



**25**  
**YEARS**

BUILDING  
PARTNERSHIPS  
FOR THE  
ENVIRONMENT

# Community-based Forest and Wetland Landscape Management and Restoration Programme



Komuniti Bakau  
Kampung Taman Nilam



Komuniti  
Ayer Paser

# GLOBAL ENVIRONMENT CENTRE (GEC)

A non-profit organisation established in 1998, registered in Malaysia to work on environmental issues of global importance.



We work regionally and internationally, both directly and in partnership with other like-minded agencies.



We support information exchange, capacity building and undertake strategic projects particularly in developing countries.



We focus on community-based approach in natural resource management and environmental protection within Malaysia and throughout Southeast Asia.

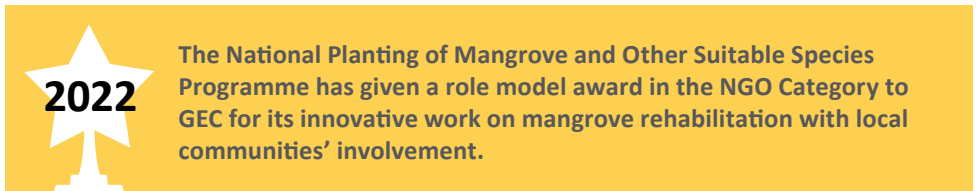


**>260** projects implemented successfully in  
**>20** countries covering environmental issues.

GEC has planted **>700,000** mangrove & peat swamp forest trees with the help of **>50,000** volunteers.



For more information on the Global Environment Centre, please visit [www.gec.org.my](http://www.gec.org.my)



## Theory of Change for Community Involvement Strategies

Community involvement strategies help to conserve and improve the status of land management, terrestrial ecosystem (including water catchments), peat swamp and mangrove forests and biodiversity in Malaysia. This strategy will empower the local community and strengthen the state government in making decisions according to the innovative models to enhance the conservation efforts in landscapes with high biological diversity. This strategy can be implemented with the cooperation of all the stakeholders including the government, local community and the private sectors to strengthen the management of terrestrial ecosystem (including water catchments), peat swamp and mangrove forests and biodiversity in Malaysia. The threats caused by the local community against any form of conservation efforts can be reduced by ensuring a continuous stream of benefits from the prudent use of local resources, conservation of biological diversity as well as fire prevention practices. These efforts are to reduce the rate of decline in the biodiversity and forests in the selected landscapes by adopting sustainable management practices. Figure 1 and Figure 2 illustrate the main strategies to ensure successful forest conservation efforts via the involvement of local communities using a bottom-up approach.

## KEY STRATEGY 1:

# Establish and promote the community-based forest management programme

in targeted landscape and networking with government authorities and other partners  
(developed by GEC & implemented and partner with the targeted community)

## ACTION:

# Local communities involvement in forest conservation and rehabilitation programme

### OUTPUT 1:

Local communities empowered for conservation and rehabilitation of local environment  
*(such as tree planting and monitoring with maintenance).*

### IMPACT:

Improved the local environment land cover and protected habitat and increased the species population.

### OUTPUT 2:

Promoted of equity, collective responsibility, utilise of local traditional knowledge and indigenous system into forest conservation  
*(such as undertaking field work with traditional knowledge in species selection).*

### IMPACT:

Development of the concepts of community ownership, and collective responsibility for conserving and rehabilitating the forest and coastal programme.

### OUTPUT 3:

Strengthened communication between the community and the government authorities and policy makers  
*(such patrolling and preventing fire and illegal encroachment).*

### IMPACT:

Community participation has been recognised and has begun to see potential platform addressing reduction of forest encroachment and fire prevention.

### OUTPUT 4:

Strengthened the capacity and exchanged knowledge among other community members.

A strong spirit of volunteerism and commitment developed among the community groups  
*(such as through peer visits and exhibition and public awareness).*

### IMPACT:

Active role played by locals through the established CBOs.

