

SEED

SOCIETY FOR SOCIO ECONOMIC & ECOLOGICAL DEVELOPMENT

ANNUAL REPORT 2023-24



FOREWORD

This year has been a testament to SEED's unwavering commitment to serving underprivileged communities while fostering environmental conservation and women's empowerment in the Sundarbans. With support from our stakeholders, we have made significant strides in education, sustainable livelihoods, health and climate resilience. Through CSR support from Signify Foundation, we provided 1,000 families with solar lanterns, 100 families with home solar systems and installed 50 solar streetlights in Ghoramara Island. The NFE Centres on the Jharkhali and Ghoramara island has offered academic support to 405 climate refugee children with support from T & I Global Ltd. The mangrove plantation with the involvement of local women in Jharkhali island, continues to protect coastal areas by planting diverse mangrove species with support from the Tiger Widows, Ireland.

Through the One Health Education Project in Darjeeling and Purulia, supported by Trinity Challenge, UK, we have served around 500 tribal children with vital health education, integrating awareness on hygiene practices with access to safe drinking water. In Ghoramara, our WASH initiative, backed by the CSR support of BPCL, addressed critical sanitation needs for 2500 women, fostering healthier living conditions and community resilience.

SEED has also empowered coastal communities through alternative livelihood training in aquaculture and organic farming, helping them adapt to the harsh impacts of climate changes. The climate resilience remains a key focus, with awareness workshops, disaster risk reduction training and efficient water management initiatives addressing critical challenges.

These achievements inspire us to continue building climate resilience and fostering sustainable change. Thank you for being an essential part of this journey, and I look forward to another impactful year ahead.

J. NASKAR

PROF. JYOTIRANJAN NASKAR

President, SEED

THE ORGANISATION

SEED (Socio-Economic and Ecological Development) is a Kolkata based grass root NGO established in 1996 as a non-profit society. SEED operates on four foundational pillars: Equality, Education, Empowerment and Environment.

- Registered under the West Bengal Society Registration Act 1961.
- Registered with Income Tax Act 12A & 80G.
- Registered under Foreign Contribution Regulation Act (FCRA).
- Holding CSR 1 Certificate, Ministry of Corporate Affairs, GOI.
- Member of the International Network CANSA (Climate Action Network South Asia).
- Member of CTCN (Climate Technology Centre and Network).
- Member of Wetland Link International (WLI) Global & WLI Asia Oceania.



THEMATIC AREAS

**WATER AND
SANITATION FOR
CLIMATE
RESILIENCE**

**CLIMATE-RESILIENT
AGRICULTURE &
ALTERNATIVE
LIVELIHOODS**

**PROTECTION &
EDUCATION FOR
CLIMATE REFUGEE
CHILDREN**

**MANGROVE
RESTORATION FOR
CLIMATE CHANGE
MITIGATION**

**EMPOWERING
WOMEN FOR
CLIMATE
RESILIENCE**

**CAPACITY
BUILDING FOR
CLIMATE
RESILIENCE**

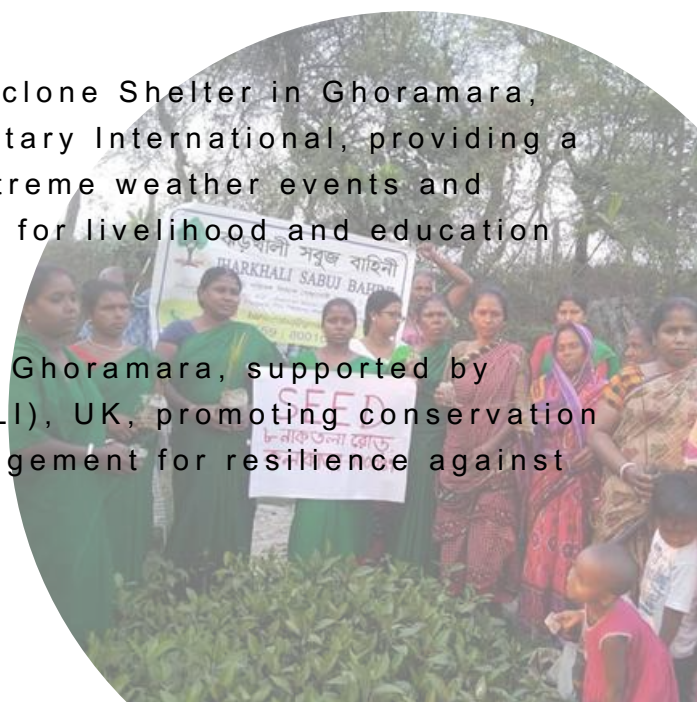
**PROMOTING THE
USE OF
RENEWABLE
ENERGY SOURCES**

