

Support to the Management of the Sundarbans Reserved Forest Project (SMP II)

Context

The Sundarbans Mangrove Forests in Bangladesh is one of the last habitats of the Royal Bengal Tigers, river dolphins, and 315 species of birds. Together with its smaller Indian counterpart, the Sundarbans forms the largest closed canopy mangrove forest in the world and is a paramount stronghold for biodiversity in Bangladesh and declared UNESCO World Heritage Site.

Moreover, the forest supports and protects more than **3,500,000 people** in the 10 km belt around the Sundarbans. With increasing incidences of devastating climate change impacts, the Sundarbans play a larger role in protecting both the land and people.

The Bangladesh Forest Department (FD) works to preserve the mangrove forest but is facing some critical issues:

- Even without permanent settlements, human activity continues to affect the Sundarbans. Unsustainable aquaculture practices and industrial development in the periphery jeopardise the forests' delicate ecosystem
- Harmful practices like poison fishing, logging, and poaching threaten the unique biodiversity
- Rangers need to be capacitated in using modern techniques to monitor the vast wilderness and to enforce existing regulations
- There is a lack of involvement of locals who are dependent on the forest resources, especially women, in the management of the natural resources

Our Approach

From 2019 to 2022, the Sundarbans Management Project (SMP II) has supported the collaborative management of the forests and its resources. Building on the best practices and lessons learnt from a first phase (SMP I, 2015 – 2019), the project has enabled stakeholders claim their rights, and to understand the benefits of conservation. To that end, SMP II worked with the Village Conservation Forum (VCF), Resource User Groups (RUG) and Women's Groups (WG).

Under the project, the BFD has introduced an evidence-based monitoring and reporting tool, Spatial Monitoring and Reporting

Tools (**SMART**), to support rangers in their work. The tool collects, stores, and analyses data on illegal activities, wildlife sighting, patrol routes, and provides meaningful insight for forest managers.

The introduction of systematic long-term Ecological Monitoring (**EM**) in the Sundarbans allows the assessment of the current state of the ecosystem and predict possible impacts.

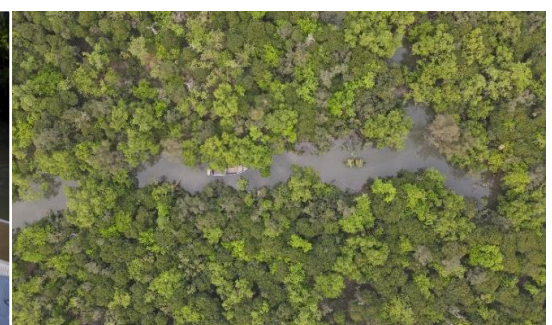
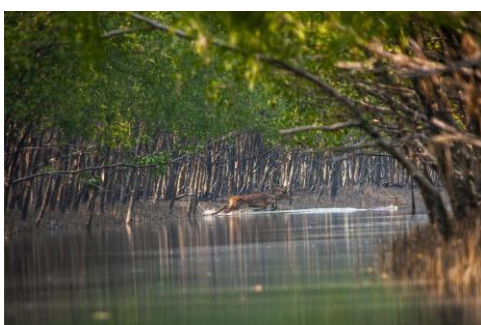
These measures have fed into an updated version of the official Integrated Resource Management Plan (IRMP 2030) for better conservation of the Sundarbans.

Project name	Support to the Management of the Sundarbans Reserved Forest Project (SMP II)
Commissioned by	German Federal Ministry for Economic Cooperation and Development (BMZ)
Commission value	EUR 4 million + special funds of EUR 950,000 for COVID mitigation in the Sundarbans
Partner ministry	Ministry of Environment, Forest and Climate Change (MoEFCC)
Implementing partner	Bangladesh Forest Department (BFD)
SDG contribution	Gender equality (SDG 5), Life below water (SDG 14), Life on land (SDG 15)
Duration	May 2019 – July 2022

Impact of SMP II

The conservation of the Sundarbans is strengthened by increased participation of resource users and women groups in collaborative management, due to an effective reporting system of law enforcement and wildlife monitoring, and the initiation of an ecological monitoring by standard parameter.

Next to 140,000 highly resource-dependent people, the 3.5 million inhabitants living in the 10 km belt around the Sundarbans take great benefit of the protection of 6,000 sqkm of Reserved Forests.