**THROUGH BOTTOM-UP APPROACH  
(GRASSROOTS)**

Figure 1: Establishing and promoting community-based forest management programmes.

## KEY STRATEGY 2:

# Establish and promote the sustainable livelihood programme

focusing on local social-economic improvement

## ACTION:

### Setup of small-scale social enterprise concept

which promoted both conservation local environment / habitat and income generation through full utilisation of traditional knowledge and potential skills owned by local communities

#### OUTPUT 1:

Local nursery established.

#### OUTPUT 2:

Local cottage industry established (includes local food and handicraft).

#### OUTPUT 3:

Ecotourism product established and associated packages developed.

#### OUTPUT 4:

Project achievements have contributed to the preparation of the federal, state and local policies.

#### IMPACT 1:

An increased understanding of how to utilise the traditional knowledge for conserving and preserving the local environment in order to generate income among the community (mainly focus B40 group).

#### IMPACT 2:

Improved local biodiversity conditions and protection within the community.

**THROUGH BOTTOM-UP APPROACH  
(GRASSROOTS)**

Figure 2: Establish and promote livelihood sustainability programmes.

# COMMUNITY-BASED ECOSYSTEM MANAGEMENT FOR WETLANDS RESTORATION

The conservation programme of degraded forests and wetlands has been evolved locally through GEC's participation, one of the prominent NGOs in Malaysia, that acts as a catalyst to the conservation programme via strategic partnership with the Friends of Peat Swamp Forest or *Sahabat Hutan Gambut (SHG)* and Friends of Mangroves or *Sahabat Hutan Bakau (SHB)* or collectively known as community-based action groups as the main implementers of the ground activities (i.e. mangrove and peatland tree planting and other rehabilitation activities) since 2006 under GEC's technical guidance. GEC is able to foster multi-stakeholder partnerships to initiate and implement a community-based peatland and mangrove management programme with the local communities.

The local community participatory approach in the mangrove and peat swamp forest conservation is a strategic output-oriented approach that benefits the locals by improving their self-reliance, social interactions and participatory decision-making skills. These benefits extend to the inculcation of moral values and community responsibilities to participate in forest conservation on a voluntary basis. Activities such as the establishment of a community nursery to supply the trees for replanting, ecological restoration, and monitoring of rehabilitation areas are able to foster a 'sense of belonging' to engage them into a long-term conservation effort. This strategy serves as the core basis of the successful implementation of the projects by the local NGOs by contemplating social aspects together with the different organisational interests, while executing project outputs in a turbulent environment as the main part of mangroves and peatland restoration efforts.

## Forest Communities in Peninsular Malaysia together with GEC-Forest and Coastal Programme (FCP)



*Pertubuhan Sahabat  
Hutan Bakau Kuala Gula  
(SHBKG)*



*Komuniti Bakau  
Kampung Taman Nilam  
(KBKTN)*



*Pertubuhan Sahabat  
Hutan Bakau Kampung  
Dato' Hormat (SHBKDH)*



*Pertubuhan Sahabat  
Hutan Gambut Selangor  
Utara (SHGSU)*



*Pertubuhan Sahabat  
Hutan Bakau Pulau  
Tanjung Surat (SHBPTS)*



*Pertubuhan Sahabat  
Gambut Asli Temuan  
(SGAT)*



*Pertubuhan Sahabat  
Hutan Bakau Pasir  
Panjang Laut (SHBPPL)*



*Komuniti Warisan Hutan  
Sungai Tengi Selatan  
(KWHSTS)*



*Komuniti Ayer Pasir  
(KAP)*



# GEC-COMMUNITY SUSTAINABLE PEATLAND CENTRE (COSPEC)

The GEC - Community Sustainable Peatland Centre (GEC-CoSPeC) is an integrated learning and sharing center for the local communities to learn about sustainable management of mangrove and peatland ecosystems. Located in Taman Raja Musa close to Raja Musa Forest Reserve, the objectives of the GEC- CoSPeC establishment includes identifying the issues and priorities related conservation, protection and rehabilitation of peat swamp and mangrove forests, promoting and enhancing the awareness regarding the importance of sustainable management of both ecosystems, supporting the livelihoods of rural communities as well as forest fire prevention. The immediate aim of the centre is to empower and strengthen the locals and indigenous community's stewardship as a high-impact mechanism for community participation in conserving and restoring the mangrove and peat swamp forest while promoting ecotourism as an alternative source of livelihood.