**PREVENTIVE &
CURATIVE
HEALTH ASPECTS
OF CLIMATE
CHANGE**

**AWARENESS
GENERATION ON
CLIMATE CHANGE &
ADAPTIVE
SOLUTIONS**

OUR IMPACT

- Sustainable water access for over 20,000 through solar-powered deep tube well, pond restoration, rainwater harvesting and WASH awareness.
- 658 children benefitted through education programmes.
- Planted 1.05 million mangroves & 20,000 fruit plants across 125 hectares, benefiting 2,700 women with livelihoods and impacting 30,000 climate-affected individuals.
- Formation of 1425 SHGs, enabling 18,000 women.
- 3,66,000 benefitted through alternative livelihood training.
- Life skills training to 35,000 youths.
- Health camps and workshops for 1,60,000.
- Installed 500 sanitary pad vending machines, educating 40,000 girls and women on menstrual hygiene.
- Adult literacy for 36,000 tribal women.
- Organic farming benefitted 5,500 coastal farmers.
- Benefitted 50,000 individuals in Integrated Coastal Zone Mangement (ICZM) project.
- 2600 solar lightening systems installed for 1150 vulnerable coastal families.
- Established a Multipurpose Cyclone Shelter in Ghoramara, supported by JECAPCL and Rotary International, providing a safe haven for 5570 during extreme weather events and serving as a community center for livelihood and education programs.
- Coastal Biodiversity Centre in Ghoramara, supported by Wetland Link International (WLI), UK, promoting conservation education and community engagement for resilience against climate change impacts.



OUR REACH



WEST BENGAL
JHARKHAND
BIHAR
ORRISA
TELANGANA
KARNATAKA

OUR HISTORY

SEED was established in 1996 by a group of renowned professionals and social workers in Kolkata, West Bengal, who shared a common vision of serving society. Initially named “Naktala Centre for Socio-Economic Reform and Environmental Conservation,” the organization began its journey by undertaking relief work in remote rural areas of South 24 Parganas and the Sundarbans in collaboration with local administrative bodies. After the success of these efforts, SEED was formally registered under the West Bengal Society Registration Act 1961 and later renamed to better reflect its mission of empowering vulnerable communities and fostering socio-economic and ecological development.

In its early years, SEED focused on promoting land rights and raising awareness about entitlements among marginalized communities, such as the Oraon tribe in South Kolkata. Notable early projects include an environmental awareness mapping program in KMC Ward No. 100, sponsored by the West Bengal Pollution Control Board in 1999, and a CARE India-supported study on forming Self Help Groups (SHGs) among ragpickers in East Kolkata. SEED also undertook a self-funded initiative in the East Kolkata Wetland area to advocate for its protection, conserve biodiversity, and support the livelihoods of vulnerable communities.

Over the years, SEED has implemented various impactful training programs for unemployed youth and women, supported by State and Central Government agencies, including NABARD, the Department of Environment, and the Department of Science & Technology, as well as national organizations like Care India and global institutions like the World Bank. Since 2012, SEED has played a pivotal role in implementing the World Bank-funded Integrated Coastal Zone Management Project (ICZMP) in Sagar Island, focusing on livelihood development and climate resilience for vulnerable communities.

As a member of the CANSA, CTCN, WLI Global and WLI Asia Oceania, SEED continues to champion climate action and sustainable development, leveraging its decades-long experience to address the unique challenges faced by marginalized populations in West Bengal and beyond.



CURRENT PROJECTS



WATER, SANITATION & HYGIENE

Awareness Programme on WASH in Ghoramara island supported by the CSR initiative of Bharat Petroleum Corporation Ltd.

