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## The Sundarbans Mangrove SATOYAMA Conservation Action Plan (SCAP-2030)

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# The Sundarbans Mangrove SATOYAMA Conservation Action Plan

## About the Sundarbans Mangrove Forest

The Sundarbans is the largest Forest in Bangladesh. The Sundarbans is also called mangrove forest or Badaban. It is an important natural ecosystem for us. It is our proud and heritage. The Sundarbans is the only habitat for the Royal Bengal Tiger.



### World Famous Sundarbans

There are many beautiful natural tourist spots in the Sundarbans which attract tourists. Three sanctuaries of Sundarbans were declared as the 798th Natural World Heritage Site by UNESCO in 1997. The Sundarbans Reserved Forest was also declared a Ramsar site by the Ramsar Convention on Wetlands in 1992. It is the largest breeding and nursery ground of fishes in Asia.



### Biodiversity of the Sundarbans

The Sundarbans is a biodiversity hotspot and living school of biodiversity. There are many different trees and animals in its ecosystem. There are a lot of Critically Endangered and Endangered animals in this Badaban (Forest). There are innumerable resident and migratory birds in this forest.



According to the Forest Department, there are about 334 species of trees, 165 species of Algae, 13 species of Orchids, about 400 species of wild animals (about 35 reptile, 315 birds and 42 mammals) and more than 291 species of fishes



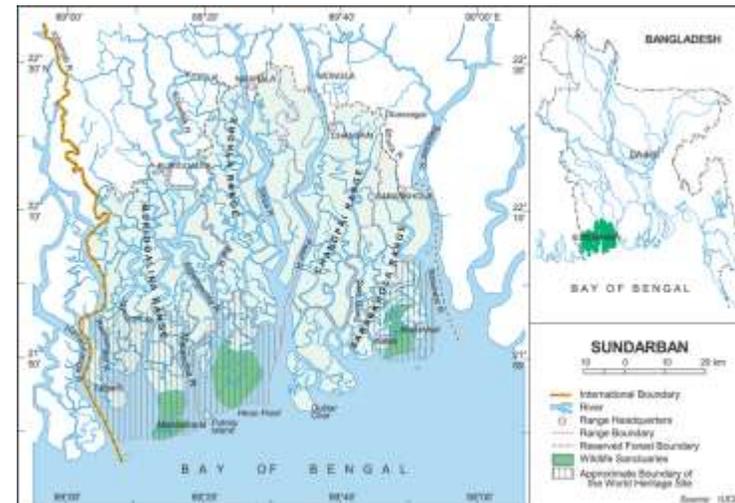
### Sundarbans Resources and Their Harvesters

The Sundarbans is our natural resource. Many species of Sundarbans trees have life-saving medicinal attributes. Millions of people living near the Sundarbans earn their livelihood by collecting honey-wax, fish, crab and Nypa (thatch) from the forests. Those who collect Nypa from the Sundarbans are called 'Bowali', 'Mowali' collect honey-wax, and those who collect fish and crab are called Fishermen. Many people are earn their livelihood by working for the forest department in forest management. Many families make a living in the tourism business. In addition, the government earns revenue from Sundarbans resources and tourists.



### Location and Area of the Sundarbans

Sundarbans is located in the southwest coastal region of Bangladesh and a small part of west Bengal of India, near the Bay of Bengal. In Bangladesh, the Sundarbans cover an extensive area of Satkhira, Khulna and Bagerhat districts. The Baleshwar River marks the east corner, the Roymongal River the west corner, Bay of Bengal the south corner and a large area extends northward into Bangladesh. The total area of Sundarbans in Bangladesh and India is 10,000 square kilometers, with 60% in Bangladesh and 40% in India. The area in Bangladesh is 6017 square kilometers. Approximately 70% of the Sundarbans area is land and 30% is water. The Sundarbans covers about 4% of the total area of Bangladesh, and contain roughly 40% of the total forest of our country.



