

ANNUAL REPORT

2021-2022



www.naturewildlife.org

**NATURE ENVIRONMENT &
WILDLIFE SOCIETY (NEWS)**



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INTRODUCTION

Nature Environment and Wildlife Society (NEWS), founded in 1991, is a conservation NGO with headquarters in Kolkata, India. Our primary focus is to conserve wildlife, ecology, and natural resources and ensure sustainable livelihoods for the well-being of society. Through its work, passion, and dedication NEWS has been able to establish its footprint in the conservation circle. We work for a better future using scientific research based on traditional ecological knowledge, community engagement and ownership for sustaining the efforts and policy advocacy to mainstream conservation issues and nature-based solutions in development planning. In this fast-changing world, conservation is a continuous process where new challenges emerge every day. There is no milestone in conservation that can be achieved once and for all. However, the process must adjust to social, economic, environmental, and scientific advancements. We believe that without the empowerment and participation of the community no amount of effort can sustain any threatened or vulnerable ecosystem or habitat, natural resources on which depends the web of life from plants to species of various forms.

On the operational part, the organogram is a pyramid structure, with Governing Body at the apex consisting of a pool of dynamic people from varied professions. The Governing Body is supported technically by the Advisory Board and Ethical Committee. Our President – Dr. J R B Alfred, Former Director of the Zoological Survey of India is part of

many Committees under MoEF&CC (Ministry of Environment Forest and Climate Change) to provide knowledge and contribute to strategic decisions related to the fauna of India. Our Secretary – Mr. Biswajit Roy Chowdhury, is a veteran member of the State Wildlife Advisory Board, Govt of West Bengal.

Our Joint Secretary – Ms. Ajanta Dey is the Regional Coordinator of Living Lakes and Wetlands – South Asia and is also a member of the West Bengal State Coastal Zone Management Authority. The President, Secretary and Joint Secretary along with the Treasurer is responsible for the overall programmatic alignment backed by vibrant human resources with technical capacities, young innovative minds, and professional approach in complying with the outputs, deliverables and outcomes of the projects along with veteran community resource persons, deeply connected at the grass roots in mobilising and empowering communities.

NEWS is committed to the global targets of our country with respect to the Nationally Deterministic Contribution, Aichi Biodiversity targets and National Biodiversity targets and Sustainable Development Goals.

NEWS is a member of the Indian National Committee of the International Union for Nature Conservation (INC-IUCN) and is accredited by the Global Environment Facility (GEF). It is also a member of Living Lakes and Wetlands, a network connecting 110 countries on the protection of Ramsar Sites.



Vision

Ensure a sustainable and functioning ecosystem for a wise planet

Mission

To protect and restore ecosystems and their services, the flora-fauna and their habitat for humanity

Objectives

- To ensure Conservation : Protection of species, habitat, and ecology through research,

- planning, and demonstrative projects
- Evaluation : Documentation, monitoring, sustainable use of ecosystems and their services
- Resilience : Identify, explore and recommend specific actions to mitigate and adapt to risks, especially in the context of climate change
- Awareness : Inform and educate
- Stewardship : Build ownerships of local communities
- Advocacy : Address policy-related issues
- Synergy : Building multi-stakeholder partnerships
- Gender : Sensitization, and empowerment



Submerged forest, Sundarban, India



PRESIDENT'S DESK

It has been yet another year filled with action and learning for NEWS.

The past couple of years were a period of one of the greatest challenges the humanity has ever faced. It may have been a time to fight, a time to question, a time to mourn, but there was always one thing we held on to: hope. COVID brought the world down to its knees. Mankind was faced with a lethal and invisible enemy; whose cruelty knew no bounds. The year witnessed multiple stories of loss, but it also gave rise to a new breed of heroes, who worked tirelessly and put their lives on the line to keep the rest of the population safe.

NEWS is a statement of commitment to continuously keep moving to the next level of growth in ways that are purposeful and meaningful to the communities that we serve. Our communities stand at a crucial juncture. We are determined to help and support them bounce back in the months and years ahead. Our appeal to you is to come and join us in this mission.

We would like to thank all our donors and well-wishers, who support us in our endeavour to safeguard these vulnerable communities.

Here I would like to place on record the valuable guidance of our Governing Body & Advisory Board for providing the necessary support, as and when



required. The impact and work done by NEWS this year would not have been possible without the active support and tireless efforts of the young NEWS team of Managers, Biologists, Research Associates, and others. Their dedication is an inspiration to all.

As always, We at NEWS are Ready to Serve as part of our deeply held values and commit to our preparation and resilience as an organization to respond quickly and confidently to whatever comes our way.

J. R. B. Alfred



SECRETARY'S DESK

Greetings to all on behalf of NEWS.

NEWS has stepped into its 31st year. For the last three decades NEWS dedicatedly worked in the field of ecology, sustainable use of natural resources, wildlife conservation, and livelihood augmentation, and has constantly advocated for nature-based solutions. During the last year, we have been successful in implementing community-based mangrove restoration in various parts of the Sundarban. I sincerely thank our partners, Global Nature Fund, Alnatura, and CRISIL, for their constant support. I also convey my gratitude to AXIS Bank who have recently joined hands in the mangrove restoration programme. We had the opportunity to continue to work with our eminent German partners, Global Nature Fund and Terre des Hommes in pursuing Integrated Mangrove Aquaculture (IMA), increasing the coastal resilience and sustainable safeguarding of the natural livelihoods, promotion and implementation of sustainable tourism, mangrove plantation, and formation of Eco-Clubs and development of cross-border approaches to mitigate conflicts between humans and elephants.

This year, the State Bank of India General Insurance extended its hands and supported a project on the reduction of forest dependence of tribal youths at Patharpratima, Sundarban. Our old associate, Fullerton India Credit Co. limited encouraged us in executing an awareness generation on organic farming and its benefits in 18 villages of Sundarban.

NEWS has been associated with the State Project Management Unit (SPMU) as a supporting organisation for the West Bengal Accelerated



development of Minor Irrigation Project (WBADMIP) at South 24 Parganas District, Balagarh Block and Kurseong Block.

We are forever grateful to the Japan International Corporation Agency (JICA), WBFBCP, and the Government of West Bengal for their patronage. I also thank the various governmental departments (Department of Forest, Panchayat & Rural Development, Department of Fisheries, Department of Agriculture, and Department of Environment), Zoological Survey of India, West Bengal Biodiversity Board and Vidyasagar University for their constant support and encouragement for the protection of Biodiversity and Conservation of the ecosystem.

This year NEWS also participated in the Kolkata International Book Fair. The society has celebrated World Biodiversity Day, World Wetland Day, World Environment Day, Earth Day, and World Mangrove Day with the active participation of the community through raising awareness and plantation.

Finally, I convey my hearty greetings to our spirited team members by whose tireless efforts could make the programmes of NEWS a great success.

Looking towards a greener tomorrow.

Biswajit Roy Chowdhury



JOINT SECRETARY'S DESK

The by-gone years were different with Covid pandemic and new hopes ushered in with the advent of the new year 2022. Life again started gaining normalcy. Humanity must have learnt a lesson and many reflections have been done as to where we were wrong in our development path. However, it had opened deep questions on the character and purpose of wild game, animal eating and how long we can pamper ourselves with such gestures. But immediately after the covid restrictions are over, the planet on the eastern side got engaged in a ghastly war between Russia and Ukraine, ridiculing the entire climate dialogue the year before in Glasgow. Also, the Living Planet Report by WWF in 2022 states that 'ambitious conservation measures are critical to bending the curve of wildlife loss. But even the most ambitious conservation strategies may not go far enough. To turn things around, we must also change the way we produce and consume food by making agriculture more sustainable, reducing waste, and adopting healthier and more sustainable diets.'. Thus campaign for 'Food for biodiversity' is gaining strength and we as conservation practitioners realise that conservation cannot be conceived in isolation, but in defining it in various perspectives and capacities in the interactions between people and nature. Thus social science and their



inherent linkages with the natural science has become an important component of the conservation definitions.

Combatting biodiversity loss is however further critical as it requires interdisciplinary collaboration, and understanding on how capacities at different levels can be developed to bring about the needed change in the present conservation approach. Advocacy for nature based solutions (nbs) can actually link the much needed gap area, however it is easily said that done as 'nbs' brings inter disciplinary approaches quite challenging for civil society organisations like us. My focus for this year for our organisation is to be part of networking, as



much, and doing advocacy for working in the science-community-policy interface, the science which includes traditional ecological knowledge. Also, to orient ourselves in result based management approach (RBM), which looks at indicators of change rather than ticking the activity box. The journey is not easy and needs constant thriving upon to align to the conservation goals and objectives. I trust NEWS team will rise to the occasion and take the challenge in tying intricately the various threads to build a strong web that connect to the 'theory of change'.

We are blessed with having strong patrons and well-wishers, who guide us and also listen to our thoughts, give recognition to our views. We are expanding in other parts of the country, with our footprints in Bihar and Uttar Pradesh now. We have partnered with two new big Corporate houses this year – Axis Bank Ltd and State Bank of India and has been successful in bringing investments in nature.

We are thankful to Senior Government Officers from the States and the Centre to have constantly been with us , supported and guided us. Collaborations with various esteemed Research Institutes and personnel in consultation capacities are advising us to achieve our objectives and we are grateful for

the partnership. We are thankful to our old friends from abroad- Livelihoods from France, Global Nature Fund, Blue sensus from Germany for continuing to keep working with us with trust and confidence. We also thank the Consulates for their support and encouragement. We pledge to take our co-operation in South Asia with Living Lakes members in Sri Lanka, Bangladesh and Maldives to newer heights.

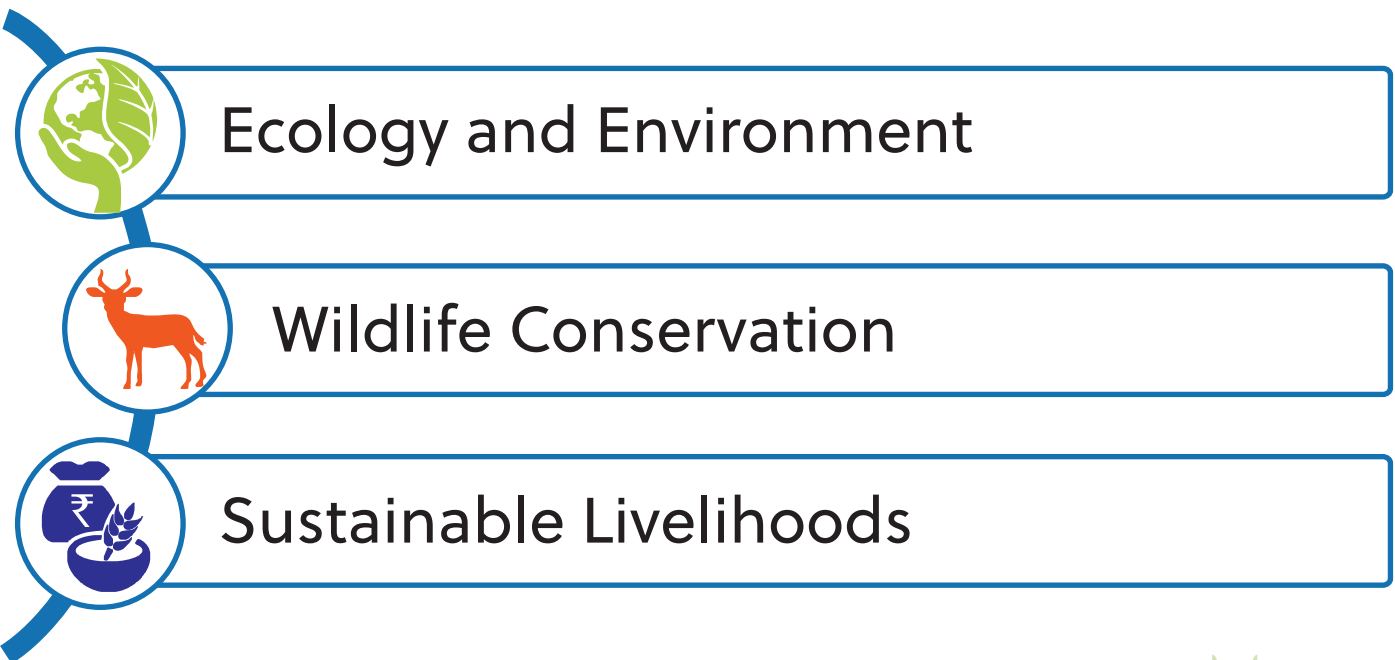
I also thank our Governing Body , Advisory board for providing the necessary support , as and when required. And , not to mention the local communities who have rendered valuable service to conservation and the fun and trust we share while co-creating. The NEWS team from Leadership teams to Programme and Project Managers, Project Officers, Field Biologists, Research Associates, Zonal Managers, Animators and Community workers - vibrant and dedicated, deserve all the laurels to help the organisation achieve what we are today.

Wish all of you good health, a vibrant life ahead in this year while continuing to work for a sustainable planet.

Ajanta Dey
November, 2022

Conservation science has seen its evolution from only biological aspects to include both natural and social sciences and their inherent linkages. Thus, beyond species protection and habitat restoration, landscape approaches with community participatory methods, multi-stakeholder partnerships to achieve the conservation goals are now fundamental part of the conservation agenda. It is more and more the need of the hour to find nature-based solutions that look at 'actions to protect, conserve, restore, sustainably use and manage natural or modified terrestrial, fresh water, coastal and marine ecosystems, which address social, economic and environmental challenges effectively and adaptively, while simultaneously providing human well-being, ecosystem services and resilience and biodiversity benefits' (IUCN definition). Hence, situation specific ecosystem-based approaches that look at short term solutions and long-term goals need to be understood, practised,

documented, shared and taken forward as lessons learnt. Thus, such approaches demand multi-sectoral engagements and often one is intricately connected with the other; it becomes difficult to aspire for species protection without habitat restoration and engaging local communities in monitoring the restored habitat, which again brings the question of the continuity of such surveillance or monitoring unless they are being benefitted from the various ecosystem services it generates. Valorising the ecosystem services through inclusive value chains thereby becomes an objective to have the benefits accrued to the vulnerable and marginalised communities who are directly dependent on the natural ecosystems, be it resources from forest, rivers, mountains, deserts, soil, wetlands etc. NEWS has tried to simplify their strategy by defining three thematic areas as their core functional areas, with cross cutting issues of climate, gender among others.



ECOLOGY & ENVIRONMENT



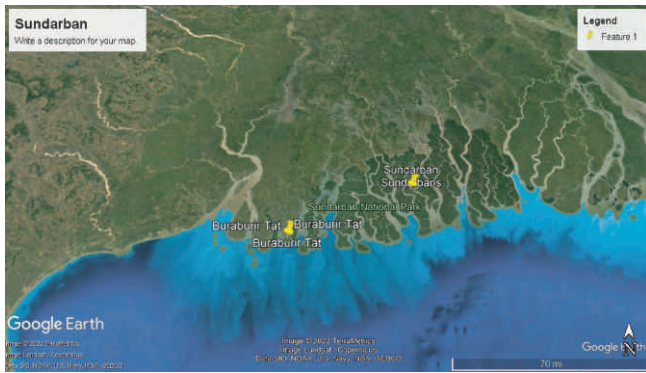
Rhizophora abundance, Sundarban, India

NEWS believes in 'one planet one ecosystem'. Every living and non-living component of an ecosystem is linked together in a complicated web and are dependent on their environment. The state of the environment has now become a worldwide concern. An ever-expanding population, warning levels of pollution, massive land degradation, large-scale deforestation, and several other anthropogenic causes lead to an overall degradation of the environment. A prime concern of NEWS is to conserve the environment we survive in.