COMMUNITY-LED MANGROVE REVIVAL

Mangrove Plantation Project in Jharkali island supported by Tiger Widows, Ireland.



COMPREHENSIVE EDUCATION CENTRES

Education Program for climate affected Children in Sagar and Ghoramara island supported by T & I Global Ltd.

LIGHTING LIVES IN SUNDARBANS

Solar Lightening Programme in Ghoramara, Namkhana and Puthorportima supported by Signify Foundation.



ONE HEALTH PROGRAMME

Supported by IIT Kharagpur and Trinity Challenge (UK), this initiative in Purulia and Darjeeling districts benefits tribal school-going children by integrating safe drinking water and hygiene awareness in health education.



*WATER & SANITATION
FOR CLIMATE
RESILIENCE*



WATER & SANITATION FOR CLIMATE RESILIENCE

KEY HIGHLIGHTS (2012-24):

- Installed solar-powered deep tube well in Ghoramara Island, benefiting 60 households.
- Restored 15 ponds in the Sundarbans, improving water quality for domestic use across 1.25 hectares.
- Ensured sustainable water access for 18,000 people through the ICZM project. Installed 58 deep tubewells, excavated 7 ponds, and trained 870 individuals through 58 Water User Groups (WUGs).
- Rainwater harvesting structures were constructed in Kumarpukuria tribal village of Sonarpur block, restored 28 ponds enhancing water availability for irrigation during dry season and benefitted around 1200 people, supported by Deptt. Of Environment (West Bengal).
- Conducted WASH awareness camps, fostering better health and sanitation practices.

Installation of Solar-Powered Deep Tube Well for Clean Drinking Water

As part of SEED's ongoing commitment to ensuring sustainable access to clean water, a solar-powered deep tube well was installed in Raypar village, Ghoramara Island, with the support of the Bansal Foundation, Kolkata. This innovative project provides a reliable and environmentally friendly solution to the pressing water needs of the community.

Key Components:

1. Drilled to a depth of 325 meters to access clean groundwater.
2. A 2 HP energy-efficient pump, powered by solar panels, was installed to minimize operational costs and reduce the carbon footprint.

Benefits to the Community:

- Reliable access to clean drinking water for 60 households, improving daily lives and reducing water insecurity.
- Significant reduction in the risk of waterborne diseases, particularly among children and vulnerable groups.
- Enhanced water availability for domestic purposes, including cooking, cleaning, and personal hygiene.
- Positive environmental impact through reduced carbon emissions, promoting sustainability.
- A cost-effective, energy-efficient solution, ensuring long-term operational viability.





Integrated Coastal Zone Management (ICZM) Project

Supported by the World Bank, SEED addressed water scarcity in Rudranagar and Muriganga-1 Gram Panchayats of Sagar Island by installing deep tubewells and excavating ponds.

Key Components:

1. Installed 58 deep tubewells and excavated 7 ponds to provide sustainable water access.
2. Formed 58 Water User Groups (WUGs) and trained 870 individuals in technical and managerial skills.

Benefits to the Community:

- Sustainable access to fresh water for 18,000 people.
- Community empowerment through water management skills, ensuring long-term sustainability.
- Improved agricultural productivity by ensuring reliable water sources for irrigation in the covered areas.
- Reduced health risks associated with unsafe water consumption, particularly among children and vulnerable groups.

Rainwater Harvesting Initiatives

In response to the pressing irrigation challenges faced during the dry season, SEED undertook the construction of rainwater harvesting structures in Kumarpukuria tribal village of Sonarpur Block by restoring 28 ponds, supported by Deptt. Of Environment (West Bengal). This initiative aimed to enhance water availability for agriculture, ensuring sustainable livelihoods for the tribal community that heavily depends on farming as a primary source of income.

Key components:

1. Designed and constructed 28 ponds to capture and store rainwater during the monsoon season, these systems provide a reliable source of water during dry spells.
2. The harvested rainwater is utilized efficiently for irrigation, minimizing water wastage and addressing the scarcity of surface water resources.

Benefits to the Community:

- 1200 farmers have been able to adopt better irrigation practices, resulting in enhanced agricultural yields and improved food security for the village.
- The project has lessened the community's reliance on irregular and insufficient natural water sources, such as seasonal streams and shallow wells, which are often inadequate during the dry season.