## Natural safeguard for the coastal Communities

The Sundarbans is our natural safeguard. The Sundarbans protects the coastal area of Bangladesh from many natural disasters such as Cyclone Aila and Cyclone Sidr. This forest cares for southern Bangladesh with a mother's affection.

## Folklore of the Sundarbans

There are many accepted stories about the Sundarbans in folklore, such as Gazi-Kalu-Champabati, Bonbibi and others. Different types of fairs like Banbibi Worship, Gazi-Kalu fair and Rashmela, are held at different times of the year in the Sundarbans region. These festivals bring endless joy to the lives of the forest-dependent people who live far from the diversions of the city.



## Government declaration Initiatives for Sundarbans Conservation

Because of the importance of the Sundarbans, Government has declared it as Reserved Forest in 1878. In 1996, the Government has declared three Wildlife Sanctuaries with 139700 hectares of Forest. A 10-km border strip around the Sundarbans has been declared an Ecologically Critical Area (ECA). Many government rules and regulation exist to conserve the Sundarbans' animals and plants. The National Curriculum and Text Book Board (NCTB) included Sundarbans information in class I to V text books. Moreover different Non-Government and international donor organizations have been helping the government to conserve the Sundarbans.

## About the existing policy of the Bangladesh Government to conserve the Sundarbans mangrove ecosystem

Bangladesh Government has some certain laws, policies and rules to conserve the Sundarbans ecosystem. They are as follows:

### Law:

- Forest Act 1927
- Atia Forrest (Protection) Ordinance
- Wildlife (Conservation and Security) Act 2012
- Brick prepared and depleted (control) Act 2013

### Rules:

- Social Forestry Rules 2004
- Forestry Transportation Rules 2011
- Sundarbans Tour policy
- Prime Minister's National Award for Promoting Plantation
- Saw-Mill (License) Rules 2010
- Mortality compensation Rules for wildlife affected people 2010
- Agar tree sales Rules-2012

### Policy:

- National Forest Policy 2016
- Bangladesh Forestry Sector Master Plan 1995

### International Conventions and Agreements:

- RAMSAR Convention (Convention on Wetlands of International Importance specially as waterfowl Habitat)
- UNESCO (Convention Concerning the Protection of the World Cultural and Natural Heritage)
- CBD (Convention on Biological Diversity)
- UNCCD (United Nations Conventions to Combat Desertification)
- CITES Convention (Convention on International Trade in Endangered Species)
- EAAFP (East Asian Australasian Flyway Partnership)
- GTI (Global Tiger Initiative)
- APFNet (Asia Pacific Network for Sustainable Forest Management)
- GTF (Global Tiger Forum)
- UN REDD Program (Reducing Emission from Deforestation and Forests Degradation in Developing Countries)
- UNFF (United Nations Forum on Forests)
- Nagoya Protocol
- MFF (Mangrove for Future)
- SAWEN (South Asia Wildlife Enforcement Network)
- APAP (Asia Protected Area Partnership)

**Source:** Forest Department, Government of Bangladesh  
<http://www.bforest.gov.bd>

## Government Initiatives

Government has taken different kinds of projects by the Government fund and international supports. Few of very recent initiatives are as follows;