Building Resilience in Coastal Landscapes

Coastal ecosystems are highly productive and also rich biodiverse areas that provide important ecosystem functions. This ecosystem is extremely vulnerable and faces the brunt of climate disasters. With the steady increase in the frequency and intensity of tropical storms and cyclones, the coastal people now realize the importance of mangroves which have been serving as a bio-shield against tropical cyclones. NEWS has been working towards building coastal resilience through mangrove





Sundarban delta

restoration and afforestation programmes in the different parts of Indian Sundarban in West Bengal following the community-based restoration model.

Restoration of Mangrove Ecosystem

In its journey towards landscape restoration, NEWS has developed a robust community-based mangrove restoration approach through a pilot model, then upscaling it and finally including it in the Government policy planning under MGNREG scheme. These models are based on scientific assessment of the Physico-chemical parameters of the hydrological and soil systems for the site and species selection, followed by plantation and monitoring by mobilising and engaging local communities especially women.



Preparation before plantation



Plantation area: Buraburir tot, Sundarban, India

Thus, new afforestation activities in small patches were undertaken with women groups in Lakshmipur village, Kakdwip block in a patch of 2 ha, supported by Alnatura. It is interesting to note that these veteran women engaged in rearing saplings have successfully reared saplings of *Sonneratia apetala* and *Avicennia officinalis*, which needed a different type of skills. With their persistent efforts the mortality was reduced, and a good survivability was ensured.

The community also contributed a part to the manufacturing of one mechanized country boat for patrolling and eco-tourism at the plantation site.

At Buraburir Tot, Gobardhanpur Village , Patharpratima block in Sundarban two women



Community training at Buraburir tot, Sundarban, India





Plantation activity at Dighirpar, Sundarban, India



Root-shoot study by the women's group, Manmathanagar, Sundarban, India

groups named 'Sabuj Sathi' (Green companion) and 'Srijoni' (The creators) consisting of twelve and thirteen members developed mangrove nurseries and planted in 16 Ha. This particular area is facing the high waves of Bay of Bengal. It has been a remarkable achievement how they have consistently worked to save their island and villages from the sea waves, by creating a mangrove bio-shield slowly expanding every year with the support from different funding partners. Axis Bank Ltd has extended strong support in their endeavour to strengthen the bio-shield over three years.

CRISIL Foundation has extended continued support for last three years in strengthening the coastal resilience programme of NEWS and this year too at Dighirpar, Canning-1, Sundarbans. The Giridhari (Lord Shiva) Nursery Group involving men and women from the local community are working relentlessly to make it successful by engaging themselves in risk mapping, conflict resolution, monitoring etc.

A multi stakeholder initiative under the transboundary Sustainable Aquaculture in Mangrove Ecosystem (SAIME) activities supported by Global Nature Fund (GNF) in consortium with

Naturlande. V and partnering with Bangladesh Environment & Development Society (BEDS), NEWS has undertaken the mangrove restoration programme since 2019 by integrating mangroves with aquaculture. Pilot Integrated Mangrove Aquaculture (IMA) models have been established under this programme at Chaital, Minakhan Block, North 24 Parganas and Madhabpur, South 24 Parganas, Kultali Block covering an area of 19 hectares. In 2021-2022, the IMA model got extended for another 9.95 hectares at the Chaital IMA site with 17 more farmers.

A central mangrove nursery has been developed at Manmathanagar, South 24 Parganas, covering an area of 0.07 hectares. The women members of three Badaban Farmers Interest Groups (BFIG) are engaged in the development of the nursery.

From combating climate change to protecting fisheries and coastlines around the world, mangroves are one of the world's most vital and interconnected environments – their impact reaching far beyond where the land meets the sea. NEWS was engaged as a Supporting Organization for implementing the project titled





Central Mangrove nursery at Manmathanagar, Sundarban, India



“

Consultancy Services from NGO, NEWS for strengthening embankments with suitable vegetative cover by community development through livelihood augmentation (mangrove

nursery development, embankment plantation & monitoring) in Saline Zones at Kumirmari Delta of Gosaba Block in S24 Paraganas district under District Project Management



Mangrove plantation at Chakfuldubi, Sagar, Sundarban, India





Mangrove nursery at Dakshin Durgapur, Sundarban, India

Unit (DPMU) S24 Parganas of West Bengal Accelerated Development of Minor Irrigation Project (WBADMIP).



The entire program has been planned involving the local community. The community members were oriented about the plantation strategy and the scientific methods to be followed following which the group formation and nursery bed preparation activities are done. Mangrove experts from NEWS worked closely with the groups – providing them handholding support and technical training before initiation of the work. 2 Mangrove Protection Groups (MPG) named Sarbajaya and Dr. B.R. Ambedkar consisting of 17 and 14 women respectively are formed at Chakfuldubi, MG-2 Gram Panchayat at Sagar block in Sundarbans.

NEWS joined hands with Terres Des Hommes, the

leading Swiss federation for children's aid, and is striving to build a climate resilient community, establishing community governance in order to produce a regular and varied source of income for the local community. Establishment of a mangrove nursery at Dakshin Durgapur village under Namkhana block of South 24 parganas district to extend the green cover by 1,50,000 mangroves has been initiated with the capacity building of women groups in developing and monitoring of the nursery.



Mangrove maintenance at Kumirmari, Sundarban, India





On-filed Mangrove Watch app training at Manmathanagar, Sundarban, India

In the Post-Amphan situation in Sundarban, Government of West Bengal took up an ambitious project of 5 crore mangrove plantation in Indian Sundarban and in the process, NEWS was approached to provide technical support in developing a scientific monitoring protocol for the plantation strategy. The work has been facilitated involving Gram Panchayats as well as local communities under different projects adapting to climate risks through an ecosystem-based approach. A virtual training on 'Mangrove Watch', an android-based application, designed for monitoring

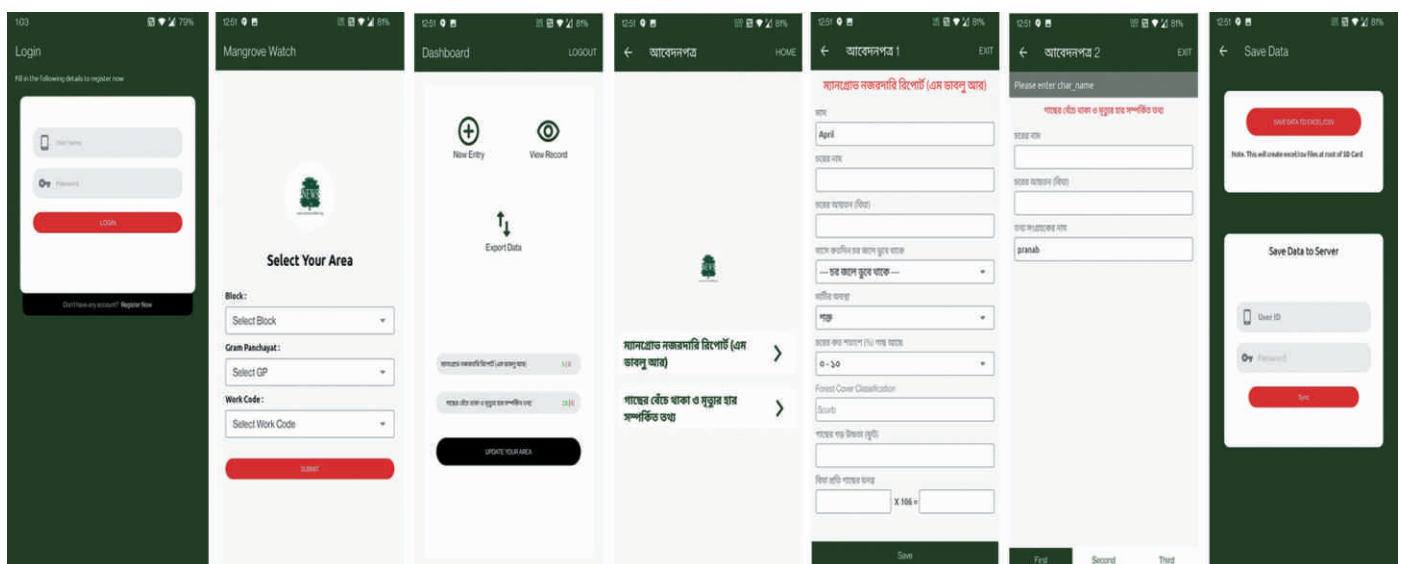


In-house training of trainers under MGNREGS

of the mangroves, took place on 24.07.2021. The training was imparted to all the representatives from the MGNREGA cell of the Gram Panchayats of South 24 Parganas district of West Bengal. A total of 100 participants from 75 Gram Panchayats participated in the training.

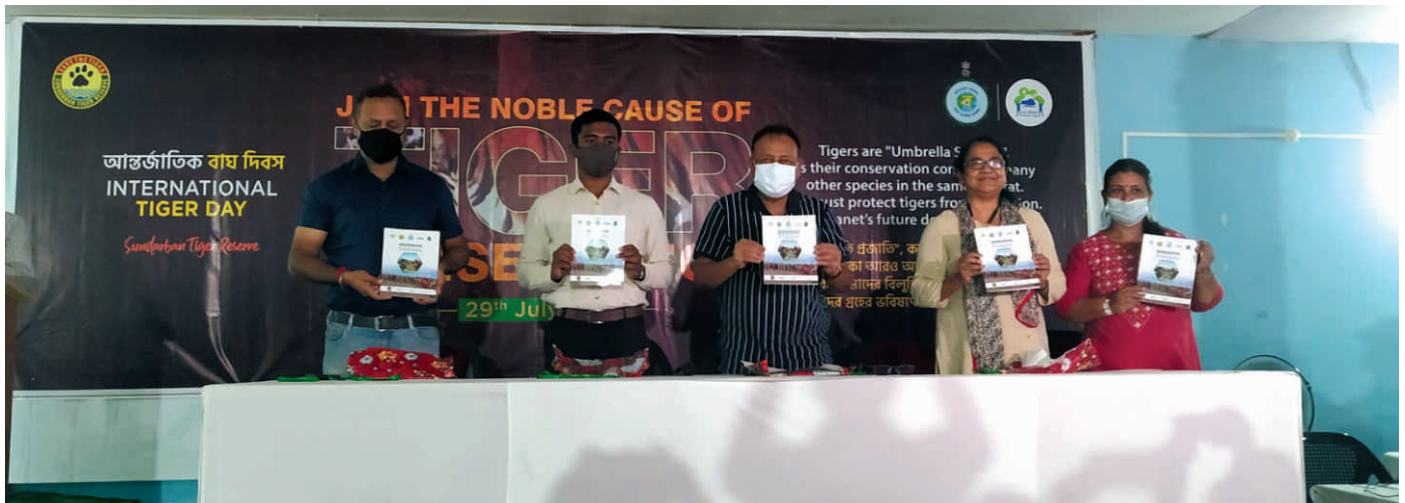
Publication of "Mangrove Manual: In the Context of the Indian Sundarbans"

On the occasion of "International Tiger Day", a programme was organized by the Sundarban



'Mangrove Watch' app interface





Launch of Mangrove Manual at Sajnekhali, South 24 parganas, West Bengal

Tiger Reserve at the Shajnekhali National Park where the 'Mangrove Manual: in the context of the Indian Sunderbans', compiled by NEWS was ceremoniously published. The NGOs working in and around the STR region, twelve Joint Forest Management Committee (JFMC) members along with other forest staff from Basirhat and Shajnekhali ranges, MGNREGS Cell (South 24 Parganas), Scientists from Botanical Survey of India and University of Kalyani, members from the Microbiologist Society, West Bengal were also present in the program.

NEWS has been advocating for nature-based solutions (nbS) in building coastal resilience and adopt situation specific ecosystem-based approaches for sustainable solutions in Sundarban, with various Government Departments.

Research work on Sacred groves in five districts of Northern Bengal

Sacred groves have long been the legacy of conservation history in India. NEWS did a survey for identification of Sacred Groves in Jalpaiguri, Alipurduar, Coochbehar, Uttar Dinajpur and DakshinDinajpur Districts in West Bengal. Financially

supported by Silviculture (North) Division, Directorate of Forests, Govt. of West Bengal, NEWS focused on preparing an inventory of the sacred groves in the concerned districts and the documentation of floristic diversity and socio-religious cultures of those sacred Groves. While the geographical coordinates and approximate area along with plant species were identified and documented, the socio-religious and cultural practices, performed in sacred groves, were also recorded through participatory discussions with local people. Findings revealed that fifty-four sacred groves were identified in five districts (Jalpaiguri - 8, Alipurduar - 8, Cooch-Behar – 7, Uttar Dinajpur – 15, Dakshin Dinajpur – 16). An overall of 277 plant species including 143 tree species, 37



Sacred grove field evaluation at Coochbehar, West Bengal





CANE field survey at Chel 2, Fuljhara beat, Jalpaiguri, West Bengal

climber species, 93 herb & shrub species and 4 epiphytic species were documented from the identified sacred groves. The maximum plant species diversity (145) was found in sacred groves of Dakshin Dinajpur district and the minimum (106) of the same was found in the Jalpaiguri district. Despite having maximum plant species diversity, Uttar and Dakshin Dinajpur districts exhibited comparatively less tree species diversity and high climber species diversity than Jalpaiguri, Alipurduar, and Cooch-Bihar.

Conservation strategies for Cane in Dooars, West Bengal

Canes/Rattans are commercially viable bioresource and important component of forest ecosystem providing structural complexity and habitats. A Status survey of cane along with the identification of species and its habitat was done in Dooars of West Bengal, funded by the Silviculture (North) Division, Directorate of Forests, Govt. of West Bengal. In the course of the study, twenty-five habitats were identified from the Dooars region of Salugara Lab Range, Buxa- Cooch Behar Research Range and Salugara Lab Range under the jurisdiction of the Silviculture (North) Forest Division and eight cane



CAMPA field survey at Amlachoti, Jhargram, West Bengal

species were documented under 2 genera viz. *Calamus floribundus*, *C. gracilis*, *C. flagellum*, *C. latifolius*, *C. leptospadix*, *C. tenuis*, *D. jenkinsiana* and *D. teraiensis*. Among the identified species *Calamus latifolius* and *Daemonoropstera iensis* are important rattans and have single bushes, recorded from Dalgaon Range of Jalpaiguri Division and Aambari Range of Baikunthapur Division respectively. Its conservation strategies have also been worked out and recommended.

Monitoring & Evaluation of WBCAMPA

A Third-party monitoring of WBCAMPA works of the financial year 2019-2020 has been carried out in collaboration with Topgrip Instruments Company in the 33 Forest Divisions under the Directorate of Forests, Govt. of West Bengal. The third-party monitoring has been funded by the West Bengal Compensatory Afforestation Fund Management and Planning Authority. The study intended to evaluate the plantation and non-plantation activities, carried out by different Forest Divisions of West Bengal, funded by WBCAMPA for the F.Y. 2019-20. The survival percentage of plantations was obtained through the random sampling method. Accounts of expenditure against plantation and non-plantation





International Youth Day celebration at Samsernagar, Hingalgunj block, Sundarban, India

activities of each of the Forest Divisions were thoroughly checked and verified. Most of the afforestation works (creation and maintenance) included miscellaneous plantations and grass fodder plantations were mostly concentrated in the Gorumara Wildlife Division and Jaldapara Wildlife Division. Silviculture Divisions were concerned with creating pure seed stands of tree species.