WATER & SANITATION IN 2023-24

Pond Restoration Initiative

As part of its commitment to sustainable water management, SEED undertook a significant pond cleaning and restoration initiative in 2023-24, supported by Bharat Petroleum Corporation Limited (BPCL). This project aimed to address the critical need for clean and accessible water for domestic use in the climate-affected Sundarbans, particularly for communities facing acute water scarcity due to rising salinity and recurrent flooding.

Key Components:

1. A total of 15 ponds were identified and restored to improve water availability for domestic purposes.
2. The cleaning covered approximately 1.25 hectares, ensuring enhanced water storage capacity.

Benefits to the Community:

- The cleaning and restoration processes eliminated debris and pollutants, significantly enhancing water quality and making it suitable for domestic uses such as cooking, cleaning, and personal hygiene.
- The restored ponds now serve as vital water sources for several villages, providing a lifeline for families who otherwise struggled with limited access to potable water.
- By revitalizing these water bodies, the initiative reduced dependency on distant water sources and improved local water security, particularly in the face of climate-induced challenges like rising salinity and erratic rainfall.

Swachhta Pakhwada Campaign

Under the Swachhta Pakhwada Campaign in partnership with Bharat Petroleum Corporation Limited (BPCL), SEED implemented comprehensive programs to address water, sanitation, and hygiene challenges in the climate-affected regions of the Sundarbans. The initiative focused on vulnerable fishing communities in Basanti Block and Jharkhali Island, South 24 Parganas, with a special emphasis on access to clean drinking water and sustainable hygiene practices.

Key activities included:

- Distributed 150 hygiene kits, emphasizing safe water usage and personal hygiene practices.
- Conducted five awareness campaigns on critical topics including clean drinking water, basic health and hygiene, environmental pollution, plastic waste management, and sustainable alternatives.
- Highlighted the importance of potable water and the risks of contamination through practical demonstrations during awareness sessions.
- Reached 7 villages, ensuring community-wide engagement and education on water and sanitation issues.
- Benefited 6,500 individuals, equipping them with resources and knowledge to improve drinking water safety and sanitation.





Safe Drinking Water and hygiene Awareness

As part of its commitment to promoting water and hygiene in underserved communities, SEED is implementing the One Health Education project for tribal children in Purulia and Darjeeling districts, supported by IIT Kharagpur and Trinity Challenge, Cambridge (UK). This project is focused on integrating safe drinking water and hygiene awareness with health education among tribal school-going children, addressing the unique challenges faced by these vulnerable communities.

Key Components:

1. Reached 500 tribal children across 15 schools in Purulia and Darjeeling, fostering awareness of health, hygiene and safe drinking water practices.
2. Conducted 90 interactive sessions and workshops, educating children about the importance of clean drinking water, sanitation and personal hygiene.

Benefits to the Community:

- Educated 500 children with critical knowledge on safe drinking water practices, leading to a significant reduction in waterborne diseases.
- Fostered behavioral changes in hygiene practices among children, positively impacting an estimated 1000 family members.
- Enhanced understanding of the link between clean water, hygiene and health, resulting in improved hygiene practices in participating households.
- Created a replicable model for integrating health education into school curriculums in underserved regions, ensuring sustainable impact across tribal communities.



*PROMOTING THE USE
OF RENEWABLE
ENERGY SOURCES*



LIGHTING LIVES IN SUNDARBANS

The "Lighting Lives in Sundarbans" solar energy program, supported by Signify Innovations Foundation, was initiated in November 2022 and became fully operational in 2023. This transformative project aimed to bring sustainable energy solutions to the remote and climate-affected communities of the Sundarbans, enhancing their safety, livelihoods, and quality of life through the provision of solar-powered lighting systems.

KEY HIGHLIGHTS (2023-24):

- Distributed 1,000 solar lanterns and 100 home solar systems in Ghoramara Island.
- 20 solar lanterns provided to a free coaching center in Uttar Surendraganj, supporting over 100 children in their studies during frequent power outages.
- Installed 50 solar streetlights and improved safety for villagers by lighting up public spaces after sunset.
- Trained 40 community members in solar lantern repair, creating local employment opportunities and ensuring long-term maintenance of the solar systems.

