater to these necessities. The riverside fencing around mangrove trees catches the garbage that comes in with the river tides.

Further, the goats and other animals must be dealt with carefully, operating around the tiny and fragile saplings as the soil contains clay, silt, etc.

Riverside Fruit Trees

The transportation of the saplings is a tedious process as it involves multiple modes of transportation to reach the island farmers with saplings.

The volunteers and the SankalpTaru Forest Force come together for the R&D of species selection, digging, plantation updates, and plantation. Farmers take 100 trees in one go to attain maximum survival in such sensitive climatic conditions.

Lastly, the saline water disintegrates the plants and trees, and with the river wall not set up well, the place is subjected to frequent cyclones and sea level rise.



Deltas of Sundarbans,
West Bengal



Prasanta Das says he received nearly 300+ saplings of Mango, betel nut, jamrul, sopata, lemon, and guava. He adds that the survival rate is 80 per cent, and the mortality is 20 per cent due to saline water cyclones and heat waves. He intends to take care of his young plants and hopes for a better tomorrow.

Samir Biswas and **Purnendu Panda**, from Purba Atapur PS-Sandeshkhali village, extend their gratitude towards the SankalpTaru Foundation to support their livelihood.

TESTIMONIALS FROM THE GROUND



Deltas of Sundarbans,
West Bengal

THE WAY FORWARD





With your continued support and trust, the SankalpTaru Foundation aims to increase the number of farmers under the ambit of Project Shyamolima and show them a sustainable way of earning their livelihood. The mangrove trees break the water force by nearly 95%, and the roots grow against gravitational force. These trees are highly adaptive to extract CO₂ and O₂.

These plantations have been a source of inspiration for farmers in nearby villages, who have witnessed how existing farmer-beneficiaries are now more hopeful of diversifying their livelihoods despite the small size of their farmlands. We plan to continue engaging more such farmers and help them lead a sustainable and stable life with an attempt to curb the climate crisis.

GET IN TOUCH WITH US



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