Environmental Education and Awareness

As the environmental crisis is deepening, the most impacted section of the society are the children and youths, as the future seems imperfect when it comes to sustainability. Air pollution, water pollution, exposure to toxic substances etc increase their vulnerability more. It is true, that a section of the urban youths are getting united under various slogans, whereas the vulnerable groups living at the edge of these crises in coastal areas are struggling and hesitating to identify the needs and aspirations,

and it is necessary to engage with them to address the various environmental issues that are plaguing their daily life and build community actions in their respective areas to have more inclusive approach in building relations with themselves and nature.

NEWS is currently working with Terre des Hommes, Germany to promote biodiversity and nature conservation in Kumirmari island in Sundarban. 42



World Wetlands Day celebration at Kumirmari, Sundarban, India



youth clubs have been formed with 430 youths in the age group of 14 to 24 years at the different project sites to create awareness on their role in this context. Four Climate Literacy Modules have been developed so far through this project that cover Sundarban Biodiversity, Mangrove Ecosystem, Energy, Water, Disaster Management, Pollution, Waste Management and Sustainable livelihood in the context of Sundarban. Incidentally, the South 24 Parganas District Administration has also adopted this curriculum as part of the sensitisation programme for the schools in their 'Mission mangrove' agenda. Several local awareness programmes on the environment and ecology have been carried out by the eco-clubs of Kumirmari and Sagar Islands of Sundarbanto create relevant actions in the field.

Solid Waste Management

We all know the menace of plastic pollution and understand the detrimental factors that it brings to our natural environment and eventually affects entire food chain, has negative effect on physiological systems, pollutes ground water, land, air and thus affects the well being of the society. In deltaic landscape, where it readily melts into marine ecosystem, the consequences are far fetching. We are working in Sundarban on an island concept and developing processes and systems to have plastic-free island with proper solid waste management system and approaches that support the 5 R's- refuse, reduce, reuse, repurpose, and then recycle through a community-based approach.

Spring rejuvenation in the Himalayas

Springs are integral part of Himalayan landscape. The flora, fauna and the human population continues to thrive on these spring water for drinking water, domestic needs and other livelihood activities like agriculture, pisciculture in small tanks etc. Climate patterns getting irregular, unabated construction in the mountains increasing the concrete cover, deforestation and many other factors, mostly anthropogenic, are contributing to the depletion of Himalayan springs. NEWS had earlier worked on Salamander conservation in Namthing Pokhari in Kurseong hills of the Darjeeling district. It was noticed that the Pokhari is drying, and Salamanders were threatened. It was understood through Focussed group discussions and key Informant interviews that the increased concrete cover and deforestation has in particular contributed to this change in the region. NEWS started working with West Bengal Accelerated Development of Minor irrigation project, under the Water Resources Investigation & Development Department (WRI&DD), Government of West Bengal in rejuvenating the springs. Presently 21 springs have been identified, where a dedicated multi-disciplinary team with background in engineering, social science, agriculture etc are working on collecting baseline and creating the various infrastructures, plantation agendas suitable for each by forming Water Users' Association.



WILDLIFE CONSERVATION



Elephas maximus

As part of the world's ecosystems, wildlife provides balance and stability to nature's processes. The exponential growth of the human population, rapid urbanisation and industrialization, pollution, and climate change have endangered the habitats and existence of various types of wildlife around the world, particularly animals and plants that may be displaced for land development or used for food or other human purposes. Wildlife has been the most ignored and most vulnerable among all living resources in the world.

IPBES Report 2019, had brought forth in recent times

the threat of stupendous decline in biodiversity with accelerating species extinction rate. The Living Planet Report 2022 by WWF reveals an 'average decline of 69% in species populations since 1970. The rapid loss of species we are seeing today is estimated by experts to be between 1,000 and 10,000 times higher than the natural extinction rate.' Nature is declining globally at rates unprecedented in human history with grave impacts on the health of the planet. The five direct drivers of change in nature are mostly (1) changes in land and sea use causing habitat shrinkage; (2) direct exploitation of organisms in forms of poaching, hunting, extracting



for medicines, over-fishing, harmful chemical pesticide use etc; (3) climate change and its impacts; (4) pollution in land, air and water and (5) invasive alien species that is destroying the indigenous species.

Urgent actions are required to review and evaluate past actions, engage in need based research, develop sustained conservation actions with local communities, build multi-stakeholder partnerships, disseminate lessons learnt and spread awareness if we are to reverse nature loss.

Thus, in a situation where every day 12 species become extinct worldwide and we are being left with increasingly fewer wild species for future generations to witness and enjoy. NEWS has been working towards wildlife conservation since its inception and has undertaken several conservation programmes to protect endangered species in their habitats partnering with the state and the central government and international funding partners.

Assessment on Impact of Habitat management practice on herbivores in three protected areas in North Bengal

NEWS has been engaged in an assessment on the impact of habitat management practices with an emphasis on canopy manipulation and grassland management on the habitat use pattern of herbivores (especially all Deer species, Rhino, Elephant, Gaur and Hispid hare) and the Bengal Florican through quantifying the biomass and analysing Herbivore-carrying capacity in Jaldapara National Park, Gorumara National Park and Mahananda Wildlife Sanctuary funded by Japan International Cooperation Agency (JICA) and commissioned by West Bengal Forest & Biodiversity Conservation Project (WBFBCP), Government of West Bengal. The findings revealed that the impact

of managing the grasslands in these Protective Areas has shown in the turnover of the large herbivores which have had a logarithmic growth since the initiation of such management practices. In effect, the study revealed that the past management intervention of grassland development and canopy opening has helped to enhance the ecosystem and wildlife in all the 3 protected areas of North Bengal. Moreover, all three protected areas are at a critical stage when the carrying capacity of the herbivores will overshoot beyond their sustenance.

Research on floristic survey with its associated avian fauna in sampled forest areas in West Bengal

The research activity was based on the floristic survey on the sampled forest areas of South-West & North Bengal Plains with its associated avian fauna to assess periodically the changes in the botanical composition and population structure of the forest vegetation of the State. This too funded by Japan International Cooperation Agency (JICA) and commissioned by West Bengal Forest & Biodiversity Conservation Project (WBFBCP), Government of West Bengal, a detailed baseline document has been prepared on composition of forest vegetation by analysing the structural parameters of the various floristic components. Special emphasis was placed on indigenous plants and avian fauna by



NEWS team at Bagora, Darjeeling, West Bengal



establishing permanent monitoring plots for long term observation to understand the effect of climate change. In the course of the study, forest vegetation was both qualitatively and quantitatively recorded (frequency, density, abundance and dominance) from 24 permanent plots of Lateritic South Bengal and North Bengal Plains. The study revealed that the permanent plots of North Bengal Plains exhibited richer floristic and avian faunal diversity than those of Lateritic South Bengal. Overall, 207 species of plants and 63 avian faunal species were recorded from the permanent plots of Southwest Bengal. On the other hand, 327 species of plants and 98 avian faunal species were recorded from the permanent plots of North Bengal Plains.

Human-elephant conflict mitigation

Fragmentation and degradation of natural habitats are occurring due to anthropogenic pressures thus reducing the resources on which the elephants are dependent. Thus, humans and elephants compete for the same resources and conflict situations are increasing instead of co-existence. These conflict

situations may cause economic loss to the farmers in form of crop raids, houses being destroyed, human attacks and deaths and also elephant deaths. Thus, it has negative impact on the rural societies, which has become key concerns for wildlife practitioners. The elephant corridors are often spread across adjacent countries, making the situations complex. Thus, engagement of relevant stakeholders and engaging in co-creation in order to strengthen the capacities at different levels need to be adopted to have an effective human-elephant conflict mitigation approach.

Khatain Uttar Pradesh & Shikaribas in Bihar are such trans boundary corridors connecting Katarniaghat Wildlife Sanctuary (KWLS) in India and Bardiya National Park in Nepal & Valmiki Tiger Reserve (VTR) in India Chitwan National Park in Nepal respectively. NEWS, in collaboration with Ujyaalo Nepal, a Nepal-based non-profit NGO has been working on a community-based Human-Elephant conflict mitigation approach funded by the Global Nature Fund (GNF) in the region since December 2020. After the initial planning phase, six Elephant



Human Elephant conflict mitigation with Elephant Protection Group (Gajamitras), Bihar



Protection Groups (EPGs) were formed with 78 residents in seven villages of the target areas. These EPGs have been capacitated by NEWS to provide useful information on elephant movements in the village area. Forest range offices translate the information on elephant movements to local EPG first and then it is communicated to the villagers. In doing so, communication between Forest staff and the inhabitants of the target villages has been strengthened. There are a total of 3500 inhabitants in the project sites in 7 target villages in KWLS and VTR. A basic warning system has been developed for the EPGs with the help of the concerned forest range offices, to set the warning signals when elephants are in the surrounding areas.

It was observed that open defecation esp. in the nighttime posed greater human-elephant conflict situations. Hence, ten community toilets have been constructed till now in the target villages of Valmiki TR and Katarniaghat WLS.

Conflict mitigation training and meetings were organised in the Manguraha range under VTR where local community people, representatives from the district level and concerned Range offices, local administrative offices (Panchayat & Ward offices), and members of Eco Development Committees (EDC) from each target village were present. The participants from the villages were selected through community consultations focusing on their willingness & ability to volunteer further and act as multipliers. An awareness poster on Do's and Don'ts has been prepared, considering short-term & long-term measures, in consultation with the forest department. The involvement of residents in Elephant Protection groups, has changed their perception and attitude towards the conflict situation to certain degree. They can understand their roles and responsibilities as EPG members, and they continue to act as multipliers to raise awareness

in their villages.

NEWS participated in an India-Nepal transboundary meeting on providing safe passage to animals in transboundary movement between Forest Officials in VTR. The NEWS team is also taking part in wildlife rescue operations, awareness programmes and the Asian Waterbird Census organised by the forest department, introducing the objectives and goals of the project to a larger section of that area.

BIRD WATCH Project in Eco Park

Eco Park is an extended part of the East Kolkata Wetlands (EKW), a Ramsar site is the largest park in Kolkata. NEWS in collaboration with West Bengal Housing Infrastructure Development Corporation Ltd. (WBHIDCO) took up this project entitled, "Promoting visibility of Eco-park as a bird refuge through photographic documentation" creating a scope for photographic documentation of the avian diversity of this urban forest ecosystem. Multiple winter migratory and resident birds have been photographed with professional image quality and GPS tagged location data to produce authentic information of eco park's bird presence including their behaviour, feeding and roosting. Video documentaries showing bird ecology and behaviour were produced with detailed informative aspects.



NEWS team at Eco Park, Kolkata, West Bengal



SUSTAINABLE LIVELIHOODS



Honey collectors (Moulis), Sundarban, India

NEWS firmly believes that inclusion of the term sustainability in the development discourse is actually for protecting the biodiversity and natural resources of the planet. Conservation, which is articulately hemmed in the seventeen Sustainable Development goals, cannot be achieved without the communities' engagement around the vulnerable habitats and ecosystems and their well-being. Thus, community governance and sustainable livelihoods are two important pillars on how conservation goals can be achieved while sustaining economies. Grounded in knowledge of the socio-economic-

ecological systems and integrating traditional ecological knowledge with modern scientific inventions, NEWS is engaged in developing livelihoods that is designed on an integrated approach, that are climate adaptive and supported with a robust value chain.

Several Sustainable Development Goals (SDGs) are addressed through this inclusive and integrated approach to livelihood augmentation.



Building coastal resilience through Sustainable Livelihood Models in Sundarban

To capacitate the Mangrove Stewards and vulnerable communities dependent on natural resources, NEWS has taken a holistic vision to address the fuelwood and fodder issues and designed cookstoves with chimneys which has reduced the fuelwood requirement. The household-specific design based on the number of persons in a particular household has also helped to reduce the time of cooking.

Water Users' Association – Community governance units for water, soil conservation with livelihood impact

NEWS in partnership with the Government of West Bengal is working toward water and soil conservation intending to sustainably increase agriculture production through its Accelerated Minor Irrigation Project in South 24 Parganas. The silted canals are excavated into Water Detention Structures (WDS) to harvest rainwater for agriculture, fisheries, and daily use. Farmers of the catchment area have been grouped into Water Users Associations (WUA) for community

governance. The farmers are adopting new scientific technologies and methods so that they can increase their production and get more profit. Training on 'Krishi Katha' on agriculture, Horticulture, and fisheries is being imparted for farmers' support. Embankment plantation, Modified extensive polyculture of Indian Major Carps, Scampi (Fresh water prawn – *M. rosenbergii*), Pabda (*Ompok bimaculatus*), and Bhetki (*Lates calcarifer*) culture in WDS. Poly-mulching, Cultivation of Okra with plug tray and poly-mulching method, promotion of bio-fertilizer and Dhaincha (*Sesbaniabispinosa*) as green manure have been promoted for livelihood augmentation. The women members are actively participating in the WUA activities. The Purba Surendranagar women scampi nursery rearing group earned 3, 02,000 INR by selling 60400 nos. of scampi juveniles at the rate of 5 Rs/piece in a cycle of 3 months. The women members of Srinarayanpur WUA prepared a low-cost poly-shade nursery and prepared drumstick and papaya saplings. They sold 2000 nos. of saplings to 13 different WUAs and earned 26400 INR. The farmers of WUAs have decreased the application of chemical fertilisers and pesticides and are adopting Integrated Nutrient Management (INM), Integrated Pest Management (IPM) & Good Agricultural Practices (GAP).

Building capacity of tribal communities in Paschim Dwarikapur, Sundarban

NEWS has worked on the reduction of forest dependence of tribal communities in Paschim Dwarikapur village of Patharpratima block, supported by State Bank of India (SBI) General Insurance Company Pvt. Ltd. Three interventions were planned – to improve the school infrastructure, installation of community drinking water treatment plants, and skill development of tribal youths



Training session with Water User Association members at Amtali, Gosaba, Sundarban, India



through vocational training through the engagement of multi-sectoral stakeholders. Various stakeholders such as Patharpratima Gram Panchayat, the Dept. of Animal Resource Development, the Department of Education, etc, have been actively participating since the inception of the project. Later on, academic institutes such as Krishi Vigyan Kendra (KVK), West Bengal University of Animal & Fishery Sciences (WBUAFS), and Central Institute of Brackish water Aquaculture (CIBA) have been integrated for technical inputs. An implementation plan has been prepared in consultation with these stakeholders. Construction of school toilets, installation of solar panels for green energy, and safe community drinking water treatment plant have been done. Vocational training such as backyard poultry farming, tailoring, duckery, piggery, fish farming, and beekeeping has been imparted to the tribal youths for enhancing their inherent skills.

Backyard poultry farming – an alternative livelihood model especially for women in Sundarban

The coastal communities are mostly dependent on the Sundarban Ecosystem for their livelihood. The women are engaged in catching shrimp juveniles and mud crabs from the rivers. They use nets of fine mesh size installed to capture the shrimp juveniles. These fine nets not only capture a huge number of shrimp juveniles but also a considerable number of other species possessing a threat to the ecosystem. Besides, there is always a danger of crocodile attack and other health hazards resulting from prolonged standing in the waters. These women were mobilised as mangrove stewards for mangrove protection. The women are devoid of ownership of any physical asset and as an alternative livelihood option, Backyard Poultry Farming (BYPF) was implemented in Lakshmipur and Buro Burir Tat.