Distribution of Home Solar Systems for Vulnerable Families

As part of SEED's mission to provide sustainable energy solutions, 100 home solar systems were distributed in Ghoramara Island, Sundarbans. This initiative aimed to address the energy needs of vulnerable coastal families living without reliable electricity access.

Key Components:

1. Home solar systems designed to provide energy-efficient lighting and basic power solutions for households.
2. Long-lasting solar panels with minimal maintenance requirements.

Benefits to the Community:

- Reliable and consistent lighting for 100 families, enabling extended working hours and improving quality of life.
- Reduced dependence on kerosene lamps, decreasing indoor air pollution and associated respiratory risks.
- Enhanced safety and security in homes, reducing accidents and wildlife risks during the night.





Solar Lantern Distribution for Livelihoods and Safety

To support livelihood activities and improve safety for vulnerable coastal families, SEED distributed 1,000 solar lanterns in Ghoramara Island with CSR support from Signify Innovations India Limited.

Key Components:

- Durable and portable solar lanterns designed for personal and livelihood use.
- Training sessions for 40 individuals on solar lantern maintenance, creating local employment opportunities.

Benefits to the Community:

- Extended working hours for women involved in income-generating activities such as embroidery and zari work.
- Safer night operations for fishermen, crab hunters, and honey collectors, reducing risks of wildlife attacks.
- Improved quality of life and resilience to energy poverty through access to renewable energy solutions.

Solar Street Lighting for Safer Communities

SEED installed 50 solar streetlights in key areas of Ghoramara Island. This initiative addressed safety and security concerns while improving lightning infrastructure in geographically isolated communities.

Key Components:

1. Solar-powered streetlights designed for long-lasting and reliable performance.
2. Strategic installation in public areas and pathways frequently used by villagers.

Benefits to the Community:

- Improved safety for villagers, particularly women and children, by reducing risks of accidents and wildlife encounters at night.
- Enhanced mobility and transportation in the evenings, boosting community activities and livelihood opportunities.
- Supported environmental sustainability by eliminating the need for energy derived from non-renewable resources.





Solar Lantern Distribution for Education

To enhance learning opportunities for students in remote regions, SEED distributed 20 solar lanterns to a free coaching center in Uttar Surendraganj, Sundarbans, benefiting over 100 children.

Key Components:

- Portable solar lanterns to provide consistent lighting for educational purposes.
- Training sessions for students on the use and maintenance of solar lanterns.

Benefits to the Community:

- Enabled students to study at night, overcoming the challenges of power outages.
- Improved academic performance by providing a stable and well-lit environment for learning.
- Encouraged regular attendance at coaching centers due to enhanced learning conditions.
- Promoted awareness of renewable energy among young minds, fostering a culture of sustainability.



EDUCATION FOR CLIMATE REFUGEE CHILDREN



EDUCATION FOR CLIMATE REFUGEE CHILDREN

The education program, supported by T & I Global Foundation, is aimed to bring equitable educational opportunities for climate-affected children of the Sundarbans, enhancing their quality of life by breaking the cycle of climate induced poverty.

KEY HIGHLIGHTS (2023-24):

- Supported 135 students from Class 1 to 10 in Sagar and Ghoramara Island through free coaching, focusing on Science, Mathematics and English, providing one-to-one attention to address educational gaps.
- Identified and reintegrated over 250 out-of-school children, with a special emphasis on girls affected by early marriage and caregiving responsibilities.
- Integrated local art, theatre and dance into the curriculum to preserve cultural heritage and educated children about biodiversity and sustainable practices.
- A four-story multipurpose cyclone shelter in Ghoramara Island, doubling as a non formal education center is serving 200 children while serving as a temporary disaster shelter for the population of 1150 families.
- The NFE center at the Rudranagar GP of Sagar island is serving around 205 climate affected children.

Non-Formal Education Centre (Rudranagar GP, Sagar Island)

SEED's Non-Formal Education Centre at the Rudranagar GP provides an accessible and flexible platform for first-generation learners as well as the second generation learners, enabling them to bridge educational gaps and integrate into the formal education system. By incorporating academics with cultural preservation, sustainable environmental practices and health awareness, the center fosters holistic development of 205 climate refugee children.

