

ANNUAL REPORT 2022-2023

**SOCIETY FOR SOCIO ECONOMIC AND ECOLOGICAL
DEVELOPMENT**

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MEMBER OF CTCN (CLIMATE TECHNOLOGY CENTRE & NETWORK)



&

CANSA (CLIMATE ACTION NETWORK SOUTH ASIA)



**ISO 9001-2015 CERTIFIED & A REGISTERED NGO UNDER NITI AAYOG,
MINISTRY OF HUMAN RESOURCE, GOVT. OF INDIA**

MESSAGE OF PRESIDENT

It has been a long time since when the World took a complete turn as Covid-19 hit across the world taking lives of crores and devastating the lives, economy, healthcare as well as education field.

Now, as everyone has learned to cope with the new World with vaccination going fast pace across, the economy, health and social life of people are also coming back to track. So, it's time to start afresh again with full zeal and motivation. SEED is no exception in this case rather we could hardly stop being in the service.

"Only One Earth" is the campaign slogan of this year's World Environment Day which calls for a global, collective, and transformative action to celebrate, protect and restore our planet, because we have only one Earth and we must take care of it. In this, Renewable energy plays a great role to protect the earth from the dreaded effects of Climate Change. SEED with support from its CSR partner installed several solar street lights and distributed solar lanterns in coastal Sundarbans.

This year, we have stressed more on the plantation especially in coastal Sundarban regions to prevent and mitigate the effects of storm surges and annual cyclones as lakhs of coastal communities suffer due to this every year. Mangroves play the first layer of protection for the islanders from the major tropical cyclones by reducing waves and storm surges. The aerial roots of mangrove forests retain sediments and stabilise the soil in the areas between high tide and low tide by reducing erosion during storms and floods. Moreover, they are the most carbon-rich forests among all the major forest domains of the world. With support and funding from various organizations, SEED has initiated a mangrove mission to save the island and its inhabitants.

Prof. Jyotiranjana Naskar
President, SEED

HISTORIAL BACKGROUND

A group of renowned professionals, belonging to almost all strata of the society in Kolkata, West Bengal inspired by some social celebrities started with some relief works in remote rural areas of South 24 Parganas and Sundarbans, in association with different local administrative bodies in 1995. After the success of their efforts, they decided to form an organization named “Naktala Centre for Socio-Economic Reform and Environmental Conservation” that will work for people, with the people and by the people. Developmental consultants and renowned social workers joined hands and thus the organisation was registered in 1996 under the West Bengal Society Registration Act 1961. The organization was later renamed SEED (Society for Socio Economic and Ecological Development). Thus, the organization started working for the vulnerable people to bring about a positive change into their lives.

The organization first started working for the land rights and awareness generation about the entitlements among the Oraon tribe community of South Kolkata. Following this, many other assignments and projects were continued.

BRIEF DESCRIPTION OF SEED

SEED (Society for Socio Economic and Ecological Development) is a non- profit grass roots NGO for the development of the peri-urban and remote rural areas of West Bengal. Equality, Education, Empowerment and Environment are the four focus areas of SEED.

The organization developed a platform for various social action programmes to alleviate social and economic problems of the people of different regions of West Bengal especially in the coastal areas of Sundarban and arid regions of Purulia district, Himalayan regions of Kalimpong and Jharkhand. The activities of the organization are mainly into –

- Free Coaching Centre for the poor vulnerable community children
- Women SHG mobilization and Capacity Building of women SHGs
- Women Health (basic preventive care and menstrual hygiene management)
- Biodiversity Conservation
- Climate Change Adaptation
- Skill development training
- Plantation
- Disaster Response
- Plantation
- Renewable Energy

The first significant project of SEED was on 'Environmental awareness mapping programme' in the KMC ward No 100, which was sponsored by 'West Bengal Pollution Control Board' in 1999. The project was accomplished with the maximum involvement of the local people and local CBOs.

The second project was a humble attempt on finding out 'Problems and prospects regarding formation of SHGs (Self Help Groups) among rag pickers in East Kolkata'. This project was sponsored by CARE India, another national level development organization.

The next project in 'East Kolkata Wetland area' was totally self-funded. The aim of the project was to work on the vulnerable communities of the area, support in their development and education. The main purpose was to organize a campaign to declare it as a protected area. It also aimed at biodiversity conservation, wetland conservation and livelihood development.