Results of SMP II

Output 1- Collaborative Management

- Through SMP II, a total of **34,510 households** (212 VCFs) directly benefited from biodiversity conservation and sustainable use of resources.
- The project contributed to improve the protection of **3,179 sqkm wildlife sanctuaries** and a total of area of **6,017 sqkm Reserved Forests**.
- **9,351 poor households**, organised in 57 Village Conservation Forums (VCFs), were trained to actively participate in decision making processes.
- **2,736 highly resource dependent households** organised in 59 RUGs weretrained on sustainable resource use.
- **2,002 women** from highly resource dependent households were organised in 46 WGs and attended workshops at family and community levels focusing on resource usage, biodiversity conservation, and gender inclusion.
- **1,555 VCF members** (587 females, 968 males) were **trained** on organisation building and leadership development, also on the role of women in the conservation of Sundarbans and natural resource management.
- **50 People's Forum** (36 females, 14 males) **members** trained on meeting management, which raised the degree of effective participation and inclusion.
- VCFs and PFs established as self-running organisations.
- **97 WGs members** and **22 RUGs members** received **external services from public and private service providers** and facilitated services for others in their community.

Output 2- Spatial Monitoring and Reporting Tool

- **32 master trainers trained** on practicing SMART. They then **trained 80 frontline forest officials**.
- **1,488 days** of patrol all over the Sundarbans covering **146,558 KM** (i.e. 3.6 times the earth circumference) of **boat patrol** and **1,378 KM** of **foot patrol** wereconducted.
- **903 offenders arrested** and handed over to judiciary, following standardised protocols.
- **23,442 sightings** of **23 key indicator species** including **36 sightings** of **Bengal Tiger** and **59 sightings** of **Masked Finfoot** (red list bird species) were recorded.

- **333 days of mentoring of SMART patrol teams (on foot and boat)** on the use of Global Positioning System (GPS), navigation skills, use of Cyber Tracker, law enforcement and educational outreach.
- **17 BFD officials trained** on SMART central database management and advanced reporting.
- A **SMART Technical Committee** established, and **nationwide SMART strategy** developed.
- A long-term **financing mechanism** through Government Budget Code is currently being prepared to ensure the sustainability of SMART.

Output 3- Ecological Monitoring (EM)

- **10 BFD staff** trained on **remote sensing** techniques.
- **3 BFD staffs** trained on simple **remote sensing** for field missions for field level outreach.
- **2 Earth Observation parameters** (canopy cover and tidal impact) using up-to-date sources and analysing techniques of satellite images established.
- **103 field parameters identified** for EM detecting changes of the ecosystem.
- **12 BFD field staffs capacitated** on EM methodology, field data collection and central database management.
- High-level multi-stakeholder **Ecological Monitoring Technical Committee (EMTC)** formed to anchor EM in the BFD.
- **6 drones** used for storm damage assessment and forest surveys.
- **14 BFD staffs** trained on **drone piloting**.
- **Localised oil and chemical spill contingency plan** formulated for the Sundarbans.

COVID-19 mitigation

- **Subsistence assistance** and sanitation equipment provided for 7,000 extreme poor families.
- **1,500 students** engaged in various activities for mental health support and to raise awareness on conservation
- **Frontline ranger and patrol stations** received equipment to better cope with wildlife crimes and the pandemic.
- 2 communities equipped with **rainwater harvesting** systems. **Pond ultra-filtration system** installed for 3 communities.
- **10,000 mangrove seedlings** plan

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Registered offices Bonn and Eschborn, Germany
Sundarbans Management Project (SMP II)
GIZ Bangladesh
PO Box 6091, Gulshan 1
Dhaka 1212 Bangladesh
Phone +880 2 5506 8746 - 52
giz-bangladesh@giz.de
www.giz.de/bangladesh

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Text Dr. Stefan Alfred Groenewold
Panchanon Kumar Dhali
Shabnam Khanam
Mahmud Hasan
Bonani Chumky
Tarique Hassan

GIZ is responsible for the content of this publication.

On behalf of German Federal Ministry for Economic Cooperation and Development (BMZ)

Contact Dr. Stefan Alfred Groenewold, Principal Advisor, SMP
stefan.groenewold@giz.de
Dr. Abu Naser Mohsin Hossain, Project Director, SMP II
swfdkhulna2016@gmail.com