Key Components:

1. FLN (Foundational Learning & Numeracy) for first generation learners.
2. Remedial classes in key subjects like Science, Mathematics and English for second generation learners to address learning gaps.
3. Integrated cultural education through art (Pattachitra), theatre (Jatra) and dance (Baul performance).
4. Conducted health and hygiene awareness campaigns alongside education.
5. Individual counseling for parents and children to sustain attendance.

Benefits to the Community:

- Enhanced learning opportunities for 205 children in disaster-prone areas.
- Improved academic performance and retention of 100 second generation learners.
- Enhanced foundational learning and numeracy skills of 105 first generation learners.





Non Formal Education Centre (Ghoramara)

To enhance learning opportunities for climate affected students in a remote island, SEED is running an NFE centre at the Ghoramara, benefiting over 200 first generation and second generation learners.

Key Components:

- Remedial classes for the 85 students of class 6th to 10th in key subjects like Maths, Science and English .
- FLN classes for 115 first generation learners to enhance foundational learning and numeracy skills.
- Weekly Bal Panchayats for the students to inculcate the leadership skills.
- Parental counselling to enhance learning environment at home also.

Benefits to the Community:

- Improved academic performance among 85 students, fostering stronger conceptual understanding in Maths, Science and English.
- Enhanced foundational literacy and numeracy skills for 115 first-generation learners, enabling smoother transitions to formal education.
- Development of leadership qualities and decision-making abilities among students through active participation in weekly Bal Panchayats.
- Strengthened parental involvement in education, creating a supportive home learning environment and improving student retention and engagement.

Reintegration of Dropouts

SEED's Reintegration of Dropouts Initiative focuses on addressing the educational needs of children who have left formal schooling, particularly girls impacted by early marriage and caregiving responsibilities. This initiative is designed to provide targeted academic support and a conducive environment for re-enrolling 250 children in formal schools, empowering them to resume their educational journey.

Key Components:

1. Identification and enrollment of dropout children through comprehensive community surveys and parental engagement.
2. Tailored academic support for a smoother transition to formal schooling.
3. Special focus on girl children, addressing barriers like early marriage and caregiving through counseling and awareness programs.
4. Provision of educational materials, school uniforms and transportation support to ensure continued attendance.

Benefits to the Community:

- Re-enrollment of 250 children, including 150 girls, into formal schooling, reducing the dropout rate in the region.
- Empowerment of girl children, breaking the cycle of early marriage and limited education.
- Strengthened community awareness of the importance of education, fostering a supportive environment for sustained learning.





MANGROVE RESTORATION FOR CLIMATE CHANGE MITIGATION



MANGROVE RESTORATION FOR CLIMATE CHANGE MITIGATION

SEED's mangrove restoration initiatives in the Sundarbans and East Kolkata Wetlands adopt a bio-rights approach, combining ecological conservation with community empowerment. By actively involving local communities, particularly women-led groups, in mangrove nursery management and plantation, SEED ensures both environmental sustainability and livelihood generation. This integrated model not only enhances coastal resilience against climate change impacts but also promotes biodiversity, fosters local stewardship, and secures income for vulnerable populations, creating a sustainable balance between human needs and ecological preservation.

KEY HIGHLIGHTS (2014-24):

- Planted more than 1.05 million mangroves, stabilizing 125 hectares of land, protecting coastal regions from erosion.
- Planted 20,000 fruit plants, enhancing biodiversity and providing nutritional support to the local communities.
- Involved 2700+ local women in the nursery management and plantation process, promoting community participation and providing alternative income generation opportunities.

Mangrove Plantation in Jharkhali Island

With support from the Tiger Widows, Ireland, SEED's Mangrove Plantation Initiative in Jharkhali Island focuses on restoring degraded coastal ecosystems while empowering local communities to combat the impacts of climate change. This project has transformed barren mudflats into thriving mangrove forests, providing natural barriers against erosion and storm surges..

Key Components:

1. Establishment of a community-led mangrove nursery, managed by 50 women from self-help groups (SHGs).
2. Plantation of over 50,000 mangrove saplings across 25 hectares of degraded coastline.
3. Training sessions for 150 community members on the ecological importance and maintenance of mangroves.
4. Collaboration with local Panchayats and Forest Department to ensure long-term sustainability.

