



Building partnerships for the environment

Contents

O1 Organisation Profile

Vision

Mission

Overall objectives

- **O2** Message from the Chairman
- **O3** Message from the Director
- O4 Governance

Advisory Council

Management Board

Staff and Volunteers

- O5 Programme: Forest and Coastal
- 11 Programme: River Care
- 17 Programme: Peatland
- **20** Programme: Outreach and Partnership
- 23 Expand the Support
- **24** Financial Summary
- 25 Partnership & Sponsorship

List of International & Government Partners
List of Contributors



Sahabat Hutan Bakau Lekir Sitiawan at the community nursery, Kampung Sungai Tiram, Perak.

Cover Rationale

Having developed a strong footing locally and regionally over the past 22 years, Global Environment Centre (GEC) is now on the cusp of change. Not allowing ourselves to be overwhelmed by the pandemic, we opted to press on, level up our efforts and put our best foot forward to help preserve lives and livelihoods devastated by the effects the pandemic. As key enablers, we empowered our stakeholders and communities - the guardians of our forests, coastlands, rivers, peatlands, towards resilience in adversity.

Organisation Profile

Established in 1998, the Global Environment Centre (Reg no. 473058-T) works to address environmental issues of global importance. Registered in Malaysia as a non-profit organisation (NPO); we work locally, regionally and internationally, both directly and through many partners. We support information exchange and capacity building as well as undertakes strategic projects in partnership with other like-minded agencies worldwide.

Vision

A world where our environment is safeguarded and natural resources are conserved and used sustainably through equitable stakeholder partnerships for common good.

Mission

To safeguard the environment and promote sustainable management of resources to meet the local, regional and global needs through smart partnerships with communities and like-minded organisations.

Overall objectives

- To promote conservation and integrated management of forest, river, peatland and coastal ecosystems through nature-based solutions to reduce vulnerability to climate change and disasters.
- To strengthen stakeholder capacity and mainstream participation in the sustainable management of natural resources for environmental stewardship and community welfare.
- To facilitate environmental protection and sustainable development through smart partnerships between governments, private sector, communities and other stakeholders.

GEC's Capacity to Achieve Sustainable Development Goals (SDGs)

A 2020 study to assess GEC's capacity as an NPO to achieve the Sustainable Development Goals (SDGs), revealed that since 2015, SDG implementation was embedded within GEC's 27 ongoing projects.

Through our broad efforts, GEC has been able to help achieve the SDGs at every level of implementation through two SDG localisation mechanisms: Cross-Sector Partnership (CSP) with our institutional partners; and Broadening Social Values (BSV) with local community participation.













Six SDGs were identified as being directly related or best associated with our roles.

Message from the Chairman

As Chairman of the Global Environment Centre (GEC), it is my pleasure to present GEC's Annual Report 2020. The year 2020 was a very challenging year for all of us. We were all impacted by the COVID-19 pandemic, which forced us to adapt to a new-normal.

Despite the difficult situation, I am encouraged to see the progress that GEC has made across all programmes. We braced ourselves well for the challenges including travel restrictions, postponements and cancellations, by adapting to new approaches to achieve our conservation, rehabilitation and multi-stakeholder partnership missions. We have reached out to help support vulnerable communities survive the challenges of the pandemic. We also pivoted online to maintain our outreach and engagement efforts. We learnt to organise and host meetings and events on digital platforms such as Zoom and Facebook Live, while enhance community and public empowerment and awareness raising through webinars and online sharing sessions. We also maintained our in-field rehabilitation and conservation activities with strict adherence to the COVID-19 Standard Operating Procedures (SOPs). Thank you for your endless support.

We do not know whether the old normal will be back or when it will be back. But for now, all of us are striving to stay safe, and hopefully with your help we can keep ourselves and our environment safe. So, while everyone works to overcome the COVID-19 pandemic, I hope our funders, partners and supporters will continue to support us to rehabilitate and conserve the environment until nature is healthy again.

We are in this together: Building Partnerships for the Environment!

Chairman of Global Environment Centre



Message from the Director

We cannot reflect on the year 2020 without mentioning the COVID-19 pandemic. The unique challenges posed by the pandemic were unprecedented. Despite these challenges, we continue to flourish and achieve more milestones in 2020.

In July 2020, GEC was awarded the Role Model Award for Non-Governmental Organisation (NGO) category under the 'Programme for Planting of Mangrove Trees and Other Suitable Tree Species along the National Coastal Areas' by Malaysia's Ministry of Energy and Natural Resources (KeTSA). With generous support from funders and partners, GEC continued to empower targeted communities on sustainable management of their nearest ecosystems, community nursery establishment, handicraft creation, food production like tapioca chips and kelulut honey farming as well as development of ecotourism activities and packages. We partnered with Yayasan PETRONAS to implement our largest ever tree planting project: to plant, monitor and maintain 50,000 trees nationwide in 11 states. This initiative is in partnership with targeted local communities to boost their livelihood through community nurseries and the planting, maintenance and monitoring activities.

At regional level, GEC was appointed to undertake the Final Review of the ASEAN Peatland Management Strategy 2006-2020 (APMS) with inputs from ASEAN member states and the ASEAN Task Force on Peatlands with guidance from the ASEAN Secretariat and Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). Despite the travel ban within ASEAN region, the review was undertaken with active engagement of ASEAN Member States (AMS), national and international organisations and experts through a series of focus group discussions and workshops. The Final Review of the APMS was officially adopted by ASEAN in January 2021.