A total of 27 women who were engaged in mangrove



Training on backyard poultry farming at Paschim Dwarikapur, Patharpratima, Sundarban, India



nursery development and mangrove protection, were supported in pursuing BYPF. The groups were imparted training on BYPF by the veterinary experts from the Animal Resource Department of Govt. of West Bengal (ARD Dept.). These groups were provided with RIR chicks, mash feed, and financial assistance for the construction of rearing coops. The group members were capacitated to prepare low-cost homemade feed with locally available ingredients free from undesired contaminants like growth hormones and antibiotics. The eggs and meat produced are sold to the local market. For better price realization these women groups have been linked to an organised value chain through the Farmers Producers Company, Badabon Farmers' Producers Company Limited (BFPCL). A continuous supply of quality chicks is very challenging for the remote island of Sundarban. Thus, two solar-operated egg incubators were installed at both sites and necessary training had been imparted so that the women group members can produce chicks from fertilized eggs to cater to the demand of their chicks for replenishment. Likewise, in Kumirmari village 100 members of 6 Farmers' Interest Groups (FIG) are capacitated on backyard poultry farming, poultry feed preparation, egg handling, egg hatching using an incubator, fish farming, fish feed preparation, farming in the organic kitchen garden and hazardous chemical-free paddy cultivation. A solar-powered incubator has been installed here where 200 eggs can be hatched every 21 days. This model not only provides health hazard-free occupation to the women, but it also shifts the women of Sundarban from wild juvenile shrimp catching activities thus conserving the ichthyofaunal diversity by providing an alternative and assured income source, developing on their existing skill sets.

Badabon Harvest – a robust value chain that supports responsible production and consumption (Sustainable Development Goal 12)

For any income generation activity, continuance and sustainability are a big challenge. Hence, strengthening community governance, producers' groups, stewards' groups, farmers' interest groups are key to achieving the long-term impact of conservation-linked livelihood. Hence, weekly meetings and their engagement and training in scientific monitoring are encouraged through the establishment of Farmers' Field Schools (Food and Agriculture Organization guidelines). It is structured in a way to make farmers competent in their field and brings financial, operational, technical, marketing, and networking systems in place. More and more farmers have been adopting conservation-linked alternative livelihood practices and their capacities are increased through the development of resource-based organisational structures at the community level, the Badabon Farmers Interest Groups (BFIG); "Badabon" meaning Mangroves in Bengali. The BFIG members sell their products in the 'Joibohaats' (organic farming markets) of Kolkata under the brand name 'Badabon Harvest' through the Badabon Farmers Producer Company Limited (BFPCL). A sustainable supply line between mangrove stewards in Sundarban and affluent consumers in Kolkata has been successfully created to sustain the value chains of farmers and fishermen dependent on mangroves in Sundarban. Mainly exclusive products from Sundarban, like honey, 'China Kamini' and 'Dudheswar' rice, turmeric and chilli powder, date palm jaggery, moong pulses along with chicken and duck eggs, chicken meat and fresh vegetables which are grown without any harmful chemicals are being sold to the valued customers in Kolkata. Badabon Harvest is a



'hazardous chemical-free' labelled franchisee from Sundarban to the prestigious Sufal Bangla Project Unit of the Department of Agriculture, Govt. of West Bengal.

Recharging of Springs in Kurseong Block, Darjeeling district, West Bengal to augment sustainable livelihood in the hills

NEWS has been working with the State Project Management Unit of the WBADMI Project as a supporting organisation for implementing the project in Kurseong Block (Namthing Pokhri region) for taking up focused action towards rejuvenation and restoration of the drying springs in the region that would further support the augmentation of the livelihoods of the inhabitants out of which a significant number are from the Scheduled Tribe. Last year, nine springs/jhoras were identified and a primary baseline study was done for these sites along with concept seeding meetings with the community and rapid rural appraisal before preparing proposals for carrying out the project activities in the identified sites.

This year, NEWS is working on the restoration of the 'Mandarin Orange', the native orange variety of the

hilly regions with vermi compost production and Animal Husbandry through community participation models. Mixed Fruit Plantation under Agricultural Support Service (ASS) activities has also been undertaken in this programme. A total of 27 farmers are selected from different locations namely Gumba Gaon, Purbi Toryok & Lower Toryok area under Toryok Agro WUA with a concept of 1 farmer and 1 bigha land (0.33 dec). A total of 1431 plants were distributed among 27 farmers where each farmer got 53 nos. of orange saplings. Along with orange sapling, farmers were also given additional inputs like neem cake & vermi-compost. Various awareness and capacity-building training programmes have also been imparted to the marginalised community on proper natural resource management and livelihood augmentation programmes. Environment awareness programme on conservation of Himalayan Salamander at Namthing Pokhri and plantation drives have also been undertaken in collaboration with WBADMI Project, Govt. of West Bengal in order to reduce biodiversity loss, stop soil erosion, landslide and restore ecological balance.

Augmenting livelihood of fishers in the Balagarhblock, Hooghly District, West Bengal and sensitising on the Hilsa sanctuary in Balagarh among the fishers.

Under its Hilsa conservation program, Govt. of West Bengal has declared the 318 Km riverine stretch between Katwa to Hooghly Ghat as Hilsa Sanctuary imposing a ban on river fishing in this zone from June to August and October to December. Balagarh Block of Hooghly district falls within the geographical boundary of this Hilsa sanctuary. As a result, the livelihood of approximately twelve thousand river fishers of this block has been affected. Through the previous years, NEWS has initiated an ecosystem-based approach for



World Wildlife Day celebration at Kurseong, Darjeeling, West Bengal





*Giant freshwater prawn (*Macrobrachium rosenbergii*) harvest at Takipara, Hooghly, West Bengal*

mitigating the impacts of the Hilsa conservation program on the livelihoods of the fishing community and has been working to develop a sustainable community-based model and to extend the need-based technical knowledge and other exposures related to business development for augmenting alternative livelihood of the fisher folks of Balagarh Block.

Construction of a seed production unit for Magur, Koi, and ornamental fish was constructed. Fish feed production, culture fisheries, carp breeding, ornamental fish rearing, pearl culture, production of vermi-compost and bio-pesticide (*Trichoderma viride*), poultry rearing and incubation,

and jute retting improvisation was initiated last year. The activities were undertaken with active engagement of Fishermen Cooperative Society (FCS) members ensuring the participation of women members especially. This year, NEWS carried out fisheries-based IFS activities, integrating indigenous fish and prawn species in a semi-intensive mode in a 3.07 ha pond area. The pisciculture in ponds, pond management, pond water quality monitoring, feeding to the fishes as well as marketing are in progress and carried out by the FCS involving their members who actively took part in it. A total of 9400 kg of fish was produced. The important fish species cultured by the Dumurdaha-Takipara FCS consisted of Rohu (*Labeo rohita*), Catla (*Catla catla*), Mrigal





Pearl culture at Balagarh, Hooghly, West Bengal

(*Cirrhinus mrigala*), Bata (*Labeobata*), Mourula (*Amblypharyngodon mola*), Gudusiachapra, Giant freshwater prawn (*Macrobrachium rosenbergii*). The farmers sold 5277 kg of fish species and earned a revenue of INR 5,87,600 in the 2021-22 financial year.

A carp hatchery unit was constructed for the augmentation of the production of carp seeds, a portion of which was utilised for stocking in the ponds of Dumurdaha-Takipara FCS to cater to their internal demand of seeds. This year, utilising the hatchery unit at Takipara quality seeds of Rohu (*Labeorohita*), Catla (*Catla catla*) and Bata (*Labeobata*) were produced during this year. This year a total of 34 lakh spawn of *Labeorohita* and 360 kg of fingerlings were produced and stocked. A total of 2 lakh spawn of *Catla catla* and 2 lakh spawn of *Labeobata* were also produced in the carp breeding hatchery unit. A total of 80 kg of fingerlings of *Catla catla* and 65 fingerlings of *Labeobata* were also produced in the hatchery.

As an additional sub-activity to strengthen fisheries-based IFS and create additional income generation, a catfish seed production unit was established. This unit is now producing quality seeds of Magur (*Clarias magur*) and Pabda (*Ompok bimaculatus*). Approximately 2700 of magur spawns were produced and 2512 fries were produced and released in the pond. 3500 Pabda spawn and 800 fingerlings were released in the pond. 3500 Pabda spawn and 800 fingerlings were released in the pond. Through the ornamental fish culture unit, production of ornamental fishes such as Goldfish, Angel, Rainbow fish, Zebra, Molly, were carried out by the woman community at Takipara. The women group earned 70734 INR in the 2021-22 financial year by sale of these ornamental fishes.

Artificial freshwater pearl culture was integrated as an avenue of additional income-generating activity especially engaging the women for their empowerment. Management of this unit including preparation of designer nuclei, mussel surgery,



post-surgical treatment and caging, regular maintenance and pearl harvesting were carried out by the woman community of this village with the support of male members of FCS during mussel collection and maintenance. This year, a total of 1270 nos. of pearls from 684 mussels were harvested. The percentage of mussel survivability was 75.5%.

The fish feed manufacturing process is also being carried out by the FCS involving their members who actively took part as labourers. Grinding of raw materials using the grinder machine is in progress in order to meet the daily requirement of 40 kg fish feed (Mustard oil cake: Groundnut oil cake: Soybean oil cake: Rice bran: Fish meal: 3: 1.2: 1.2: 2.6: 2).

Production of vermi-compost is being successfully carried out by the FCS involving their members who actively took part as labourers. The use of water hyacinth for the production of vermi-compost has not only helped to maintain pond health but also generated additional income. Self-consumption of the produce has brought a qualitative change in the agriculture practices as no chemical fertiliser has been used during the horticulture at the pond embankment. This FCS is now supplying vermi-compost to various parts of West Bengal. This year a total of 11926.5 kg of vermi-compost has been produced of which 8296.5 kg has been sold and 3000 kg has been self-consumed for the agricultural purpose of the FCS. A total of 1,05,130 INR has been earned by the society after selling the vermi-compost.

Sustainable aquaculture in mangrove ecosystem – a Climate-Adaptive Livelihood

The present global climate change scenario and sea level rise have negatively impacted agriculture, fisheries and forestry of the coastal community thereby limiting production and raising concerns for

food security of the coastal community. The poor and marginal farmers are often the most affected by climatic variability which makes them the most vulnerable. Indiscriminate use of chemicals and unsustainable means of livelihood for increased production is degrading the air, soil, water, forest and eventually the ecosystem, taking the climate change issue to the worst situation. Therefore, adaptation to climate change with nature-based solutions is the best way to build resilience to climate change. NEWS is working to develop climate-adaptive livelihood models in the coastal regions. As shrimp farming is one of the major economic activities in the coastal region, chemical-intensive shrimp farming and the large-scale destruction of mangroves for brackish water aquaculture have degraded the ecology of the region. The small-scale fish farmers follow the traditional shrimp culture by utilising the tidal current and the riverine resources to naturally replenish stockings in the shrimp ponds. The mangrove leaf litter serves as a potential food source in such semi-closed water bodies and provides natural nutrition to cultured shrimps. There was no or little investment and the process was sustainable. The change in climate patterns and water parameters and the need for greater production turned the farmers towards high stocking with additional food supplements and the use of chemicals resulting in the replacement of the age-old traditional shrimp culture with chemical-intensive practices. To encourage a participatory and creative visioning process for healthy mangroves, thriving coastal communities, and a robust aquaculture value chain in the transboundary Sundarban, NEWS is working to integrate mangroves into the aquaculture.

Integrated Mangrove Aquaculture (IMA) was implemented as a pilot project at Chaital in North 24 Parganas and at Madhabpur in South 24 Parganas





Penaeus Monodon (Black tiger shrimp)

with an objective to promote more sustainable forms of production of shrimp and create a functioning multi-stakeholder partnership within and across the nation, focusing on market-oriented value chain approach with the firm involvement of the target group. This year, NEWS has carried out several IMA activities and has also taken up initiatives to strengthen the value chain of the shrimp farmers for better price realisation. Apart from that, Pilot IMA (Integrated Mangrove Aquaculture) has been expanded to another 9.95 hectares area at the Chaital IMA site, involving 17 more farmers.

The application of lime and mustard oil cakes in the IMA ponds was done by the farmers as better management practice before the initiation of the culture season. Stocking of certified organic seeds of Black Tiger Shrimp (*Penaeus monodon*) at IMA farms was done. As an adaptive strategy against the mortality of black tiger shrimps due to White Spot Syndrome Virus Disease (WSSVD), seeds of *Macrobrachium rosenbergii* were stocked at Chaital IMA farms so that the farmers can compensate for the loss incurred due to the mortality of their stocked black tiger shrimp seeds as *M. rosenbergii*



Sale of harvested fish to BFPCL by IMA farmers

can withstand the adverse water quality better and are not susceptible to WSSVD. Shrimp growth monitoring is being done by the farmers at Chaital and Madhabpur IMA sites. The water quality parameters such as pH and salinity are also being monitored by the farmers themselves. Other parameters such as the Nitrate, Nitrite, Ammonia, and Oxidation-Reduction Potential of the IMA farms are being monitored by the NEWS team. Farmers are maintaining the 'Farmers' Diary' provided to them to keep a record of the pH and salinity data and harvest and sale records. To strengthen and establish a robust value chain, the IMA farmers from Chaital and Madhabpur IMA sites sold the harvested Black Tiger Shrimp and Giant Freshwater Prawn to Badabon Farmers' Producer Company Limited (BFPCL) with higher price realisation. This was a step ahead for integrating the production from this conservation-linked livelihood with a community-governed value chain, reducing the number of middlemen for better price realisation. Analysis of the harvest and sale of the last culture season was also done and shared in the working meetings.

A Trans-national partnership in South Asia instituted under the Living Lakes network

NEWS has also implemented a coastal resilience initiative supported by the Global Nature Fund (GNF) contributing toward increasing the resilience



and sustainable safeguarding of the natural livelihoods of the rural coastal population of South Asia against the impacts of global climate change through the conservation and sustainable use of coastal ecosystems (SDG 13,14 and 15) in the context of a transnational partnership (SDG 17). The project has been implemented at Manmathanagar, Gosaba Block, South 24 Parganas. The women members of 3 Farmers' Interest Groups were mobilised for the implementation of agroecology at the project site. A vermi-compost unit and an Azolla demonstration unit have been proposed to be constructed. A seed storage bank and a soil testing laboratory will be also constructed at the project site.

Dorsata honey – the 'lite' and the 'denz' variety

In Sundarban, the honey collection is another source of livelihood for the honey-collecting community known as “Mouli”. These Moulis comprise a significant part of the island population with indigenous skills and depend on the forests for non-timber forest products like wild honey and wax. Struggling in poverty due to limited livelihood options, they venture deep into the forest exposing themselves to life threats from snake bites, estuarine crocodiles, and tiger attacks. Also, the traditional methods used with fire and smoke to get rid of the bees from their nests can destroy the entire bee colony. Given the good price of this wild honey over the years, NEWS has trained the Moulis, who get permit from the Forest Department, on sustainable honey harvest and a honey filtration unit has been established in Hingalganj with the Mouli BFIG. The honey is produced by the wild rock honeybee 'Apis dorsata'. This honey branded in two varieties, as the name-suggests, are sold through the 'Badabon Harvest' value chain.