Benefits to the Community:

- Reduced coastal erosion and enhanced protection against cyclones and tidal surges.
- Sustainable livelihoods for women through nursery management and plantation activities.
- Improved biodiversity, supporting fisheries and other marine life.
- Increased community resilience to climate-induced challenges.





Mangrove Plantation in Ghoramara Island

Supported by the CSR initiative of BPCL, SEED's Mangrove Plantation Initiative in Ghoramara Island is a crucial intervention for safeguarding one of the most climate-vulnerable regions in the Sundarbans. By restoring mangrove cover, the program mitigates the island's erosion and supports the livelihood of displaced families.

Key Components:

- Plantation of 35,000 mangrove saplings along 18 hectares of vulnerable coastline.
- Involvement of local communities in the plantation process to foster ownership.
- Training of 40 local women in nursery management, enhancing their skills and livelihood opportunities.
- Awareness campaigns across 6 villages on mangrove conservation and its role in climate resilience.

Benefits to the Community:

- Enhanced natural defenses against storm surges, protecting over 1150 families.
- Livelihood support for 40 women through their active participation in mangrove restoration.
- Increased carbon sequestration, contributing to global climate mitigation efforts.
- Strengthened livelihood for the community through aquaculture, apiculture and agriculture.



**CAPACITY BUILDING FOR
LIVELIHOOD
DIVERSIFICATION**



CAPACITY BUILDING FOR LIVELIHOOD DIVERSIFICATION

SEED's capacity-building initiatives in the Sundarbans aim to diversify livelihoods, enhance income, and build resilience against climate change. By providing training in aquaculture, organic salt-tolerant farming, handicrafts, and poultry rearing, SEED empowers local communities to adopt sustainable practices and reduce dependence on traditional, climate-vulnerable occupations.

KEY HIGHLIGHTS (2023-24):

- Trained 250 individuals in sustainable fish farming techniques, including pond management and breeding, leading to a 20% increase in household incomes for participants.
- Educated 200 farmers on cultivating salt-tolerant crops, resulting in a 25% increase in crop yields and improved food security for their families.
- Provided 150 women with skills in traditional crafts such as weaving and batik printing, enabling them to earn an additional amount and preserving cultural heritage.
- Supported 100 families in establishing poultry and duck farming operations, contributing to a 20% boost in household incomes and enhanced nutrition through increased protein availability.

Aquaculture Training

In the Sundarbans, traditional fishing practices are increasingly threatened due to declining stock caused by climate change, impacting the livelihoods and food security of local communities. To address this, SEED has introduced aquaculture training programs.

Key Components:

1. Conducted workshops for 250 islanders on aquaculture techniques, including pond and cage management, species selection and breeding practices.
2. Supplied quality fish seeds and feed to participants to initiate aquaculture activities.

Benefits to the Community:

- Participants reported a 20% increase in incomes due to improved fish yields.
- Created alternative livelihood, reducing reliance on climate-sensitive overfishing.
- Increased availability of locally farmed fish contributing to improved nutritional intake.





Training on Organic Salt-Tolerant Farming

The intrusion of saline water into agricultural lands in the Sundarbans has rendered traditional farming methods less effective, threatening food security and incomes. SEED's organic salt-tolerant farming initiative trains farmers to cultivate crops resilient to salinity, ensuring sustainable agriculture in challenging conditions.

Key Components:

- Trained 150 farmers in cultivating salt-tolerant crop varieties suitable for saline-prone soils.
- Established 5 model farms to showcase best practices in organic farming under saline conditions.
- Provided organic fertilizers and bio-pesticides to promote sustainable farming.

Benefits to the Community:

- Farmers experienced a 20% increase in crop yields, enhancing livelihood and food security.
- Diversified crop production reduced economic vulnerability to climate-induced crop failures.
- Reduced chemical usage led to improved soil health and decreased environmental pollution.

Handicraft and Artisanal Skills Development

The rich cultural heritage of the Sundarbans includes traditional crafts that offer potential income sources for local communities. SEED's handicraft and artisanal skills development program empowers individuals, particularly women, to create and market traditional crafts, fostering economic independence and cultural preservation.