SEED has carried out various training programmes under various projects for the unemployed youths and women of the underprivileged section sponsored by different State and Central Government agencies like Department of Environment, Department of Sports and Youth Affairs, Government of West Bengal, NABARD, West Bengal Pollution Control Board, Central Foot Wear Training Centre, Dept. of Technical Education, Govt. of West Bengal, National Institute of Technical Training and Research, Department of Science & Technology and NES, Government of West Bengal, Nehru Yuba Kendra, the World Bank etc. But so far, SEED has not been empanelled as training institute by state or central government departments and/or bodies.

Apart from the above-mentioned State and Central Government Departments and/or agencies, SEED has also imparted trainings for Care India, Central Board for Workers' Education, Society for Integrated Coastal Management (SICOM), New Delhi, Marine Fishermen Organization, Food & Engineering Department, IIT – Kharagpur, Sagardwip Fishermen Association, Department of Panchayats, Centre for Environment & Education, Ahmedabad, etc.

Since, 2012, SEED has been an implementing organization for the World Bank funded ICZMP (Integrated Coastal Zone Management Project), West Bengal in Sagar Island. Under this project, SEED has been actively working for the livelihood development of the vulnerable poor communities.

SEED is also a privileged member of CANSA (Climate Action Network of South Asia), a global network of Non-Governmental Organizations working to promote government and individual action to limit human induced climate change.

In this year, SEED has formed 500 new SHGs in different blocks of Sundarban and done their bank linkage as well as credit linkage under NABARD supported Bank Linkage programme.

They were provided capacity building trainings in different livelihood options like handicraft item preparation, spice making at home, homestead fish cultivation, organic agriculture, horticulture, and aquaculture.

SEED has conducted workshops on Low Carbon Farming in Sagar Island with technical support from IIT, Kharagpur and Climate mobilization rally in Sundarban

and Kolkata. Apart from this, plantation programs were conducted under CSR supported activities.

The organization has also been registered with the Implementing Agencies Hub at Indian Institute of Corporate Affairs (IICR) and is a member of CTCN (Climate Technology Center and Network).

SEED has installed sanitary napkin vending machines in few Govt./Govt. sponsored schools of Kolkata and organized awareness generation programmes on menstrual hygiene management and taboos/myths around the issue.

The awareness programmes on menstrual hygiene, taboos, myths, and life skill trainings were provided in different parts of Jharkhand and Odisha.

One of the significant contribution of SEED till today is a non-formal school which was built in Sagar Island of Sundarban. It was initially started for the mainstreaming of first-generation learners of primitive Lodha tribe children and later other underprivileged community children were also included and school dropouts were brought back to school to mainstream them in nearby government or government supported schools. Since beginning around 190 dropout and first-generation children have been mainstreamed till now. Apart from curriculum-based education, the students are taught various extra-curricular activities like sports, music, public speaking, art etc. The students also get one-time healthy snacking for their good health as well as to keep them motivated to come to school regularly.

The school building also functions as Cyclone/Flood shelter as the coastal area is affected by dreaded storms, cyclones, and floods.



Ghoramara Island is one of the remotest and worst affected islands by climate change in Sundarbans. With mere 5 sq.km. area, and 1100 families, the islanders were already lacking all the basic amenities like electricity, communication system and healthcare. Now, the situation has gone worst by major cyclonic events resulting into the devastation of houses, livestock, and livelihoods.

Many have become homeless and living in complete darkness. The homeless victims of cyclones do not get any immediate accommodation for shelter in such situation. The women, children and elderly people suffer the most who need immediate attention.

Considering all the above factors, SEED with financial support from Rotary Jamshedpur, West and JACPCL has constructed a multipurpose cyclone centre cum community centre in Ghoramara with 2 floors completed by now. In disaster like situation, the building can be used as shelter for the homeless vulnerable islanders. During normal time, it functions as classrooms for the local students as the only Primary School building in Khashimara village of the island has become recent victim of soil erosion near the river. The Multipurpose cyclone centre can also be used as a hub of social activities for the local community like a community hall, Home Stay and Training Centre for socio- cultural gatherings with Solar Electricity facilities.