The 'Cerana' honey – from Apisceranaindica – KNOW YOUR BEES

The popularization of the exotic species *Apis mellifera* for large scale bee keeping also possess a threat of competition to the indigenous species *Apis dorsata*. Sundarban witnesses the installation of hundreds and thousands of bee boxes in the villages around the forest periphery, from March to May when the mangrove flowers start blooming. The exotic bee species, *Apis mellifera*, is the species most commonly used there. It is interesting to note that during the same time, wild honeybee *Apis dorsata* migrate to this place from northern West Bengal to collect the nectar from the mangrove flowers and form beehives. A decade ago, *Apis dorsata* was a very common species in the neighbourhood. They were found busy making hives in ventilators, dark rooms, and abandoned houses, almost everywhere. Mustard fields were ideal habitats for bees. But of late, the usage of chemical fertilizers and pesticides in the fields started posing a major threat to the population of Indian Honeybees. NEWS conducted a successful experiment as a pilot case in Kumirmari Island during the previous year piloting *Apisceranaindica*, a native honeybee species, for Beekeeping with the Moulis of Kumirmari village intending to develop sustainable bee-keeping models with a native variety of bees to curb the biodiversity threats and human-animal conflicts associated with the wild honey collection. The income generation approach through such Bee-Keeping techniques of *Apisceranaindica*, also constitute a climate-smart farming approach for promoting seasonal organic crops securing sufficient nectar for the bees in the bee boxes. *Apisceranaindica*, the native Indian honeybee, is very adaptable to climatic changes, disease resistant, docile, a good pollinator, and can produce delicious honey with fewer beekeeping



instruments. For test purposes, 5 bee boxes with colonies have been installed at Kumirmari island of Indian Sundarbans. We are grateful to Fullerton India for supporting this unique and innovative initiative.

Developing 'Krishi Mitra's- the stewards to sustain agro-ecological practices in farming

The activity was conceived to spread the message and consolidate stewardship for agro-ecological practices in farming. In 18 villages of Sundarban intending to inform, aware and encourage 300 farmers in 5 blocks of Sundarban (Sagar, Patharpratima, Kultali, Gosaba, and Canning-1) the activities intended to adopt climate-smart farming, instead of using chemical fertilizers and pesticides. Six Krishi Mitra's (Friends of the farmers) had been selected from five blocks of Sundarban. These Krishi Mitra's are now associated with the Badabon Farmers Producer Company Ltd., the farmers' entrepreneur promoted by NEWS. A total of 50 farmers have been identified from 3 nearby villages who have agreed to practice such farming. A total of 300 farmers are now associated with this project. The farmers are guided by these Krishi Mitras on regular basis. Eighteen demonstration plots across five blocks have been developed for practical exposure to other farmers on the benefits of natural farming. Several inputs such as seeds of the indigenous vegetable and salt-tolerant variety of paddy (Dudheswar, Nonashri, and China Kamini) seeds have been locally procured and distributed to the farmers. The promotion of biological pest control has been done. Vermi-compost pits have been developed using 200-liter plastic drums as the compost pits, as these are mobile structures that can be properly used even in case of any natural disaster or emergency. A three-day long residential training

programme was held to interact and build capacity of 6 Krishi Mitra's and the team on subject-specific matters of agro-ecological Agriculture. Krishi Adda is done where farmers discuss sustainable farming, its challenges, mechanical pest management through the trap, seed treatment, soil treatment, and bio-pesticide preparation through exchange of knowledge and experience. Soil health cards have been provided to the 18 farmers. NEWS is also promoting Backyard Poultry Farming, Beekeeping, and Sustainable Fisheries as an integrated approach. Rural livelihoods must include a 'basket of livelihood' approach based on the assets and skills. The popularization of vermi-compost and bird perches for pest control is resulting in reduced use of chemicals and also cutting the cost of investments in agriculture.

Promoting paths of responsible tourism in Sundarban

Tourism is a coveted income generating activity in Sundarban; not only the hoteliers or boat owners but ancillary supply chains benefit the local population to a certain extent. But the tourism business as a whole in Sundarban is not eco-friendly and buildings, waste management systems, CRZ regulations, other rules are often violated. Thus, it was necessary to demonstrate actions in following the above regulations to promote paths of responsible tourism in Sundarban, where nature and natural resources are sustainably managed and the profit generation is shared among the communities.

Site selection for Eco-tourism infrastructure (3 cottages, 1 Kitchen, 1 Reception, 2 Staff toilets, and 2 Tube wells) with the inclusion of eco-friendly aspects and maintaining the regulations has been done. "Kumirmari Ecotourism Private Limited (KEPL)"



company with 12 Board of Directors (BOD) from among the villagers, under the Company Act, 2013 (18 of 2013), has been formed. Capacity-building on roles and responsibilities and business plan of the KEPL BOD members, Farmer Interest Groups, and Individuals have been done. Training on accounting management, helped the participants learn ways to update the cash book and issue cheques and vouchers. No Objection certificate from the Coastal Zone Management Authority has been received. Additional income generation scope through promotion of local handicrafts is being explored and

baseline documented. The foundation laying and initial plinths etc have started. It may be noted that the land has been donated by a villager to the KEPL. Work is under progress for the construction related activities. Means and ways of sustainability principles are not the easy and common path. Availability of fly-ash bricks is a constraint in this region and the remoteness of the island has added further challenges. NEWS has done lot of innovative pilot models in the past and is sure of overcoming the challenges to have a model for responsible and sustainable tourism in Sundarban.



Red fiddler crab, Sundarban, India



AWARENESS PROGRAMME, WORKSHOPS AND EVENTS



Mangrove Protection group, Lakshmipur, Sundarban, India

Celebration of Earth Day, 22nd April, 2021

Earth Day urges us to remember our roots and work towards it. The theme was to restore the earth's natural resources. A bird-watching camp, aimed at building awareness among the children about our avian friends, was organised on the occasion of the 'Earth Day', at Kumirmari village in Sundarban. A total of 38 students participated in it. The journey started from the Kumirmari office of News and reached the Missionpara area. There, bird watching was organised in the field, adjacent to Nagendranath High School. The children identified

the birds by watching them through binoculars and recorded them in the bird-watching datasheet which they carried with them.

Celebration of World Environment Day, 5th June, 2021

Keeping this year's theme in mind, which focuses on Ecosystem Restoration, as only functioning ecosystems can mitigate the climate change effect, reduce indiscriminate loss of biodiversity, and thus ensure sustainable livelihoods, the NEWS team members of Kurseong WBADMI (West Bengal



Accelerated Development of Minor Irrigation, Govt. of West Bengal) project, celebrated World Environment Day 2021 on 5th June by organising a tree #plantation drive at GumbaGaon village of Sittong-I, a landslide-prone area, with objectives to stop soil erosion, landslide and restore ecological balance. Around 40 different plant saplings including *Alnusnepalensis* (Uttis), *Castanopsistribuloides* (Katus), *Cryptomeria japonica* (Dhuppi), *Duabangagrandiflora* (Lampatay) *Machilusgammieana* (ChiplayKaulo), *Prunuspuddum/cerasoides* (Payun) *Schimawallichii* (chilawnay) *Camelia* (tea), etc. were planted at roadside of the village.

At Kumirmari, plastic bottles and other plastic wastes were collected on World Environment Day. Field workers from Nature Environment & Wildlife Society (NEWS) participated in this endeavour. They sought help from the "ChampahatiDisha Welfare Agency" for removing these wastematerials from the island.

Celebration of Bharat Ka Amrut Mahotsav, 16th July, 2021

On the occasion of the 75th anniversary of Indian independence, Bharat ka Amrut Mahotsav was celebrated in the Kumirmari island of the Sundarban. The program was jointly organised by the Sundarban Tiger Reserve and Nature Environment and Wildlife Society (NEWS). The Children of the village performed a street drama titled "Tiger is our Friend" directed by NEWS. Distinguished forest officers and personnel were among the spectators which included the Deputy Field Director, Mr. S. Jones Justin, Assistant Field Director, Mr. Parthapratim Tripathi, Basirhat Range Officer, Mr. Biplob Bhowmik, Bagna Bit Officer, Md. Imdadul Haque and others of Basirhat Range and Bagna Beat. The street drama was followed by a rally

consisting of assembled boys and girls. Later, a drawing workshop was organised at Bagna Joint Forest Management Committee (JFMC) Community Hall for two age groups followed by a quiz competition. The topics were "conservation of mangrove ecosystem" and "forest ecosystem".

Celebration of International Day for the Conservation of the Mangrove Ecosystem, 26th July, 2021

As a part of celebration on the 'International Day for the Conservation of the Mangrove Ecosystem 2021', a review and interactive discussion was organised by Nature Environment and Wildlife Society (NEWS) at the Wild Animal Rescue; Transit Facility Centre, Salt Lake, Kolkata on the Mangrove Manual: In the Context of the Indian Sundarban Ecosystem, compiled by NEWS. The Mangrove Manual aims to have a documented version of the scientific approach and processes that may be followed while implementing afforestation, reforestation, renaturation of mangroves in Indian Sundarban for mangrove ecosystem restoration. Government officials from the Forest department, MGNREGS Cell (South 24 Parganas), Scientists from Botanical Survey of India and University of Kalyani, members from the Microbiologist Society, West Bengal, India and Civil Society groups attended the programme.

World Mangrove Day was also celebrated at Sumatinagar, Dhaspara II Gram Panchayat, Sagar Block, Sundarbans. The programme was held at Sumatinagar ferry ghat. The chief guest was Hon'ble Minister, Sundarbans Affair Department Mr. Bankim Chandra Hazra. Mr. Rajendranath Khara, President of SagarPanchayat Sthayee Samity, and Mr. Bipin Padua, Upo Pradhan, Dhaspara II Gram Panchayat were also present in the programme. The Mangrove Nursery of Sumatinagar, developed under MGNREGA was inaugurated. The 'Farmers' Field



School' was inaugurated by the Hon'ble Minister, which was damaged in Amphan and was then rebuilt by the initiative of Hermes, Paris.

Celebration of International Tiger Day, 29th July, 2021

On the occasion of "International Tiger Day", a programme was organised by the Sundarban Tiger Reserve at the Sajnekhali National Park, where Forest Officials of Sundarban Tiger Reserve including the Field Director, Mr. Tapas Das, Deputy Field Director, Mr. S. Jones. Justin, Assistant Field Director, Mr. Partha Pratim Tripathy attended. The NGOs working in and around the STR region, Joint Forest Management Committee (JFMC) members along with other forest staff from Sundarban Tiger Reserve were also present in the program. Nature Environment & Wildlife Society (NEWS) was felicitated by the Sundarban Tiger Reserve. On behalf of NEWS, Joint Secretary and Programme Director, Ms. Ajanta Dey acknowledged and accepted the felicitation. The 'Mangrove Manual: in the context of the Indian Sundarban', under joint publication with MGNREGA cell, Govt. of West Bengal, compiled by NEWS was also ceremoniously published in this programme.

Celebration of Raksha Bandhan at Sundarban, 22nd August, 2021

Raksha Bandhan is a traditional festival that marks and honours the bond between a brother and sister and is celebrated widely throughout India. On this day, sisters tie strings of blessings and good wishes around their brother's hands; women and men community members in Sundarban tied Rakhi around mangroves, as the mangroves protect them from natural disasters.

Celebration of Wildlife Week, 5th October, 2021

As a part of celebration of Wildlife Week, our Joint secretary, Ms Ajanta Dey participated as a panellist in Moral Fibres- A discussion on problems and views to conserve wildlife in India.

Workshop For Otters Of Sundarban, 8th October, 2021

Nature Environment and Wildlife Society (NEWS) organised a workshop about "Otters of Sundarban" in Jharkhali, Sundarban, as an entry point activity of the project entitled "Population dynamics and Conservation strategies of Otters in Sundarban" with the officials of South 24 Parganas Forest Division. Officers like, ADFO, Rangers, Beat officers and other officials of South 24 Parganas Forest Division attended the workshop. Our Secretary, Sri Biswajit Roy Chowdhury and Field biologist Ms. Ranjana Saha gave a presentation to elaborate the objectives and importance of this study, work plan, different identification characters of two species of otters found in Indian Sundarban and data collection methods. They also explained the use of smart phones as GPS devices.



NEWS team at Jharkhali, Canning, South 24 Parganas





Awareness program on Human Animal conflict at Bihar

Formation of 'GajMitra' team, October 9, 2021

In the villages adjacent to the forest in the Katarniaghat Sanctuary area, the elephants enter the villages through the forest and destroy the thatched houses and the crops. The same situation is with the villages of Rampurwa, Matthi, Amba, Vishunapur, Bhawanipur and Bardia which lie adjacent to the forest. The 'Gajmitra' (Elephant protection group) team has been formed by the Nature Environment and Wildlife Society with cross-border approaches to mitigate conflicts between humans and elephants and to protect small farmers at the foot of the Himalayas to protect the pachyderms.

Global Lake Marathon Day, 26th November, 2021:

As a part of an awareness programme on Global Lake Marathon Day, organised by Global Nature Fund (GNF) NEWS gave the leadership in the South Asian countries' representation; Deliberations, songs, presentations were made by the members of

the Living Lakes network from Sri Lanka by Emace Foundation and Nagenahiru; Crenio, Arasmin and NEWS from India and Bangladesh Environment and Development Society (BEDS) from Bangladesh. From NEWS, the youths from the Kumirmari Village have prepared and presented a song on the arduous life of the fishermen of Sundarban. <https://www.facebook.com/100026668233002/videos/655843782235140/>

Birding at Eco Park: A Birder's Paradise, 18th December, 2021:

The city birders recorded 54 bird species in just two hours of bird watching in a urban park in Kolkata. On the 18th of December 2021, in the early morning hours, twenty-six birders from various age groups, ranging from youngsters to veterans visited Eco Park for birding. The birders recorded resident and migratory bird species in varied habitats, such as Wagtails, White-breasted water hen, and Asian palm swift in the 'Palm Garden'; Purple Sunbirds, Taiga Flycatcher, and Yellow-footed pigeon in the 'Butterfly Garden'; Shikra, Rufous tree-pie and Reed



Warbler in the Casuarina rich 'Heliconia Garden'; Olive-backed pipit, Alexandrine parakeet and Black Drongo in the 'Rainforest'; Bee-eaters, Brown shrike and Oriental Magpie Robin in the 'Bamboo Garden'; Eurasian Hoopoe and Paddy field Pipit in the 'Golf Course'; Asian koel and Blue-throated barbet in the 'Fruit Garden' and Little Cormorant and Common sandpiper in the 'Lake View'.

Celebration of World Wetlands Day, 2nd February, 2022

Nature Environment & Wildlife Society (NEWS) celebrated 'World Wetlands Day', under the theme, "Wetlands Action for People and Nature" involving students, youth citizens. Volunteers and local communities to take several actions on wetland conservation in East Kolkata Wetlands. It was jointly organised with East Kolkata Wetlands Management Authority and Department of Environment, Govt of West Bengal.



Celebration of World Wetlands Day at Lakshmipur, Sundarban, India

One day seminar on 'CLIMATE CHANGE & SUSTAINABLE FUTURE- the Arunachal Perspective', 17th February, 2022

As a part of the celebration of 50 years of Arunachal Pradesh, the celebration committee in collaboration with the Arunachal Pradesh State Legislative



Ms. Ajanta Dey at the seminar in Itanagar, Arunachal Pradesh

Assembly organised a one-day seminar on the topic 'CLIMATE CHANGE & SUSTAINABLE FUTURE- the Arunachal Perspective' at D.K. auditorium, Arunachal Pradesh State Legislative Assembly, Itanagar. The Honourable Chief Minister of Arunachal Pradesh, Sri Chowna Mein inaugurated the event. The committee invited Ms. Ajanta Dey, Joint Secretary & Programme Director, Nature Environment & Wildlife Society to deliver the Expert's deliberation and also as a panelist to share experiences of work on carbon sequestration in Sundarban. It may be noted that through 'Pakke declaration 2021', Arunachal Pradesh has been the first state to declare a climate policy.

Awareness on 'World Pangolin Day', 19th February, 2022

To mark the eleventh annual World Pangolin Day, Nature Environment & Wildlife Society observed and shared a digital poster on the social media handles of NEWS.