Key Components:

1. Organized training in traditional crafts such as weaving, batik printing and clay doll making for 150 women.
2. Assisted artisans in accessing broader markets through local exhibitions and partnerships.
3. Provided guidance on improving product quality to meet market demands.

Benefits to the Community:

- Artisans earned an additional ₹10,000 annually, supplementing household incomes.
- Revitalized traditional crafts, preserving cultural heritage for future generations.
- Enabled 150 women to achieve financial independence and enhanced social status.





Poultry and Duck Rearing Training

Diversifying livelihoods is essential for building resilience in the Sundarbans' vulnerable communities. SEED's poultry and duck rearing training provides families with the skills and resources to engage in small-scale poultry farming, offering a reliable income source and improving nutritional standards.

Key Components:

- Provided hands-on training to 100 households in home stead backyard poultry and duck farming, covering aspects like housing, feeding and disease management.
- Distributed initial stock like chick and ducklings to kick-start poultry activities.
- Offered access to veterinary services to ensure animal health and productivity.

Benefits to the Community:

- Families reported a 20% boost in household incomes from poultry and duck rearing.
- Increased availability of eggs and poultry meat enhanced dietary protein intake.
- Provided a steady income source, reducing vulnerability to livelihood uncertainties.



RECOGNITION OF OUR
EFFORTS

A Simple Change Is Ending Saltwater Struggles & Period Woes for Women in the Sundarbans

For almost two decades, dedicated efforts have been tackling the severe challenges of saltwater intrusion and poor hygiene, especially menstrual health, in the Sundarbans. But solving these issues isn't easy — especially in a region where every hard-earned rupee is vital for survival, making sustainable solutions even more urgent.

By Mervin Preethi

December 12, 2024



The Sundarbans, where land and sea intertwine in a breathtaking dance, is a testament to nature's raw power and delicate beauty. This [unique ecosystem](#), breathing with the rhythm of saltwater tides, is a fragile balance that sustains life.

WASH initiatives Recognized by The Better India

SEED's initiatives in the Sundarbans have been featured in **The Better India**, highlighting our work in combating saltwater intrusion and improving menstrual health management. The article emphasizes our efforts in increasing access to freshwater through pond excavation and rainwater harvesting, as well as conducting workshops to raise awareness about menstrual hygiene. These interventions have significantly improved health outcomes and quality of life for women in the region.

Link to the article: <https://thebetterindia.com/387141/sundarbans-salt-water-intrusion-menstrual-health-management-seed-sanitary-pads/>



Coastal Biodiversity Conservation Centre

Region: Asia
Country: India
Flyway: Central Asia
Initiative: WLI Asia-Oceania

WORK AREAS

EXPERTISE

CONTACT

About

Name of organisation

SEED (Society For socio-Economic & Ecological Development)

Funding support

JACPCL, Rotary International, Tiger Widows (Ireland), Conveyor Belt India Pvt. Ltd (Continental) and Bharat Petroleum Corporation Ltd CSR

Number of staff

48

Number of visitors per year

500+

Overall aims of the centre

To protect and enhance coastal ecosystems of Sundarbans while fostering sustainable livelihoods for local communities through conservation education and active participation in mangrove restoration efforts. This integrated approach aims to ensure the resilience of coastal habitats against climate change impacts.

International Recognition of Our Conservation Efforts

SEED's Coastal Biodiversity Conservation Centre has been acknowledged by Wetland Link International (WLI) for its exemplary work in mangrove restoration and community engagement in the Sundarbans. Our initiatives include regular seminars and workshops that educate local communities on sustainable practices and climate adaptation strategies.

Link to the article: <https://wli.wwt.org.uk/?member=coastal-biodiversity-conservation-centre>



WLI Asia-Oceania Showcasing SEED's Conservation Efforts

Wetland Link International (WLI) Asia-Oceania has developed an album highlighting SEED's initiatives in Communications, Education, Participation, and Awareness (CEPA) and conservation. This album showcases our commitment to environmental education and sustainable practices in the Sundarbans region.

Album link: <https://www.flickr.com/photos/wliasia/albums/72177720321574974/>

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