The lives of the coastal communities here are quite hard because of its geographical isolation and lack of basic amenities. Two-third of the total population falls below the official poverty line. Moreover, there is no direct public conveyance from Ghoramara to the mainland. Kakdwip is the nearest mainland, and a ferry takes almost an hour from Ghoramara.

Nearly 98% of India's households have grid electricity connections, but people on this island have no access to grid electricity. The provision of grid electricity connection, as a source of conventional power and lighting, to Ghoramara, seems unlikely to be implemented soon, primarily because of its geographical adversities.

In the absence of electricity, most people here resort to kerosene as their primary lighting source. It has been widely emphasized that replacing kerosene lamps with solar lighting could relieve kerosene's toxic smoke and high prices of procuring kerosene. The solar lighting system also provides a pollution-free and renewable source of light.

In the absence of a stable source of light, it was tough for the villagers to carry out regular work after sunset. Those problems were particularly stark for women who needed to attend to daily household work after the sunset. Students also could not study in the evening. Moreover, it is unsafe to move around after the sunset in fear of snake bites in darkness, whether at home or outside. Burning of kerosene also causes different diseases putting women and children at the highest risk.

Hence, it was of utmost importance to bring some light into their lives in the form of electricity, which was viable in solar energy systems considering the island's

remote location. On the other hand, the solar lighting system also reduces Green House Gasses emissions and fights against climate change.

Hence, the project named “Installation of Solar Lights at Climate Affected Ghoramara Island of Sundarbans Area for Empowerment of Women and Children” sponsored by the SIGNIFY FOUNDATION was started on 15th March 2022. Following the orientation of Local Community, Creating Public Awareness, and Identification of SHGs for Capacity Building and training, the distribution of solar lanterns was completed in the month of June. Next 3 months were dedicated on training of Solar system Repair and Solar Enterprise Activities.



SEED is also running free coaching centres in Ghormara Island and Nalgora village of Joynagar 2 Block.

To decrease the dreaded effects of cyclonic coastal storm surges and erosion, SEED has also started massive mangrove plantation in various parts of Sundarban riverbed areas.





ACTIVITIES IN 2022 – 2023

LITERACY PROMOTION PROGRAMME -KHELAGHAR, THE NON-FORMAL SCHOOL

Education has been one of the four pillars of SEED since its inception. SEED undertook the mission of bringing back the underprivileged dropout children back to schools since beginning.

It has been more than a decade SEED has been running a non-formal school for primitive Lodha tribe children and other underprivileged community children in Radhakrishnapur Village, Rudranagar GP, Sagar Island in Sundarban named “Khelaghar”. Initially, it was run with support from Loreto, Kolkata. However, since

last few years, SEED is continuing the school alone with individual donations. Now, the school has 194 students from Lodha tribal families and other underprivileged families. Most of the students here are first generation learners and their parents are landless labours, agricultural labours or from fishermen community. The initial challenge of convincing the parents to send their children to school has decreased a lot in these years as our field counsellors have been regularly visiting the parents and informing about the benefits of sharing their children to school. Additionally, the parents have been provided several livelihood trainings and support so that they do not need additional income through their children.





Since its inception 110 school dropout students have been mainstreamed by this non-formal school. Apart from educational support, the students are trained in other extracurricular activities like sports, music, recitation, art, and craft etc.

FREE COACHING CENTRE IN GHORAMARA ISLAND & JOYNAGAR II – BLOCK FOR THE UNDERPRIVILEGED CHILDREN

The population of this area is mainly below poverty line being landless agricultural labours or migrant workers. Their livelihood was badly hit with covid pandemic in 2020 and so the education of their children. Online education was not affordable for most of them and some could not properly get adapted to the new media. Due to lack of adequate digital infrastructural support, the children of remote areas cannot get regular access to online education facilities. Financial inability and lack of digital literacy among the parents also acted as great hindrance. So, in this situation SEED started free Coaching Centre for such underprivileged children. One of them is being run in Ghoramara Island & the other is in Joynagar II – Block. Even after the lockdown and covid situation came under control, the centres continued to provide free educational support to the underprivileged children so that no student drops out of school anymore.



At present, there are total 34 students in the centre at Nalgora village of Joynagar 2 Block and 46 students in Ghoramara centre. The coaching is mainly given for English and Science subjects to enhance their formal education.