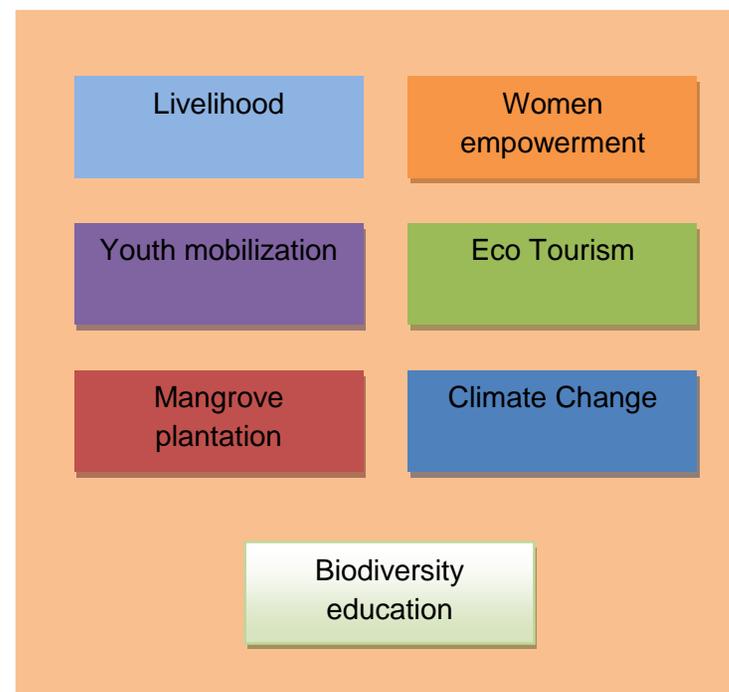
Sl. No.	Project title	Duration
01	Management of the Sundarbans Mangrove Forests for Biodiversity Conservation and Increased Adaptation to Climate Change (SMP)	May 2015 to April 2019
02	USAID's Bengal Tiger Conservation Activit	July 1, 2014- June 30, 2018
03	Climate-Resilient Ecosystems and Livelihoods (CREL)	Oct 2012 to Sep 2017
04	Sundarbans Environmental And Livelihoods Security (SEALS) Project	July 2010 to May 2015
05	Sustainable development and biodiversity conservation in coastal protection forests (SDBC-Sundarbans)	July 2012 to December 2015
06	Management Support Project for Sundarbans Reserve Forest	2005–06 to 2009–10
07	Coastal Char Land Afforestation Project	2005–05 to 2009–10
08	Extended Forest Resources Management Project	2002–03 to 2003–04
09	Coastal Green Belt Project	1995–96 to 2001–02
10	Forest Resources Management Project	1992–93 to 2001–2002
11	Second Forestry Project	1985–86 to 1991–92
12	Mangrove Afforestation Project	1980–81 to 1984–85
13	Afforestation Project in the coastal regions of Chittagong, Noakhali, Barishal and Potuakhali	1974–75 to 1979–80
14	Afforestation in the coastal belt and offshore islands	1965–66 to 1969–70
15	Afforestation in the coastal belt and offshore islands	1960–61 to 1964–65



## Non Government organizations (NGO) initiatives

A lot local, national and International organizations have been working with communities and government for improving the livelihood and conservating the mangove ecosystems.

The main topics of the project activities of the oranzations are as fommows;



## Limitations and possibilities

So many organizations have been implementing many activities and program on Sundarbans related issues directly or indirectly but Department of Forest under Ministry of Environment and Forest, Government of Bangladesh is the main authority of caring this special forest area. Sundarbans is the reserve forest. Forest divisions of GoB is controlling and guiding all forest related activities even tourism in Sundarbans area. People who are catching fish or collecting honey all are bound to collect permission from the authority (forest division).

However, before implementing any project in the Sundarbans area every organization need to confirmation and permission from the Ministry of Environment and Forest.

So, we have identified few major problems, limitation and possibilities for conserving the Mangrove ecosystem conservation by the GOs, NGOs and CBOs. The problems, limitation and possibilities are as follows;

1. Lack of communities engagement in conservation activities
2. Top to Bottom policy making approach
3. Gap of coordination among GOs, NGOs and Communities, sharing information between organizations to organizations
4. Replication and duplication of the activities
5. Lack of proper guideline
6. Short term conservation plan
7. Lack of funding

## Future direction

Government of Bangladesh has many policies and guidelines for Sundarbans mangrove ecosystem conservation but one a common guideline on Sundarbans Mangrove SATOYAMA Conservation Action Plan (SCAP-2030) which will be helpful for all of the stakeholders like GOs, NGOs, Universities, Research organizations, local people, local NGOs, CBSs etc. Our primary thinking for producing the guideline for ensuring the following purpose;

1. Make a common platform for working together
2. Reduce the gap of coordination among GOs, NGOs, CBO and local Communities
3. Effective implementation of the Government rules and regulation
4. Achieving the SDGs, CBD, Aichi Biodiversity Target
5. Build up the ownership of local people and sustainability of the Sundarbans