Awareness on 'World Whale Day', 20th February, 2022

Nature Environment & Wildlife Society observed World Whale Day and shared a digital poster on the social media handles of NEWS.



International Kolkata Book Fair, 23rd February, 2022

Nature Environment & Wildlife Society participated at the International Kolkata Book Fair, 2021 which was held at the Central Park Mela Ground, Karunamoyee, Salt Lake from 28.02.2022 to 13.03.2022. Visitors and children thronged the pavilion and had interactions on wildlife, environment and climate issues.

Transformation Literacy Conference, 24th February, 2022

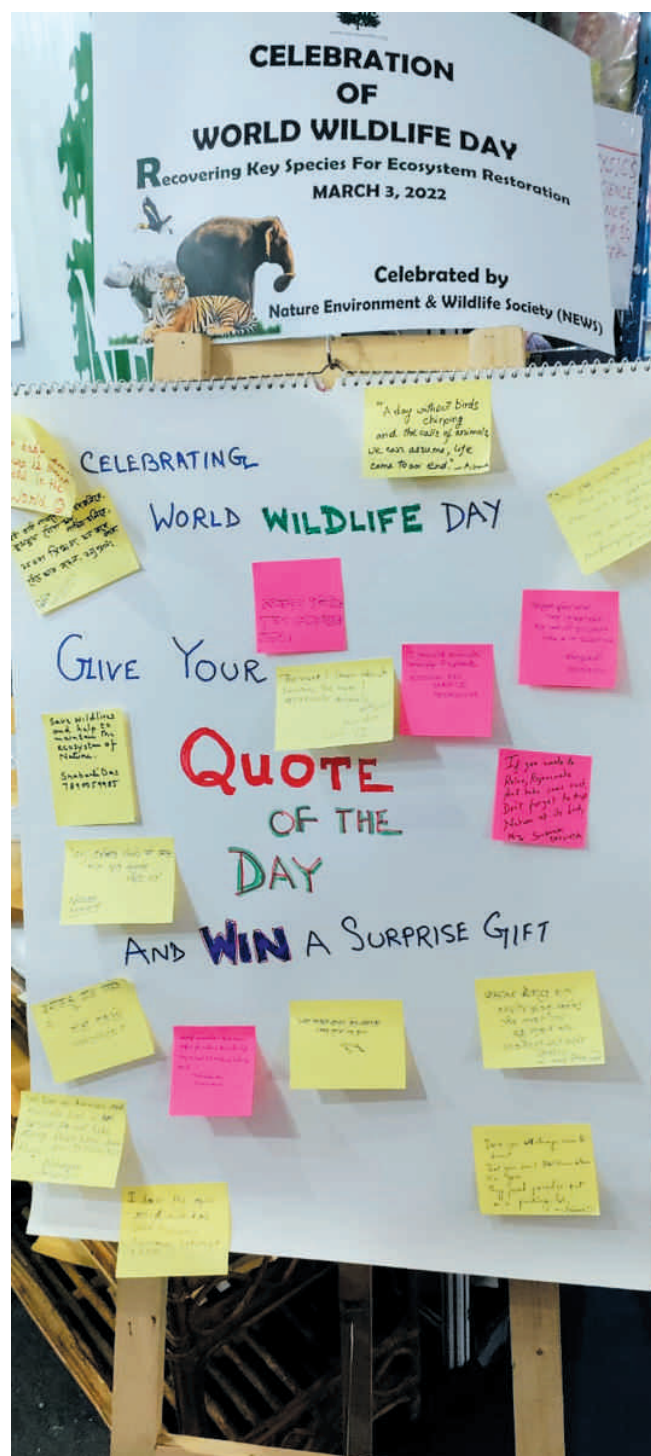
The Sustainable Aquaculture in Mangrove Ecosystem (SAIME) project was featured as an example of the kinds of transformative initiatives that are needed around the world. Dr.NimaiBera from Nature Environment & Wildlife Society (NEWS) and Ms. Sabrin Ahmed from Bangladesh Environment & Development Society (BEDS) delivered a presentation at Conference Session 1: Narratives: "What are the stories that inspire transformative change?" They explained how the collective visioning work in February 2020 has helped inspire SAIME actors in their dialogues and concrete collaborations toward realising their shared vision.

Awareness of International Polar Bear Day, 27th February, 2022

Nature Environment & Wildlife Society observed International Polar Bear Day and shared a digital poster on the social media handles of NEWS.

Celebration of World Wildlife Day, 3rd March, 2022

On the occasion of World Wildlife Day (WWD) under the theme "Recovering key species for ecosystem restoration", Nature Environment & Wildlife Society celebrated by raising the voice and spreading



Bookfair participation

awareness among the communities, especially the children. At one of the project sites, Bhatujala in the Valmiki Tiger Reserve, a small awareness walk was conducted around the village with school children



and Elephant Protection Group (EPG) members. It was followed by a talk session with the children to educate them on conservation.

At another project site, Sittong in Kurseong, an awareness rally on 'Protect Salamander' was led by the NEWS team members of the WBADMIP Kurseong Project with support of Triveni Pariwar Water Users' Association to raise an awareness on the not so familiar but endangered species, The Himalayan Salamander.

Celebration of The International Day for Forests, 21st March, 2022

The International Day for Forests, 2022 was observed by the Deorali Chaityapani Krishak Sangha Water Users Association (WUA). They celebrated World Forest Day at Chimney - Deorali Gram Panchayat in association with Nature Environment & Wildlife

Society (NEWS) under the West Bengal Accelerated Development of Minor Irrigation (WBADMI) project at Kurseong. The entire GP falls under the Bagora forest area. The Forest department had recently planted around 250 saplings in the new plantation area of the village. To spread the message of conservation and restoration of forests, the WUA members along with the NEWS team members watered all the saplings and took the vow to protect it.

Celebration of World Water Day, 22nd March, 2022

On the occasion of World Water Day, the water purifiers, community drinking waters and other infrastructures developed for the tribal communities in Paschim Dwarikapur village in Sundarban were officially handed over to the respective authorities. World Water Day was also celebrated by the



Celebration of World Forest Day, Kurseong, Darjeeling, West Bengal



communities of Sundarban and Kurseong to spread awareness about the importance of water and ways to conserve it.

Capacity Building Programme on result-based Project Management, 28th to 30th March 2022

An open space training on 'Capacity building programme on result-based project management' was imparted for the NEWS team from 28.03.2022 to 30.03.2022 at Ayodhya Pahar, Vill Kalhapurulia. A total of 17 participants from NEWS attended the training. Ms. Jagati Bagchi, Consultant having a wide experience in program management, was the trainer of this programme. During the training, the participants were grouped based on thematic areas of NEWS- Livelihood augmentation, Environment and Ecology, and Wildlife conservation. Then SWOT (Strength, Weakness, Opportunities, and Threats) analysis of each thematic area was identified by each group.



NEWS team at Purulia, West Bengal

Several wildlife conservation initiatives, and habitat restoration studies are also a part of the NEWS focus area. Building multi-stakeholder partnerships in order to strengthen the community-governed value chain is also NEWS plans to work on.



Fishermen, Sundarban, India



NEWS IN MEDIA

and quarantine centres followed waste disposal rules. The new guideline says, "Very mild symptomatic cases and pre-symptomatic or asymptomatic lab-con-

has an alarming number of Covid-19 patients and they reportedly contracted the virus from bio-medical waste," said environmentalist Subhas Datta.

All 5 colleges in the National and Hospital College, Raiganj, and Covid-19 other private city have a ry out the

While ratures in conduct R using the cetic acid (CBNAAT) like Calcutta College Raiganj M Hospital a a diagnosis method nition, if the The state health recruit mologists amicians a contract b ting the RT Earlier ment had data entry laboratory

LOCKDOWN HEROES

from doctors, nurses, bankers to milkmen and security guards, there are many frontline warriors who are battling it out daily to ensure we are safe and taken care of during lockdown. We salute these real, unsung heroes. If you know of lockdownHeroes whose stories you would like to see please log on to www.toilockdownheroes.com. We will seek to get touch and feature some stories in The Times of India newspaper

LOCKDOWN HEROES

Text: Jhimli Mukherjee Pandey

back inside a church, read- ing mass, after such a long time. here was no congregation but the entire church reverberated with a presence..." he said.

meantime, the Centre's guidelines on re-opening have arrived and they have been added to the earlier precautionary measures.

Numbers at a time on the premises, new timings will all be announced on June 10," said Kushal Chowdhury spokesperson of the trust.

'Embankments without mangroves suffer damage'

Dipawali Mitra
@timesgroup.com

Kolkata: A recent report submitted to the state government by Nature Environment and Wildlife Society (NEWS), a conservation NGO, after an extensive survey of the Sunderbans highlights that the embankments with two to three layers of mangroves in front are intact. The breaching and saline inundation happened due to weak embankments where mangroves do not exist as the first line of defence.

For the protection of mangroves and maintenance of embankments, the NGO has also proposed to the government that every panchayat should submit an Embankment Breach Report (EBR) and Mangrove Watch Report (MWR) every month to NREGA cell or district authorities. The NGO is willing to summarise and analyse the MWR for the district for free.

Joint secretary and programme director of the NGO, Ajanta Dey, who had just returned from a field trip in the Sunderbans, said the em-

bankments having mangroves are unaffected while the rest got breached. "The areas like Boro Rakkhoshkhali (Patharpratima block) Lakshimpur village (Kald-G-Plot, Dahu Chor on Matla river, which have mangroves, are unaffected. On the other hand, Sahebkhali, Sandeshkhali, Daiduli, Sitola, Hatgacha of North 24 Parganas have suffered saline inundation due to complete absence of mangroves and conversion of land into illegal fisheries," claims Dey.

The report says that saline inundation has also hap-

pened in some places with mangrove coverage due to the low height of the embankments. Mostly the breaching occurred in erosion-prone areas where the dykes are weak.

Dey suggests that in the cases where embankments are low, the dyke height can be increased, considering the highest water level during new moon and full moon throughout the year. For erosion-prone areas like Deulbari, Ramganga, Rangabalia, the dykes should be made 75-100m inward from the existing line and mangroves should be planted in between.

FOCUS ON BIO-DIVERSITY & DEVELOPMENT

Hideco chairman Debashish Sen (in suit) and joint secretary of NEWS Ajanta Dey (right) at the inauguration of the cage at Eco Park.

Sen steps inside the cage

Sen releases butterflies after the inauguration

How do birds feel? Eco Park cage tells you

ANASUYASIRU

New Town: A cage has been erected at Eco Park to highlight and give a first-hand feel of how birds like being caged. Birds, butterflies and local fauna should be free and living in a natural habitat rather than being caged and made to live the life of a pet.

The focus is on integrating bio-diversity petabytes in the development paradigm. Amidst the din and bustle of the city, the New Town park provides roosting, nesting and foraging habitats for more than 150 birds.

which have been documented.

Out of this, in just three months in the winter season, various rare migratory species like Wren, Black Redstart and Plain Cuckoo have been spotted at the park and Siberian Stone Chat has been spotted in the immediate vicinity.

Eco Park with its varied landscapes provides spaces for such varied biodiversity and is upholding the motto of "Let live to live".

To promote biodiversity, a workshop on the local floral species and the birds at Eco Park was organised by the Nature Environment & Wildlife Society (NEWS) last week. The event was attended by Hideco chairman Debashish Sen, senior officials of New Town Kolkata Development Authority, NEWS secretary Rishabh Roy Chowdhury and NEWS joint secretary Ajanta Dey. Students from Calcutta University's environmental science department participated in the workshop.

The event started with the inauguration of the cage, which is a prenasal tool to monitor non-caging of wild birds". Sen at Pukhri Bhatnagar, it was followed by releasing of caged birds and butterflies to raise awareness against caging of wild birds.

वन्य कर्मियों को प्राथमिक चिकित्सा का दिया गया प्रशिक्षण

वन कर्मियों को प्रशिक्षण देते प्रशिक्षक ● गजराज

गोबर्द्धना, संसू: वीटीआर के प्रमंडल एक के गोबर्द्धना वन कार्यालय परिसर में दो रेंजों के वन्यकर्मियों के एकदिवसीय प्रशिक्षण शिविर का अलग-अलग आयोजन किया गया। इसमें प्राथमिक उपचार और साँपों के रस्क्यू के बारे में विस्तार से जानकारी दी गई। इस प्रशिक्षण में गोबर्द्धना और रघिया वन कार्यालय के वन्यकर्मियों ने भाग लिया।

सुजीत कुमार और रघिया वन पदाधिकारी रहीमूद्दीन अहमद मौजूद रहे। साँपों के रस्क्यू के दौरान प्रशिक्षक अभिषेक कुमार ने वन्यकर्मियों को पहले साँपों को पहचानने और उनके सफलता पूर्वक रस्क्यू के तरीके को बताया। इस क्रम में जहशले और बिना जहर वाले साँपों को पहचान भी कराई गई। साँपों को पकड़ने के सही तरीके पर विस्तार से प्रशिक्षण दिया गया।

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अपना प्रदेश जागरण

नेपाली हाथियों के उपद्रव से फसल और इंसानों को बचाएगा सीईपीजी

सुनील आनंद • बेरिया (प्रदेश जागरण)

नेपाल की सहृदय लांघकर भारतीय क्षेत्र में आकर उत्पात मचाने वाले हाथियों पर रोक लगाई जाएगी। इसके लिए सीमा से सटे गांवों में कम्युनिटी एलिफेंट प्रोटेक्शन ग्रुप (सीईपीजी) बनाया जा रहा है। इसके सदस्य नेपाली हाथियों के भारतीय क्षेत्र में प्रवेश करते ही गांव के लोगों को अलर्ट करेंगे। साथ ही वन विभाग के साथ मिलकर हाथियों को खदेड़ने में सहयोग करेंगे।

पश्चिम चंपारण की सीमा से सटे नेपाल के चितवन राष्ट्रीय उद्यान से हाथियों का झुंड अक्सर पहुंचकर तबाही मचाता है। फसलों के साथ शिवड़ी इलाके तक वे हाथी पहुंच जाते हैं। इसे देखते हुए नेचर इनवायरमेंट वाइल्ड लाइफ सोसाइटी, नई दिल्ली आगे आई है। उसने प्रायोगिक तौर पर जिले के मैनाटांड प्रखंड के चकरसन व गौनाहा प्रखंड के भुजुला गांव में 15-15 लोगों का सीईपीजी तैयार किया

जागरण विशेष



मैनाटांड के चकरसन गांव में वन के दौरान मौजूद ग्रामीण • जागरण

• पश्चिम चंपारण के गांवों में शुरूआत 30 लोगों का किया गया वन

है। दोनों ग्रुपों को अगले माह प्रथम चरण का प्रशिक्षण दिया जाएगा। इसके बाद कई सर्गों में नेपाल और काजीरंगा राष्ट्रीय उद्यान, असम के एक्सपोर्ट से प्रशिक्षण दिलाया जाएगा, ताकि उपद्रवी हाथियों के आने पर रेस्क्यू में वे लोग बेहतर ढंग से सहयोग कर सकें। प्रथम दौर के प्रशिक्षण के बाद सभी सदस्यों

को हाथियों से सुरक्षा के लिए लांग रेंज टार्च, रिफ्लेक्टर, सीटी, हाथी भगाने वाला स्प्रे, जाल और रस्सी दिए जाएंगे। यह प्रयोग सफल हुआ तो भारत-नेपाल सीमा के समीप बसे और हाथियों से प्रभावित गांवों में अन्य ग्रुप भी बनाए जाएंगे।