DISTRIBUTION OF SOLAR LAMPS AND STREET LIGHTS IN SUNDARBAN

The adverse effects of climate change, sea level rise, or frequent extreme weather conditions such as cyclones are wrecking the lives of the poor vulnerable coastal communities. The selected project areas, three Blocks of the Sundarban, namely, Pathar Pratima, Namkhana and Sagar, have been facing all the tribulations of climate change. An increased number of cyclones in the Bay of Bengal have worsened the livelihood of those poor people.

Many poor people in the selected areas primarily depend on the forest for their livelihoods. Unfortunately, this dependency on forest occasionally conflicts with the mighty Royal Bengal Tiger and crocodiles. Every year, a considerable number of fishermen, crab hunters, and honey collectors fall prey to those ferocious animals. In most cases, the sole breadwinner of family gets killed in tiger attacks. Since the Covid pandemic, forest dependency has increased among the poor, which resulted in a higher number of tiger attacks and loss of lives. Most of these attacks happen during dark hours due to the lack of proper visibility and a stable source of light.

The Lodha tribe of Sundarban are mainly depended on Natural resources for their food and livelihood. They need to struggle a lot after sunset when it gets dark as most of them don't have access to any source of electricity.

Similarly, the villagers on remote Ghoramara Island are susceptible to crocodile attacks and snake bites at night without any light source. The whole locality plunges in the dark after sunset. Incidences of snake bites are widespread on this island. The poor villagers on this island primarily depend on kerosene lamps for lighting in or outside their homes in the dark

In Namkhana Block, many coastal villagers were forced to leave their homes temporarily and settle in makeshift shelters. These settlements are often located in dark and unsafe areas.

Considering to solve these everyday problems, SEED with support from Signify Innovations India Ltd. planned to install solar streetlights to provide lighting and safety in these areas and provide solar home lights for everyday chores after sunset.

The project has installed 50 solar streetlights across different villages of the Sagar, Pathar Pratima, and Namkhana blocks. From Sagar block, three villages, namely, Mandirtala North, Mandirtala South, and Roy Para, were chosen to install the street lights. Similarly, seven villages were selected from the Pathar Pratima block: Gobardhanpur, Purba Sripati Nagar, Paschim Sripati Nagar, Satyadaspur, Uttar Surendragang, Gobardhanpur, and Sitirampur. Finally, another village named Patibumia was chosen from Namkhana Block.



The installation of solar streetlights was chosen for public areas such as ferry ghats, bazaars, fish markets locally known as 'Khnuti,' community tubules, school premises, temples, and colonies where homeless people, due to the cyclone, have temporarily settled. These public places are essential for the community and require proper lighting for safety and convenience.



Introduction of solar lights has improved the education of children after sunset, health and security of women and improve overall lifestyle of the vulnerable islanders. The availability of lighting has increased women's safety, enabling them to move around more freely, especially during the night. In addition, women can now participate in various community activities and avail themselves of essential services such as healthcare, education, etc.



The availability of lighting has significantly impacted economic activity in the region. The local fish market and bazaar have seen an increase in footfall, with people now able to shop for essentials after sunset. The availability of lighting has

also enabled small businesses to operate for longer hours, boosting their overall revenue.



Solar streetlights have improved public places such as schools, temples, and other community spaces. These places are now more accessible and safer for people to use. The availability of lighting has also encouraged more people to use these public spaces for various activities, including sports, social gatherings, and cultural events.



The Sundarbans region primarily depends on river transport for connectivity. The installation of solar streetlights has been helpful in transportation, particularly in the ferry ghat. With proper lighting, people can now board and disembark from ferries safely, reducing the risk of accidents and injuries.

The solar lanterns given have socket to charge cell phones as most of the project areas do not have grid electricity so this multipurpose lantern has become a reliable source of cell phone charging. So now, these islanders can connect themselves with the outside world easily without any interruption for discharged battery. The project is also helping in fighting climate change and global warming by reducing the usage of fossil fuels as earlier all the families used kerosene oil lanterns.

The fishermen, crab hunters, and honey collectors now carry the solar lanterns received through this project whenever they go to the forest. Earlier, those poor people used to take kerosene lamps during their visits to the forest. This unstable source of lighting often made them vulnerable to tiger and crocodile attacks at night. Now, solar lanterns are providing them with a stable source of light that has reduced the possibility of wild animal attacks at night.