**Result of the workshop for making Guideline on Sundarbans Satoyama conservation Action Plan**

Engage multi stakeholders with Sundarbans Conservation

Ensure the sustainable use of natural resources

Reduce the bad practices of the resource harvesters

Reduce the gap of coordination among the organizations and make a common platform for working together

Provide continuous mangrove education to the coastal people

Strong government policy and ensure the execution

## **Engage multi stakeholders with Sundarbans Conservation**

Engaging multi stakeholder with mangrove ecosystem is the most important thing to ensure the best quest. Multi stakeholders stand for Policy makers, Department of Forest, NGOs, Universities, Media, Local government, Buisnessman, Coastal community, Resource harvesters. In this process every stakeholder has their individual responsibilities to perform. Policy makers will make strong policies; Department of Forest will perform their duty to be the law enforcement authority that is execute those laws and monitor the activities of the resource harvesters and local community; NGOs will implement project considering mangrove ecosystem, educate people on ecosystem conservation, improve skills of the resource harvesters and provide alternative livelihood to the resource harvesters so that; Universities will conduct research on mangrove and help to identify the problems for the existence of the mangroves; media will raise their voices againts the bad practices and illgality relating magrove resources, local government should support Forest Department to execute forest laws and help the NGOs to execute the projects; the businessman will conduct business considering the mangrove ecosystem and finally the local community especially the resource harvesters should practice good practice and harvest natural resources in a sustainable way.

### **Ensure the sustainable use of natural resources**

This is one of the majr contents without which Sundarbans mangrove ecosystem conservation is absolutely impossible. This mangrove ecosystem is so much important because of its resources. If this

resources are not are not used in a sustainable way then the resources will be vanished in few years. Considering the ever growing pressure on the sundarbans resources, it is the perfect time to start using the mangrove resources in a sustainable way. Harvesting small amount of natural resources and make the best use of it is known as the proper use of natural resource. Sundarbans is the home of natural resources like natural honey, fish and crab, Nipa and other mangrove fruits. Sundarbans natural honey should be collected in a sustainable way, it should be processed and packaged perfectly and sell it in to the markets so that honey collectors can get atleast five times more profit than which they generally get.



Fish is considered to the most promising natural resource which can contribute in the national economy in a larger scale. Unsustainable fish harvesting is a big threat for the sundarbans ecosystem to lose the fish diversity from it. Fishermen use different kinds of mesh net and some greedy people use poisons for fish harvesting which causes a massive damage of the aquatic biodiversity. Different types of food products can be mede from sundarbans fishes like dried fish, chopped fish, saulted Hilsha, piece crab etc. But to do so, the fishermen should get proper skill on it.



Nipa is of traditional uses for house making and cooking fuel. There should be some food items like Nipa Juice, Nipa fruit made food and sugar from Nipa juice. It has some specific medicinal values too. There should be some community driven enterprises to expand Nipa business.



Mangrove pickle can be a very good business for the Sundarbans resource harvesters. This pickle is made from the mangrove fruit *Kewra* (*Sonneratia apetala*). It has a very high market value. All the resource harvesters should do is ensure the quality, package it attractively and sell in the market. It is a very good practice for the natural resource management of Sundarbans.



Mangrove fruit Ora is another food item that can attract the tourists. Because mangrove dishes have great appeal to the tourists. Delicious foods can be prepared using this fruit. Coastal people should get the skill to make such amazing food item.



Making handicraft by using natural resources is another medium to sustainable natural resource management. As the Sundarbans is always considered to be the best visiting site of Bangladesh, making mangrove souvenir is a big opportunity for the coastal community. Different types of handicrafts can be made like hat, sitting mat, wall mat, flower vase, laptop cover, pen holder, handkerchief etc. It can be a great way to increase the income of the resource dwellers.