दिना रखते करेंगे सेवा : किसान सह,

हाथियों का उत्पात

- 11 अगस्त, 2020 को मैनाटांड के चकरसन व गौनाहा गांव के सरेह में नेपाली हाथियों ने धान व गन्ना की फसल को क्षति पहुंचाई।
- वर्ष 2018 में नेपाल से 18 बार भारतीय क्षेत्र में आया हाथियों का झुंड।
- गौनाहा के ठोरी गांव में अगस्त 2018 में एक बत्ती को हाथी ने पटक कर मार डाला था।
- 06 नवंबर, 2013 को मानपुर के इमिलिया टोला में एक युवक को

- हाथियों ने मार डाला था।
- 09 दिसंबर, 2012 को गौनाहा के भुजुला में हाथियों ने कई लोगों के घर उजाड़ दिए थे।
- 07 दिसंबर, 2012 को बंगहा थाना क्षेत्र के सिसवा राजपुर में नेपाली हाथियों ने दो को कुचल कर मार डाला था।
- 08 मई, 2010 को हाथियों ने परसौनी गांव में एक व्यक्ति को पटक-पटक कर मार दिया था।

सीईपीजी ग्रुप के सदस्य विजय उरांव, शेख जैनुल, कामेश्वर यादव और राम ठाकुर का कहना है कि हाथियों के उत्पात से फसल व जान-माल की क्षति होती है। सुरक्षा के लिए निःस्वार्थ भाव से योगदान दे रहे हैं। नेचर इनवायरमेंट वाइल्ड लाइफ सोसाइटी के जिले के प्रोजेक्ट मैनेजर अभिषेक ने

बताया कि ग्रुप में गांव के वैसे लोगों को शामिल किया गया है, जिनकी फसलों को नेपाली हाथी क्षति पहुंचाते हैं। ग्रुप के सभी सदस्य जनसहयोग की भावना से जुड़े हैं। यह पूरी तरह से सामाजिक कार्य है। इसके लिए कोई पारिश्रमिक देव नहीं है। इसमें वन विभाग भी सहयोग कर रहा।

मिलेगी राहत

एनईडब्ल्यू ने तैनात की टीम, प्रशिक्षित कर किया गया संसाधनों से तैस

जंगली हाथियों से फसलों को बचाएंगे गजमित्र

संरक्षित (विराटपुर) : कर्तन्याघाट वन्यजीव प्रभाग के जंगलों में नेपाली हाथियों ने एक बार फिर दस्तक दी है। बाहर से आए हाथियों ने जंगलवर्ती गांवों में उत्पात मचाना शुरू किया है। इससे बचाव के लिए वन क्षेत्र में कार्यरत संस्था नेचर इनवायरमेंट एंड वाइल्ड लाइफ सोसाइटी ने प्रशिक्षित कर गज मित्र की टीम तैनात की है।

आंबा, बर्दिया, बिछिया, कैलाशपुरी आदि जंगलवर्ती गांवों में किसानों की फसलों को हाथी चौपट कर रहे हैं। सूचना पर जब तक वन विभाग की टीम गांव पहुंचती है, तब तक हाथी भारी नुकसान कर चुके होते हैं। इससे

जागरण विशेष

गज मित्रों की तैनाती से हाथियों को गांवों की ओर आने से रोका जा सकेगा। फसलों एवं मकानों की सुरक्षा हो सकेगी।

आकाशदीप त्रिपाठी, प्रभागीय वनाधिकारी

चितित वन विभाग हाथियों के संरक्षण के साथ किसानों की फसलों की सुरक्षा में जुट गया है।

कर्तन्याघाट में हाथियों के संरक्षण पर काम कर रही संस्था एनईडब्ल्यूएस ने हाथियों के गतिविधियों वाले गांव मटेही, आंबा,

विशुनापुर, भवानीपुर और बर्दिया में गजमित्रों की टीम का गठन किया है। प्रत्येक टीम में छह से दस तक लोग शामिल हैं।

संस्था के प्रोजेक्ट मैनेजर अभिषेक ने गजमित्र टीम के सदस्यों को हाथियों की चहलकदमी भांपने और समूह में सजग रहते हुए पर्याप्त दूरी बनाए रखते हुए खदेड़ने का प्रशिक्षण दिया। इसके साथ ही उन्होंने रात के अंधेरे की चुनौती से निपटने के लिए तीन हाई बीम टार्च, 10 सावरन, 10 लाइट रिफ्लेक्टर वेस्ट, दो पशु निवारक स्प्रे (एडीएस) दिया गया।



हाथियों के उत्पात से बचाने के लिए बनेंगे 'सुरक्षा दल'

गोपालगंज | मनीष कुमार भारतीय

नेपाल के जंगल से उत्तर बिहार में आकर उत्पात मचाने वाले हाथियों को रोकने के लिए कवायद शुरू हो गई है। इसके लिए नेपाल से सटे गांवों में कम्युनिटी एलीफेंट प्रोटेक्शन ग्रुप बनाने की योजना है।

फिलाहाल प्रायोगिक तौर पर सूबे के पश्चिमी चंपारण के चकरसन व भुजला गांवों में यह ग्रुप बनाया जा रहा है। इसी तरह नेपाल से सटे यूपी के बहराइच जिले के कतरनियाघाट में ग्रुप बनाने की तैयारी चल रही है। इस ग्रुप में गांव के कम से कम दस वॉलंटियर शामिल होंगे। जिन्हें हाथी को भगाने के लिए बकायदा प्रशिक्षित किया जाएगा। ग्रुप को सनकी हाथियों को भगाने के लिए जरूरी

पायलट प्रोजेक्ट रूप में फिलाहाल कम्युनिटी एलीफेंट प्रोटेक्शन ग्रुप बनाया जा रहा है। इससे नेपाल से आने वाले हाथियों से तबाही व बर्बादी पर रोक लगेगी। आगे दूसरे प्रभावित गांवों में भी इस ग्रुप को बनाया जाएगा। -अभिषेक, प्रोजेक्ट मैनेजर नेचर इन्वायरमेंट वाइल्ड लाइफ सोसाइटी

संसाधन भी उपलब्ध कराए जाएंगे। इसमें ट्रॉच, रेफ्लेक्टर, हाथी को बेहोश करने वाला स्म्रे, जाल व रस्सी आदि शामिल हैं। इस प्रोजेक्ट पर जर्मन फाउंडेशन के सहयोग से नेचर इन्वायरमेंट वाइल्ड लाइफ सोसाइटी काम कर रही है। गौरतलब है कि विगत शनिवार की रात को ही नेपाल के जंगल से एक हाथी बरगनिया के रास्ते पहुंच गया था।

हाथियों से फसल की सुरक्षा के लिए करें मधुमक्खी पालन

मैनाटांड, संवाद सूत्र: नेपाल से आकर भारतीय क्षेत्र में हाथियों के उपद्रव से बचाव को लेकर मंगुराहा वन कार्यालय में समीपवर्ती गांव के लोगों व वनकर्मियों को प्रशिक्षण दिया गया। प्रशिक्षण कार्यक्रम के मुख्य अतिथि नेचर इनवायरमेंट एंड वाइल्डलाइफ सोसायटी के हाथी विशेषज्ञ सुब्रत पाल चौधरी ने कहा कि वन विभाग हाथियों और अन्य जानवरों को बचाने के लिए प्रतिबद्ध है। हाथियों के हमलों से फसलों को बचाने और मानव-हाथी संघर्ष को रोकने के लिए किसानों को मधुमक्खी पालन सिखाया जा रहा है। जिसमें किसान को शहद और वैक्स (मोम) से अतिरिक्त कमाई होती है। हाथियों को भी नुकसान नहीं पहुंचता है। वहीं प्रोजेक्ट मैनेजर अभिषेक सितागंसु के अलावा प्रशिक्षण को अरविंद हाटवे, राजा हसन, कमलेश मौर्य, मंगुराहा वन रेंजर सुनील पाठक, फ्रैंसेस्ट गार्ड सीखा कुमारी भी थीं।

SUNDAY 06.03.2022

कानपुर सुपन मंगुली

दिल्ली-एनसीआर

अमरउजाला

● संपादक: अरवि 19 | 886 227 | फोन: 24

मुद्रा: सप्ताह का सप्ताह

नई दिल्ली

● 6 पृष्ठ ● 2 वेबसाइट पृष्ठ ● 21 संस्करण

जंगली हाथी ने युवक को रौंदा

जख्मी हालत में सीएचसी से मेडिकल कॉलेज किया गया रेफर

संवाद न्यूज एजेंसी

कर्तनिवाघाट (बहराइच)। हाथियों के झुंड से बिछड़े एक टस्कर हाथी ने बिछिया बेरियर पर कार्यरत वन विभाग के दैनिक श्रमिक के पुत्र को रौंदा दिया जिससे वह गंभीर रूप से घायल हो गया। स्थानीय लोगों ने हाका लगाकर हाथी को भगाया। इसके बाद घायल युवक को इलाज के लिए सीएचसी में भर्ती कराया गया, जहां उसकी स्थिति गंभीर देखते हुए चिकित्सकों ने उसे इलाज के लिए मेडिकल कॉलेज रेफर कर दिया। बिछिया बेरियर पर कार्यरत दैनिक श्रमिक अरवि ने बताया कि वह कर्तनिवाघाट में गेहूँ की फसल में काम कर रहा था तभी हाथियों के झुंड से बिछड़े एक टस्कर हाथी ने उस पर हमला कर दिया।

हमले में उनका पुत्र घायल हो गया। चौख-पुकार सुनकर स्थानीय लोगों ने हाका लगाकर हाथी को भगाया। इसके बाद वन क्षेत्राधिकारी रामकुमार ने वन कर्मियों को टीम मीक पर भेजकर घायल को इलाज के लिए सीएचसी में भर्ती कराया जहां युवक की हालत गंभीर देखते हुए चिकित्सकों ने उसे इलाज के लिए मेडिकल कॉलेज रेफर कर दिया

पयागपुर में तेंदुए ने किसान पर किया हमला, घायल

पयागपुर (बहराइच)। कर्तनिवाघाट वन्य जीव प्रभाग में दहरात फसल के बाद अब तेंदुआ पयागपुर क्षेत्र में भी पहुंच गया है। तेंदुआ ने पयागपुर की ग्रामस्था पद्मदेवी या कर्तनिवाघाट के वीर खेत में काम कर रहे किसान पर हमला कर दिया जिससे वह घायल हो गया। चौख-पुकार सुनकर अरविगंसु मीनूद ग्रामसे ने हाका लगाया तो तेंदुआ खेतों के बीच भाग गया। हमले की सूचना मिलने पर वनकर्मियों व पुलिस विभाग की टीम क्षेत्र में कांमिनी कर रही है। ग्रामस्था पद्मदेवी या कर्तनिवाघाट के वीर खेत में काम कर रहे थे तभी उन पर तेंदुआ ने हमला कर दिया। बचाव के लिए गुरार लगाने पर अरविगंसु मीनूद ग्रामसे टीडी। ग्रामीणों के खेत बचाने पर तेंदुआ खेत में भाग गया। लोगों ने हाका लगाया तेंदुआ भाग गया, लेकिन तेंदुआ काही टिकाई नहीं पड़ा। ग्रामीणों ने इसकी सूचना फोन पर वन विभाग को दी। मीक पर पहुंचे वन कर्मियों व पुलिस की ओर से कांमिनी शुरू कर दी गई। पर तब तक तेंदुआ दिखाई नहीं पड़ा। हमले में घायल किसान को



पयागपुर के पद्मदेवी गांव में तेंदुआ के हमले में घायल ग्रामीण। -अरवि

बर्तनवाघाट स्थित एक चिकित्सालय में इलाज के लिए भर्ती कराया गया है। डॉक्टरों और एम्बुलेंस ने बताया कि वन्य स्थान पर हमला हुआ है वहां की जमीन काफी कठोर है। ऐसे में तेंदुआ के पंखों में मीक से नहीं मिले हैं। तेंदुआ को खेत के लिए तीन टीमों में बांटा कर दी गई है। ग्रामीणों को भी सावधानी बताने को सलाह दी जा रही है। संवाद

है। कर्तनिवाघाट वन्य जीव प्रभाग के प्रभागीय वनाधिकारी आकाशदीप बघावले ने बताया कि हाथी के हमले में घायल युवक के इलाज में विभाग हर संभव मदद प्रदान कर रहा है। वहीं,

ग्रामीणों की सुरक्षा के लिए वन विभाग व हाथियों के संरक्षण पर कार्य कर रही संस्था गजमित्र टीम को भी तैनात किया गया है। टीम का नेतृत्व अभिषेक कर रहे हैं।



'गज मित्रों' ने नेपाल से आकर उत्पात मचाने वाले हाथियों पर कसी नकेल

गोपालगंज

■ मनीष कुमार भारतीय

गोपालगंज। नेपाल के जंगल से आकर उत्तर बिहार के गांवों में उत्पात मचाने वाले हाथियों पर 'गज मित्रों' ने नकेल कसने में कामयाबी पायी है। केमत कई दशकों से खासकर बिहार के पश्चिमी चंपारण में नेपाल के हाथियों ने आतंक कायम कर रखा था। वे झुंड में घुस कर किसानों को सनत कर फसल को गंद कर बर्बाद कर रहे थे। हर वर्ष जात-माल को गरी बर्बादी हो रही थी। पश्चिम चंपारण के चकरसन व भुजला

06 जिलों में नेपाल से आकर जब 11 महीने पूर्व पश्चिम चंपारण के गांवों में समूह हुआ था गठित

■ पश्चिम चंपारण के चकरसन व भुजला में पायलट प्रोजेक्ट रहा सफल
■ अब उत्तर बिहार के सीमावर्ती जिलों में भी होंगे समूह गठित

66 पायलट प्रोजेक्ट पिछले वर्ष शुरू किया गया था। पिछले वर्ष जुलाई-अगस्त में 'गज मित्र' समूहों का गठन कर हाथियों की निगरानी करने का प्रयोग सफल रहा है। तब से एक भी हाथी इन समूहों की सक्रियता से बिहार में मूवमेंट नहीं कर सका है। अब दूसरे जिलों में इस तरह के समूह गठित करने की योजना पर विचार-विमर्श चल रहा है।

—अभिषेक, प्रोजेक्ट मैनेजर



दूसरे जिले के प्रभावित गांवों में भी बनेंगे समूह

प्रोजेक्ट मैनेजर के अनुसार बिहार में नेपाल के हाथियों का प्रवेश पर्स, वाइल्ड लाइफ संवर्धन व वाल्मीकि टाइगर रिजर्व को जोड़ने वाले शिकारीवास कॉरिडोर से होता है। वे पूर्वी चंपारण, सीतामढ़ी, मुजफ्फरगंज आदि इलाके तक पहुंच जाते हैं। पिछले वर्ष ही नेपाल के जंगल से एक हाथी बेरगनिया के रास्ते पहुंच गया था। जिसने बेरगनिया व सुपौ प्रखंडों में खेत-खलिहानों व बागों को बर्बाद कर दिया था। किसानगंज के टिपल बैक इलाके तक नेपाल से आकर हाथी उत्पात मचाते रहते हैं। अब पश्चिम चंपारण में प्रोजेक्ट के सफल रहने के बाद नेपाल से सटे दूसरे जिले के सीमावर्ती गांवों में भी गज मित्रों के समूह बनाने की योजना तैयार की जा रही है।

गज मित्र समूह के गठन से हुए वे फायदे

- हजारों हेक्टेयर की फसल जंगली हाथी से बर्बाद होने से बच रही
- अमानक हाथी के घुसने व उसके हमले से होने वाली मौत पर लग रही ठेक
- कच्ची व झोपड़ीनुमा मकानों की सनकी हाथियों से हो रही सुरक्षा