Under this project, 1000 families received single solar lanterns, 100 families received home solar systems, and 50 solar street lights were installed in the project villages from 01.12.2022 to 31.1.2023.

In addition, different training sessions were arranged to make the new users accustomed to this solar lighting system. 40 people were professionally trained to repair these lanterns providing an opportunity for employment generation.

MENSTRUAL HYGIENE MANAGEMENT WORKSHOP IN JHARKHALI ISLAND

Irregular menstrual cycles, vaginal infections, recurring UTI and miscarriages are common amongst the women in the Sundarbans. The men of most of these families are migrant workers and based somewhere else. The women meet their day-to-day expenses by selling prawns and fish they catch in the river for which they have remain in waist-deep water for four-six hours per day. These women shy away from telling their problems to doctors who are also not available regularly.

The women and girls generally do not maintain cleanliness during menstruation period. As a result, they become the host of many infectious diseases. This is due to the lack of awareness among them and also due to the economic inability for adopting better precautions like- use of good sanitary napkins during menstruation period. Usually, different varieties of sanitary napkins are found available in the market. But the reason is that these napkins are not affordable for rural poor women and girls.

With an aim to generate awareness among women about menstrual health management, to diminish myths and taboos around menstruation and to improve health status of the adolescent girls and women SEED conducted awareness workshop and distributed low-cost sanitary pads under SCOPE-BANGLA project of JBNST and Vigyan Prasar 2022-2023. The workshop was conducted in Parbatipur village of Basanti Block, Sundarban.

The Workshop was conducted by Dr. Madhumita Dobe, Ex. Professor Director All India Institute of Public Health and Hygiene, Govt. of India and Dr. Prodyut Kumar Sur, Ex. Sr. Gynaecologist, Department of Health, Govt. of West Bengal with participants from local Panchayat, local women, students, Asha workers, and ICDS workers.

The awareness workshop was conducted with audio-visual supporting informative videos which will include participants like adolescent girls and all women representatives of various CBOs & SHGs, Health workers and teachers.



The experts Dr. Madhumita Dobe and Dr. Prodyut Kumar Sur conducted step-by-step activities along with one-to-one interactions with the participants. They explained the physiology of menstruation, why and how women should take care of their health and hygiene during menstruation, and what the taboos and myths around menstruation should not be followed.



Almost 85 % of the participants reported that they were not allowed to enter the kitchen or worshipping area during this time of the month as they are getting rid of the impurities inside them during this time. Most women earlier used clothes and dry them in shed. In this workshop, they were made to understand the negative aspects of using the clothes and then reusing them after drying in shades. Those who used the sanitary pads could not change them, there was no proper disposal facility. They were informed that using one pad for the long time can cause skin irritation and other health problems.



The girls usually get first information about menstruation from their mothers at home so it is very important for mothers to have proper knowledge about menstrual health and hygiene management otherwise the myths and taboos will be transmitted to next generation. So, mothers were invited as one of the most valuable participants in these workshops.

Initial counselling was provided for psychological support to the girls entering puberty and to help them to come out from social taboo, situational discomforts, depression, and trauma.

DISTRIBUTION OF FREE SANITARY PADS

Many of the women participants were not using sanitary pads because of its easy high cost and they could not access them easily. The families here are from poor vulnerable communities with meagre income to run their daily needs. In such a situation, buying sanitary pads sounds luxury to many women. Some were shy to ask for it in their local pharmacies. The hesitance was little overcome followed by

the workshop and many women were willing to buy if they get at affordable cost. With an aim to develop the habit of using sanitary pads, these women were given initial few packs of free sanitary pads of good quality.

OUTCOME

It is an age-old cycle of myths and taboos so immediate change cannot be expected. But the best encouraging part was the participation of women with their girl children and their interest about knowing the facts against the myths around menstruation. Most of them readily agreed to start using sanitary pads and encourage others in their family and among relatives. They questioned about the myths and taboos they were following for many years. Some of them were convinced and some were still little hesitant to accept so they were shown practical examples by Dr. Madhumita Dobe. Some videos related to menstrual taboos and the science behind them were explained and then they could understand the reality.

The awareness about menstrual hygiene management in rural population was thus improved and provided an atmosphere of confidence among women.