Eco tourism is the most promising economic sector. By conducting eco tourism inside the sundarbans, natural resource management is very much possible. But unfortunately, massive tourism is taking place in the sundarbans coastal region which is impacting to the total ecosystem. Now a day, tourism is mainly is conducted by the tour companies by not considering local community. So, making tour guides from the local community and engaging them in eco tourism can be the solution of this problems. Introducing home stay tourism with the sundarbans coastal community is another income generating opportunity. So, eco tourism is a very good option for natural resource management.



Planting of mangroves in the sundarbans coastal region in huge extent can be a nice way to regenerate mangroves and contributing to mangrove ecosystem. Planted mangroves can contribute in protecting the embankment from erosion, it can provide mangrove fruit and timber to the coastal people. It can also contribute in biodiversity conservation by creating biodiversity habitat. So, the coastal community should plant as many mangroves as possible.



So, if sundarbans coastal communities can practice this good practices, natural resource management is very much possible.

### **Reduce the bad practices of the resource harvesters**

Sundarbans coastal community generally do not participate in organized conservation initiatives, rather they engage themselves with mangrove ecosystem destructive activities like use poison for fishing, using mesh net, illegal hunting and posing of wildlife, timber collection etc. due to their poverty and lack of education. illegal hunting and posing of wildlife, timber collection, unsustainable harvest and use of resources. So, they are destroying the mangrove ecosystem by this process.



Government as well as NGOs should take initiative to provide education to the resource harvesters on biodiversity conservation and sustainable natural resource harvesting to stop such fatal and devastating practices that can provide threat to the existence of mangrove ecosystem. So, there is no alternative other than providing mangrove education to the coastal community in order to conserve the Sundarbans mangrove ecosystem.

**Reduce the gap of coordination among the organizations and make a common platform for working together**

Different GOs, NGOs and Universities are working for conserving the Sundarbans biodiversity but there is big gap among them to sharing the news. And this often becomes the reason of replication of same work in the same region. Moreover, all the Government rules and regulation are not followed by them due to top to bottom approach and unconsciousness. To reduce this gap organizing a forum is urgent engaging GOs, NGOs, Universities, researchers and civil society members. The embodied forum should take place once or twice a year. In the forum, organizations will describe about their current activities focusing on Sundarbans mangrove ecosystem conservation. It can be a great platform for the organizations to execute their activities in right place according to the necessity. A common website can be developed for those organizations engaging Department of forest where all the relevant organizations will upload their activities in every month. All those organizations should follow a definite guideline for Sundarbans ecosystem conservation. Some international seminars

can also play a vital role to reduce this gap of coordination.



**Provide continuous mangrove education to the coastal people**

It is proved that to make people understand about anything, education is a must. Engaging local community with Sundarbans mangrove ecosystem conservation is a big challenge now a day. But they are the main people who can contribute most in respect of Sundarbans ecosystem conservation. Continuous mangrove ecosystem education can play the key role to involve local people with mangrove ecosystem conservation. NGOs and Government have to come forward to educate people on Sundarbans ecological and economic importance. When the local people will understand the significance of the Sundarbans in the national and international level, they will participate to conserve this natural world heritage site.



### **Strong government policy and ensure the execution**

The government have to have a very strong policy for sundarbans ecosystem conservation. Most importantly, the policy should be followed by the local people. Policy can be made anytime but strict implementation of that policy can ensure the best result. Department of Forest should be much more aware on execution of the government laws properly. In this spesific content they can be helped by Non Government Organizations, Universities, Local government and Civil Society. Some examplary punishment can discourge bad practicing community and create consciousness among them.



### **Conclusion**

Bangladesh is blessed with extensive mangrove resources, which are vital for the maintenance of the environment and sustainable development of the country. The Forest Department has been entrusted with the responsibility of management of this precious resource for more than a century. But it is the time to ensuring the Co-Managemnt of the Sundarbans mangrove conservation. So we need a common long guideline on how GOs, NGOs, local people can work together. Such an Action Plan on Sundarbans Mangrove SATOYAMA Conservation will be helpful for long term co-managemnt approach.