# ***PERTUBUHAN SAHABAT HUTAN BAKAU KUALA GULA (SHBKG)***



Established  
in **2006**  
after being  
affected by the  
2004 tsunami.

Consists of 13  
members (B40),  
who are fishermen  
and housewives,  
whose livelihood  
mainly depends  
on the mangrove  
forest products.



**248,037**  
mangrove  
saplings were planted  
within 124 hectares  
involving **>20,000**  
volunteers

SHBKG has been restoring the Kuala Gula mangrove forest area continuously for over 17 years and has received recognition from the Perak state government for their effort to restore the mangrove ecosystem.



# ***PERTUBUHAN SAHABAT HUTAN GAMBUT SELANGOR UTARA (SHGSU)***



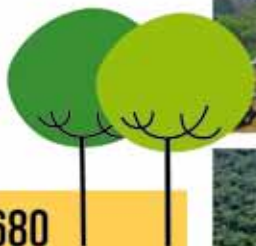
Established  
in **2012**  
consisting  
40 members  
(B40),

who are aware of and concerned about peatland degradation as well as understand the impact to the society, making them proactive in the conservation and restoration of the Raja Musa Forest Reserve (RMFR).

With the primary objective to strengthen the collaborative efforts amongst the government, private sector, NGOs and local communities to overcome the issues related to peatland fire, peat water management and encroachment.



Established a community tree nursery that can accommodate as many as 15,000 saplings and supply trees for the purpose of planting in several states in Peninsular Malaysia.



**>126,680**  
peatland trees were  
planted, which covers  
≈196 hectares within  
the degraded area of  
RMFR.

Due to their concerted effort, together with GEC and Selangor State Forestry Department (SSFD), there have been no fires incidents recorded for the past five consecutive years.





# ***PERTUBUHAN SAHABAT HUTAN BAKAU KAMPUNG DATO' HORMAT (SHBKDH)***



Established  
in **2012**  
and officially  
registered under the  
Registrar of Society  
(ROS) in 2017,

for the purpose of continuing efforts to restore the degraded mangrove forest area on the banks of Sungai Bernam which caused major floods in the village area.

Consists of 20  
members (B40),

actively taking care of community nursery and working hand-in-hand with the GEC, SSFD, Department of Irrigation and Drainage (DID) Sabak Benam and local authorities as well as many private partners to conserve and sustainably manage the mangrove ecosystem along the Bernam river.

**42,600**

mangrove  
trees were planted &  
restored 21 hectares  
of degraded area.



**2020**



**2021**



**2022**

Tebuk Mendeleng, Sabak Bernam.

# ***PERTUBUHAN SAHABAT GAMBUT ASLI TEMUAN (SGAT)***



Established  
in **2015**  
and officially  
registered under  
the ROS in 2021,

to participate and monitor the rehabilitation efforts taken in Kuala Langat North Forest Reserve (KLNFR) and empowered to increase daily income sources by making handicrafts, selling fresh local vegetables from their village, forest trees species that have been sown and so on.

Consists of 26  
members (B40).

From Kampung Orang Asli Bukit Cheeding and Kampung Orang Asli Pulau Kempas.



Raised &  
planted  
**>15,900**  
trees in degraded  
areas of KLNFR.

Successfully established a community nursery for peat swamp forest rehabilitation and supplying saplings to other communities.

Due to their concerted effort, together with GEC and Selangor State Forestry Department (SSFD), there have been no fires incidents recorded for the past five consecutive years.