Mothers promised to send their adolescent girls to schools even if they start menstruating as they will use sanitary pads and know how to maintain hygiene in those days. The women also promised to continue their various livelihood activities and take part in social and financial decisions and will not be hindered by menstruation.

Workshop on Malnutrition among the Children of Namkhana Block and Remedial Measures through Nourishment Using Local Resources

Workshop on Malnutrition among age group of Six to Eleven Years and Remedial Measures through Nourishment using local resources was organized

successfully at Kalpataru Ramkrishna Ashram, Namkhana, Sundarbans, South 24- Parganas District on 7th January, 2023. The workshop was attended by altogether 52 numbers of children of the age group of six to eleven years along with their individual mothers/ guardians, local Asha workers, ICDS workers, Panchayat members and three teachers of the local school.

Altogether, 126 numbers of persons participated in the workshop. However, only one guardian per student was allowed in the workshop. Two experts namely Dr. Madhumita Dobe, Ex-Director Professor, All India Institute of Public Health and Hygiene, Government of India and Ms. Mitali Palodhi, Consultant Nutritionist at Child in Need Institute (CINI) and Vice-president at Indian Dietetic Association National participated in the workshop as resource persons.



The workshop was carried out in two halves:

In the first half after the registration, height of individual students was first measured through a graduated scale under the supervision of the two experts present in the workshop.



Simultaneously with the measurement of heights, the weights of the individual students were also measured using a weighing machine.



Both the height and the weight of all the individual children were noted in a slip with their names, ages and sex so as to facilitate the BMI measurements subsequently. Photo-3 displays that the same is being carried out. The individual slips were handed over to the concerned child so that they can keep those with them for handing over at the counter in which BMI calculation would be carried out.

Once, the measurements of heights and weights of those in individual slips were over, the measurements were carried out and noted in the paper slips. Their heights and weights were earlier noted.



Individual slips of each student were calculated at this counter and the experts then grouped the participants into three groups namely healthy, less nutrition and malnutrition as per WHO guideline chart following age and sex. It was found that out of 52 children 24 numbers of children are suffering from malnutrition. Out of these 24 numbers, 15 were girls and 9 were boys. Once, the children having malnutrition were identified, then individual child were physically examined by Dr. Madhumita Dobe, who is a physician and a child specialist.

The anaemic conditions of some students were also detected through physical examinations of the child suffering from malnutrition. In four cases, it was found that worms are the main reason behind such malnutrition. All the causes for the individual child were noted in their individual slips for carrying out the hands-on exercise in the second half.

In the second half after the lunch break, Dr. Madhumita Dobe first started her deliberations. First, she called the mother/guardian of each of the child one by one to understand the food habits at individual home. It was found that the children suffering from the worms are not taking the preventive medicine for worms even they are getting those 'Free of Cost' from the school. The mothers of these four

children are preventing them from taking those tablets out of superstition and ignorance.



Prescription of individual child suffering from anaemia was also made by her. After this exercise and examination of 24 numbers of children suffering from malnutrition, she gave a plenary lecture for all the mothers and guardians regarding her findings of the nutritional status of the participant children. Based on this sample size, she also made an exhaustive discussion on the possible nutritional status of the children of the locality and how to improve that. She also remarked on the income status of the local residents based on her interaction with the mothers of the children and pointed out how they are misusing their money for purchasing fast food and tinned food due to consumerism and following the advertisements of TV and cinema.

After her lecture, Ms. Mitali Palodhi presented a lucid lecture on nutrition and foods rich in nutrient quality. She also indicated how those nutrient rich foods can be prepared using local resources and how to prepare those nutrient foods in a scientific manner.



She explained in detail how nutrition rich food can also be prepared in low budget. It was really a learning exercise for all the participating mothers and the Asha and ICDS workers. After general discussions, both the experts also interacted with the participants and answered all the queries and questions raised by them.

At the end of the workshop, some educational kits were distributed among the children. The workshop was very much successful to impart scientific knowledge and temper among the local women concerning nutrition and healthy food habits.

MANGROVE PLANTATION IN COASTAL SUNDARBAN

The coastal Sundarban turns extremely vulnerable during cyclone season as the area is prone to tidal surges. The Climate Change aggravates intensity of weather. The embankments built across the island are not enough to protect the coastal settlements from seeping sea water when the cyclones get more severe due to climate change. This leads to the loss of lives, livelihoods, and salt water intrusion into agricultural fields.