के लिए विशेषज्ञों से दो बार प्रशिक्षण दिलाया गया। साथ ही ट्रॉच, स्फलेक्टर, खास स्प्रें, जाल, सौटी आदि संसाधन दिए गए। अब प्रशिक्षित 'गज मित्रों' को जैसे ही नेपाल की ओर से बिहार की सीमा व ओर हाथियों के झुंड के विचरण को सूचना मिलती है। वे खास तकनीक से उसे बेरग जंगल की ओर वापस लौटा देते हैं।

'गज मित्र' समूहों को नेपाल व उजालो नेपाल नामक संस्था के स्वर सेवक 'हाथी मेर साथी' सूचना मुहूर कर रहे हैं। दोनों ओर के स्वर सेवकों में समन्वय का नतीजा है कि पिछले एक वर्ष में नेपाल की ओर से एक भी हाथी बिहार में प्रवेश नहीं कर सका है।

गांवों को तो 'हाथियों का शोक' कहा जाता था। दरअसल, पिछले वर्ष

जर्मन फाउंडेशन के सहयोग से नेचर इन्वायरमेंट वाइल्ड लाइफ सोसाइटी

ने एक पायलट प्रोजेक्ट शुरू किया था। इसके तहत हाथियों से सुरक्षा के

लिए दोनों गांवों में 'गज मित्र' के नाम से ग्रामोणों के समूह गठित किए गए।

इन्हें हाथियों को भगाने व उसके आक्रमण से सुरक्षित तरीके से निपटने

हिन्दुस्तान

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तस्वीरों की चाहिए नया नजरिया

बैंगलूर, 06 जुलाई 2021, प्रजा, आगरा, कलकत्ता, दिल्ली, मिर्जापुर, 2078, वॉच प्रेस, 21 संस्करण

बिहार का नं. 1 अखबार

हाथियों के उत्पात से बचाने के लिए बनेंगे 'सुरक्षा दल'

गोपालगंज | मनीष कुमार भारतीय

नेपाल के जंगल से उत्तर बिहार में आकर उत्पात मचाने वाले हाथियों को रोकने के लिए कवायद शुरू हो गई है। इसके लिए नेपाल से सटे गांवों में कम्युनिटी एलीफेंट प्रोटेक्शन ग्रुप बनाने की योजना है।

फिलहाल प्रायोगिक तौर पर सूबे के पश्चिमी चंपारण के चकरसन व भुजला गांवों में यह ग्रुप बनाया जा रहा है। इसी तरह नेपाल से सटे यूपी के बहराइच जिले के कतरनियाघाट में ग्रुप बनाने की तैयारी चल रही है। इस ग्रुप में गांव के कम से कम दस वॉलंटियर शामिल होंगे। जिन्हें हाथी को भगाने के लिए बकायदा प्रशिक्षित किया जाएगा। ग्रुप को सनकी हाथियों को भगाने के लिए जरूरी

पायलट प्रोजेक्ट रूप में फिलहाल कम्युनिटी एलीफेंट प्रोटेक्शन ग्रुप बनाया जा रहा है। इससे नेपाल से आने वाले हाथियों से तबाही व बर्बादी पर रोक लगेगी। आगे दूसरे प्रभावित गांवों में भी इस ग्रुप को बनाया जाएगा। —अभिषेक, प्रोजेक्ट मैनेजर
नेचर इन्वायरमेंट वाइल्ड लाइफ सोसाइटी

संसाधन भी उपलब्ध कराए जाएंगे। इसमें ट्रॉच, स्फलेक्टर, हाथी को बेहोश करने वाला स्प्रें, जाल व रस्सी आदि शामिल हैं। इस प्रोजेक्ट पर जर्मन फाउंडेशन के सहयोग से नेचर इन्वायरमेंट वाइल्ड लाइफ सोसाइटी काम कर रही है। गौरतलब है कि विगत शनिवार की रात को ही नेपाल के जंगल से एक हाथी बेरगनिया के रास्ते पहुंच गया था।

दैनिक भास्कर

बेतिया भास्कर

साफ-सफाई पर दें ध्यान बीमारियों से होगा बचाव पुरैनिया में स्कूल में बच्चों को जागरूक किया



सफाई के बारे में छात्र-छात्राओं को बताते संस्था के अधिकारी।

भास्कर न्यूज़ | मैनाटंड

स्वच्छता का सभी के जीवन से गहरा संबंध है। साफ-सफाई से स्वास्थ्य अच्छा रहता है। अच्छा स्वास्थ्य रहेगा तभी हम अपने जीवन में सकारात्मक सोच रख पाएंगे। इसलिए अच्छे जीवन के लिए साफ-सफाई बेहद जरूरी है। इसके लिए बाह्य स्वच्छता तो जरूरी है ही, लेकिन शरीर की

अंदरूनी स्वच्छता भी जरूरी है। उक्त बातें नेचर इन्वायरमेंट वॉल्ड वाइल्ड एंड सोसाइटी के प्रोजेक्ट मैनेजर अभिषेक ने मानपुर थाना क्षेत्र के पुरैनिया में स्थित ज्ञान दीप एकेडमी में बच्चों को जागरूक करते हुए कही। शीतांशु, अरविंद, आकाश उराव, अनिल कुमार, सुनील, रामविश्वास, संजय, दुर्गा, रंजीता, नीरा सहित सैकड़ों छात्र-छात्राएं मौजूद रहे।

OUR PARTNERS



AUDIT REPORT

KGRS & CO

Chartered Accountants

Chatterjee International Centre
17th Floor, Flat No. 13
33A, J. L. Nehru Road
Kolkata - 700 071
Tel : (033) 4005 6199

INDEPENDENT AUDITORS' REPORT

To the Members of Nature Environment & Wildlife Society

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of **Nature Environment & Wildlife Society**, a Registered Society under West Bengal Societies Registration Act 1961 ("the Society"), which comprise the Balance Sheet as at 31st March 2022, and the Statement of Income & Expenditure and Statement of Receipts & Payments for the year ended on that date, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid financial statements give a true and fair view in conformity with the accounting principles generally accepted in India,

- (a) in the case of the Balance Sheet, of the state of affairs of the Society as at March 31, 2022.
- (b) in the case of Statement of Income & Expenditure, of the Income and Expenditure of the Society for the year ended on that date.
- (c) in the case of Statement of Receipts and Payments, of the Receipts and Payments for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by the Institute of Chartered Accountants of India (ICAI). Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Society in accordance with the Code of Ethics issued by the ICAI and we have fulfilled our other ethical responsibilities in accordance with the Code of Ethics. We believe that the audit evidence we have obtained, is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management of the Society is responsible for the preparation of these financial statements that give a true and fair view of the state of affairs, results of operations and cash flows of the Society in accordance with the accounting principles generally accepted in India. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.



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In preparing the financial statements, management is responsible for assessing the Society's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Society or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Society's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of Society's internal controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Society's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Society to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.



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Materiality is the magnitude of misstatements in the financial statements that, individually or in aggregate, makes it probable that the economic decisions of a reasonably knowledgeable user of the financial statements may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

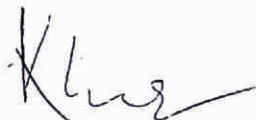
We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Report on Other Legal and Regulatory Requirements

- a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
- b) In our opinion, proper books of account as required by law have been kept by the Society so far as it appears from our examination of those books.
- c) The Balance Sheet, Statement of Income & Expenditure and Statement of Receipts and Payments dealt with by this Report are in agreement with the books of account.

For KGRS & CO
Chartered Accountants
Firm Registration No. 310014 E


K. Dutta
Partner
Membership No. F 053790



UDIN: 22053790ASQTHJ5882

Place: Kolkata
Date: 16th September, 2022




Nature Environment & Wildlife Society
Balance Sheet as at March 31, 2022

(In Rupees)

Particulars	Note	As at 31st March 2022
SOURCES OF FUND		
Unrestricted Funds		
General Fund	2	33,67,827
Current Liabilities		
Unutilized Grant	3	2,77,89,976
Liability for Expenses	4	23,16,618
Total		3,34,74,421
APPLICATION OF FUND		
Fixed Assets	5	4,24,633
Current Assets, Loans and Advances		
Loans & Advances	6	42,71,205
Grant Receivable		22,689
Cash and Bank Balances	7	2,63,05,143
TDS Receivable		24,50,751
Total		3,34,74,421
Significant Accounting Policies	1	

In terms of our report of even date
For KGRS & Co
Chartered Accountants
FRN: 310014E


(K Dutta)
Partner
Membership No.53790



For and on behalf of the Society




Place : Kolkata
Date : 16th September, 2022



Nature Environment & Wildlife Society
Statement of Income and Expenditure for the year ended 31 March, 2022

Particulars	Note	2021-22
INCOME		
Grant Income	8	3,72,86,941
Other Income	9	72,25,501
Total		4,45,12,442
EXPENDITURE		
Project Personnel Cost		1,92,52,747
Plantation Expenses		44,23,897
Travel & Transport		34,64,835
Campaigns & Awareness Programme Expenses (including workshop expenses)		51,07,517
Communication Expenses		4,13,095
Office Expenses		36,77,138
Depreciation on Fixed Assets	5	1,19,220
Audit Fees		29,500
Other Project Costs		50,30,874
Total		4,15,18,823
Excess of Income over Expenditure		29,93,619
Significant Accounting Policies	1	

In terms of our report of even date
For KGRS & Co
Chartered Accountants
FRN: 310014E

(K Dutta)
Partner
Membership No.53790



sls Ajanta Ray



Place : Kolkata
Date : 16th September, 2022

Nature Environment & Wildlife Society
Statement of Receipts & Payments for the year ended 31 March, 2022
(In Rupees)

Particulars	Note	2021-22
Balances at the beginning of the year		
Cash		35,689
Bank		1,04,41,213
Liability for Expenses		(21,58,310)
Receipts		
Grant Received	8	5,10,75,626
Other Income	9	66,82,436
Total		6,60,76,654
Payments		
Project Personnel Cost		1,92,52,747
Plantation Expenses		44,23,897
Travel & Transport		34,64,835
Campaigns & Awareness Programme Expenses (including workshop expenses)		51,07,517
Communication Expenses		4,13,095
Office Expenses		36,77,138
Audit Fees		29,500
Other Project Costs		50,30,874
Purchase of Fixed Assets	5	55,772
Project/ Staff Advances		6,32,754
Balances at the closing		
Cash		8,754
Bank		2,62,96,389
Liability for Expenses		(23,16,618)
Total		6,60,76,654
Significant Accounting Policies	1	

In terms of our report of even date

For KGRS & Co

Chartered Accountants

FRN : 310014E



(K Dutta)

Partner

Membership No.53790



For and on behalf of the Society




Place : Kolkata

Date : 16th September, 2022



Nature Environment & Wildlife Society

Notes forming part of the financial statements

Note 1: Significant Accounting Policies

Nature Environment & Wildlife Society, a society registered with the West Bengal Societies Registration Act, 1961 was established in 1991 to promote awareness among people about conservation of nature, environment and wildlife.

a) Basis of preparation of financial statements

The Financial Statements are prepared on accrual basis under the historical cost convention.

b) Fixed Assets

Fixed assets are stated at cost, net of depreciation. The cost of an asset comprised its purchase price and may cost directly attributable for bringing the asset to its working condition and location for its intended use.

c) Depreciation

Depreciation on Fixed Assets is provided on Written down Value Method at the rates specified in the Income Tax Act, 1961.

Depreciation of assets acquired during the year is provided on proportionate basis.

d) Revenue Recognition

Grants-in-aid is recognised in the Statement of Income & Expenditure to the extent utilised for the purpose of the project. The unutilised balance of Grants-in-aid, if any is carried forward in the Balance Sheet.

Membership Fees and subscription have been recognized in the financial statements only at the stage it attains reasonable assurance, on the basis of all available evidence, that the membership fees will be received.

All amounts in Rs unless otherwise specified

Note 2: General Fund

Particulars	As at 31st March 2022
Opening Balance	3,74,208
Add: Excess/ (Deficit) in Statement of Income & Expenditure	29,93,619
Closing Balance	33,67,827

Note 3 : Unutilised Grants

Particulars	As at 31st March 2022
Unutilised Grants	2,77,89,976
	2,77,89,976

Note 4 : Liability For Expenses

Particulars	As at 31st March 2022
Creditors for Expense	5,92,660
Duties and Taxes	2,88,409
Consultancy Payable	4,34,681
Salary Payable	10,00,868
	23,16,618



Nature Environment & Wildlife Society

Notes forming part of the financial statements

All amounts in Rs unless otherwise specified

Note 5: Fixed Assets

Name of the Asset	Written Down Value as on 1 st April 2021	Additions during the year	Sales during the year	Depreciation for the year	Written Down Value as on 31st March 2022
Plant & Machinery	2,76,617	-	-	41,493	2,35,124
Furniture & Fixture	91,071	-	-	9,107	81,964
Computer	1,14,237	55,772	-	68,004	1,02,005
Books & Periodicals	6,156	-	-	616	5,540
Total	4,88,081	55,772	-	1,19,220	4,24,633

Note 6: Loans & Advances

Particulars	As at 31st March 2022
Project Advances	35,17,068
Receivable from WBADMIP	5,43,066
Security Deposits	68,745
Earnest Money Deposits	45,355
Accrued Interest on Fixed Deposit	96,972
Total	42,71,206

Note 7: Cash & Bank Balances

Particulars	As at 31st March 2022
Cash in hand	8,754
Balances held with Banks	2,62,96,389
On Savings Accounts	25,39,082
On Current Accounts	1,56,87,026
Other Bank Balances	
Deposits [#]	80,70,280
Total	2,63,05,143

[#] These Term Deposits represent the deposits with original maturity of not more than 12 months.



Nature Environment & Wildlife Society
Schedules forming part of the financial statements

All amounts in Rs unless otherwise specified

Note 8: Grant Income

Particulars	2021-2022
Project – Global Nature Fund	1,71,98,039
Project – Terre Des Hommes- Germany	1,64,70,250
Project – SBI General Insurance Co. Ltd	50,00,000
Project – The Livelihoods Fund	34,11,075
Project – Aldi Sud /KFW-DEG	33,40,920
Project – JICA (Floristic Suvery)	11,42,050
Project – JICA	9,30,000
Project – Fullerton India Credit Co. Ltd	9,00,000
Project – Eco Farm Tourism	8,00,000
Other Projects	18,83,292
Total Receipts	5,10,75,626
Less: Change in Unutilised Grant	(1,38,11,374)
Add: Change in Grant Receivable	22,689
Total Income	3,72,86,941

Note 9: Other Income


Particulars	2021-2022
Membership fees & Subscription received	39,000
Interest from Bank	2,34,863
from Savings Accounts	1,10,597
from Fixed Deposits	1,24,266
Donation Received	4,31,800
Reimbursement of Project Expenses	65,19,838
Total	72,25,501

Note 10: Contingent Liability

The Society does not have any other liability (other than those which has been recognized and provided in the books of accounts) which is contingent in nature as on 31st March 2022.

In terms of our report of even date

For KGRS & Co
Chartered Accountants
FRN : 310014E


(K Dutta)
Partner
Membership No.53790



For and on behalf of the Society




Place : Kolkata
Date : 16th September, 2022





www.naturewildlife.org

NATURE ENVIRONMENT & WILDLIFE SOCIETY (NEWS)

10, Chowranghee Terrace, Kolkata - 700020, India

+91 33 22234148

contact@naturewildlife.org

www.naturewildlife.org

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