# ***PERTUBUHAN SAHABAT HUTAN BAKAU PULAU TANJUNG SURAT (SHBPTS)***



Established  
in **2018**  
consisting of  
22 local communities  
from Pulau Tanjung  
Surat,

who were stimulated by the awareness of the threat to the mangrove ecosystems and its cascading impacts on the natural resource that they were depending on.

**They are the eyes  
& ears of Tanjung  
Surat Mangroves.**

Actively involved in mangrove conservation activities as well as in the dissemination and exchange of information on mangrove conservation.



**36,620**

mangrove  
trees were planted,  
covering 18 hectares  
of degraded area.

Shares the responsibility with Johor State Forestry Department (JSFD) and other local authorities to rehabilitate, protect and manage the forest.

# ***PERTUBUHAN SAHABAT HUTAN BAKAU PASIR PANJANG LAUT (SHBPPL)***

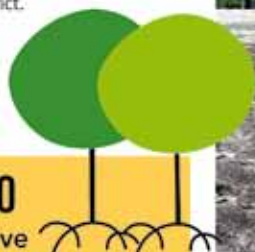


Established  
in **2020**  
consisting of  
19 members (B40).

Most of them are retiree, small-scale business operators, farmers and fishermen who actively take part in the rehabilitation and conservation of the mangrove forest.

Set up a nursery that  
can accommodate  
>12,000 seedlings

to supply trees for planting activities at  
Manjung District.



>9,000  
mangrove  
trees were planted.



2021



2022



# KOMUNITI WARISAN HUTAN SUNGAI TENGI SELATAN (KWHSTS)



Established  
in 2021.

Aiming to restore degraded area of Bukit Belata (Extension) Forest Reserve (BBEFR).

Consists of 15 members (B40) who are retirees, housewives & oil palm smallholders from Felda Sungai Tengi Selatan.

The community-based patrolling and monitoring activities are actively carried out to detect any form of encroachment, illegal activities, wildlife hunting and peatland fire occurrences at fire-prone peatland areas of BBEFR.



Planted  
**4,900**  
trees,  
covering 6 hectares.

Due to their concerted effort, together with GEC and Selangor State Forestry Department (SSFD), there have been no fires incidents recorded for the past three consecutive years.



# KOMUNITI KAMPUNG AIR PASIR (KAP)

Established in **2021**

Actively participated in the restoration of the inland forest by carrying out tree-planting activities and upkeep maintenances at Durian Tunggal water reservoir.

Consists of **10** members.

focused on planting and maintaining high-quality tree species as well as actively managing the community nursery which has the capacity to store more than 5,000 trees.

the community has planted **2,500** trees

by implementing the net-planting technique to increase the survivability and adaptability of high-quality indigenous trees.

With on-going, continuous maintenance and care that would be carried out every month, the planted trees able to record >85% of survival rate.





# **KOMUNITI BAKAU**

## **KAMPUNG TAMAN NILAM (KBKTN)**

Established in **2021**

Aware of the importance of mangrove ecosystem and willing to provide their full commitment to protect and conserve the degraded area in Merbok Forest Reserve and help to prevent other environmental problems associated with the mangrove loss.

Consists of 11 members (B40).

Independently runs a mangrove nursery and actively collaborated with GEC and Kedah State Forestry Department (KSFD) to rehabilitate the degraded mangrove area.



Planted  
**>3,000**  
mangrove trees in  
the degraded area.



**EVERYONE, EVERYWHERE,  
WE WELCOME YOUR DONATIONS  
TO SUPPORT  
GEC'S ENVIRONMENTAL WORK**



# ACKNOWLEDGEMENTS

## Government partners/funders:



## Private sector partners:



*Thank You*  
**FOR YOUR SUPPORT & PARTNERSHIP**





**Global Environment  
Centre**

BUILDING PARTNERSHIPS FOR THE ENVIRONMENT

2nd Floor, Wisma Hing,  
78, Jalan SS2/72,  
47300 Petaling Jaya, Selangor  
[fcg@gec.org.my](mailto:fcg@gec.org.my)

**[WWW.GEC.ORG.MY](http://WWW.GEC.ORG.MY)**