Mangroves play the first layer of protection for the islanders from the major tropical cyclones by reducing waves and storm surges. The aerial roots of mangrove forests retain sediments and stabilise the soil in the areas between high tide and low tide (intertidal areas) by reducing erosion during storms and floods. Moreover, they are the most carbon-rich forests among all the major forest domains of the world. They provide a safe refuge for aquatic organisms and protect people from natural disasters thus acting as bio shield. Hence, it was naturally the best choice for plantation.

Ghoramara Island is one of the worst affected islands of Climate Change in Sundarban and badly got devastated by storm surges and cyclones. The soil erosion has become a constant process in this small remote island under Sagar Block. To fight these disastrous situations and reduce the effects SEED has started planting 1 lakh mangroves on the embankment of Muriganga river at Ghoramara GP of Sagardwip block.

MANGROVE PLANTATION PROGRAMME IN SUNDARBAN ON ENVIRONMENT DAY

On the occasion of World Environment Day, following the slogan "Only One Earth", SEED with support from Taj Bengal Hotel and local women group Sabuj Bahini organised a Mangrove Plantation programme on the embankment of the Bidyadhari River on 5th June, 2022.

MANGROVE PLANTATION IN JHARKHALI ISLAND

Under the "Swachhata Pakhwada", programme of BPCL (Bharat Petroleum Corporation Limited), SEED conducted a mangrove plantation drive in Basanti Block of Sundarban's Jharkhali Island. This plantation programme was conducted with involvement of local communities and Gram Panchayat and 5000 mangrove saplings were planted on the river bed of Matla and Bidyadhari at Jharkhali GP of Basanti Block.

Additionally, 25000 mangrove saplings were planted in Jharkhali Island funded by Tiger Widow Organization, Ireland.



AWARENESS WORKSHOP & PLANTATION ON STATE WETLAND DAY

On 16th June, SEED celebrated the “State Wetland Day” in East Kolkata Wetland area.

East Kolkata Wetland in West Bengal is one of the Ramsar sites of International Importance and SEED organized an awareness workshop supported by UNDP under Cap-Net programme at Bamunghata Gram panchayat hall with 135 students and valuable guidance and participation from renowned Environment Scientists, Climate Change Specialist, Environment Activists, and local community in association with Saci Waters.

1000 fruit plants were planted in Charcharia Cooperative Fisheries with the support of Marsh India Insurance Brokers Pvt. Ltd.

Issues of the wetland like biodiversity conservation, fragile ecosystem, urbanization, livelihood linkages, household resource access and gender work etc. were the topics of discussion in the workshop.



PUBLISHING OF BOOKLET ON ENVIRONMENTAL EDUCATION & SUPPORT FOR
SUSTAINABLE WETLAND CONSERVATION

On the occasion of "State Wetland Day", SEED in association with Saci Waters published an Information booklet for environmental education and support for sustainable Wetland Conservation. 1100 copies of this booklet were distributed among the community members for awareness generation.

SCHOLARSHIP FOR MERITORIOUS UNDERPRIVILEGED STUDENTS

There are many meritorious students across the state who cannot pursue higher education. With an aim to support few such underprivileged meritorious students, SEED along with the parents of late Debojyoti Saha came up with this scholarship. Chandanpiri Ramkrishna Ashram conducted this session at their organization. The bereaved parents with handed over the scholarships to some meritorious students of Namkhana Block who have passed HSLC with flying colours wishing them a bright future.



CELEBRATION OF AZADI KA AMRIT MAHOTSAV

To celebrate “Azadi Ka Amrit Mahotsav”, SEED has distributed the Indian National Flag among 1150 families of Ghoramara Island, Sundarban from 13th to 15th August. This also included school students who had a flag march on the occasion of the Independence Day. It was a rare occasion for the remote coastal communities of this vulnerable island.



OBSERVATION OF NATIONAL SCIENCE DAY

SEED in association with "The Science Association of Bengal" and "Computer Society of India" has observed the "National Science Day" on 28th February 2023 at Ram Krishna Mission Institute of Culture, Golpark, Kolkata.



On this occasion, renowned environmental activist Akul Biswas was felicitated for his outstanding social service and development of mankind in Sundarban areas through various environment friendly activities including mangrove plantations in Sundarban coastal beds.