The year 2020 also marked the final year of the Phase 5 Outreach Programme of the River of Life Initiative, through which GEC supported the engagement of thousands of local stakeholders in monitoring, protecting and cleaning up the River Klang and its tributaries in Kuala Lumpur. Over four years, the project successfully engaged more than 42,000 participants through 385 activities, with a total of 15 km of Klang River stretches being regularly monitored and 8.2 km being adopted by local communities and organisations.

In retrospect, 2020 made us realise our vulnerabilities and discover new capabilities beyond our existing norms to communicate with and engage stakeholders and safeguard the environment. All this was made possible through the continuous support from our funders and partners from government agencies, private sector, communities, individual donors and volunteers.

Thank you for supporting GEC's work in 2020 and we look forward to your continuing support in 2021. We cannot do what we do without you!



Faizal Parish

Director of Global Environment Centre

Governance

Advisory Council

Dato' Dr. Wong Sai Hou

Chairman, Petaling Jaya City Environment Committee

Former State Assemblyman for Kg Tunku

Dato' Ir. Lim Chow Hock

Chairman, Malaysian Capacity Development Network for Sustainable Water Management (MyCDNet)

Former Director of Department of Drainage & Irrigation (River and Coastal) of Peninsular Malaysia

Dato' Halimah Hassan

Former Director General of Department of Environment Malaysia



Mr Delmar Blasco

Former Secretary General, Convention on Wetlands (Ramsar, Iran 1971)



Tan Sri Razali Ismail

First Chairman of the Commission of Sustainable Development

Former Special Advisor to the Prime Minister of Malaysia Former President of the United Nations General Assembly (1996/7)



Prof Tan Sri Dr Zakri Abdul Hamid

Former Science Advisor to Prime Minister of Malaysia Former Director, Institute of Advanced Studies, UN University, Japan

Former Chairman of SBSTTA, Convention on Biological Diversity

Datuk Zul Mukhshar bin Dato' Md. Shaari

Former Director General Forest Department of Peninsular Malaysia

Dr. Salmah Zakaria

Chair of ASM Climate Change and Water Board

Board Member of Lembaga Urus Air Selangor

Former Director General of National Hydraulic Research Institute of Malaysia (NAHRIM



Management Board

Environmental Lawyer and Former Chairman of the KL Bar Council Department of Chemical Engineering, University Malaya, Malaysia

Staff and Volunteers

GEC's activities are coordinated by a team of 36 full-time staff, based in our headquarters and four field offices across Malaysia and our work is supported by many associates, part-time staff, volunteers and partners. GEC undertakes projects in more than 10 countries mainly in the Asia Pacific region either operating directly or through local partner organisations and communities. Our volunteers provide much-needed assistance in our work including rehabilitation of Raja Musa Forest Reserve (RMFR), rivers clean-up and mangrove restoration. GEC currently has more than 1,000 volunteers.

Programme:

Forest and Coastal Nagarajan Rengasamy

Primarily Peninsular Malaysia centric, Forest & Coastal Programme (FCP) is supported by two teams that provide a wide range of technical services and consultation activities: one in conservation and management activities in peatlands, and the other for mangroves. FCP efforts aim to conserve ecology, biodiversity and mitigate climate change at all levels including community, national and global. These include forest rehabilitation, sustainable management of wetlands, hydrology restoration, biodiversity conservation, environmental education, community participation and livelihood enhancement. Our community-based, participatory approach help enhance the economic development and livelihood of local community groups. They adopt process-oriented and science-based approaches in addressing environmental issues.





Great win: The formidable FCP team led GEC to bring home the coveted award KeTSA's Role Model Award for NGOs in recognition of our ongoing mangrove and rehabilitation and conservation initiatives.

KeTSA's Role Model Award for NGOs for Mangrove Rehabilitation and Conservation Initiatives

On 26 July 2020, in conjunction with the International Day for the Conservation of the Mangrove Ecosystems 2020 in July 2020, GEC won the coveted 'Role Model Award' for Non-Governmental Organisation (NGO) category under the 'Programme for Planting of Mangrove Trees and Other Suitable Tree Species along the National Coastal Areas', a title awarded by the Ministry of Energy and Natural Resources (KeTSA).

This was in recognition of GEC FCP's pivotal role in the rehabilitation of five degraded mangrove areas in Johor,

Perak and Selangor since 2005; and the establishment of five Sahabat Hutan Bakau (SHB) community organisations namely SHB Kuala Gula (SHBKG), SHB Kg Dato' Hormat (SHBKDH), SHB Pulau Tanjung Surat (SHBPTS), SHB Pasir Panjang Laut (SHBPPL), SHB Lekir Sitiawan (PSHBLS), as well as other community groups such as Sungai Limau community, to mainstream local community participation in sustainable management of mangroves.

The results: over the last 15 years, more than 300,000 mangrove trees have been successfully planted at the degraded areas with a survival rate of more than 80%. An amazing feat accomplished through concerted efforts of the local communities, funders, partners and the volunteers who have provided unceasing support towards the FCP's rehabilitation work.



Fruitful partnership: Upon successful completion of the first phase of the project in Manjung, TNB extended its partnership into Phase 2 of (2021-2023) to plant 7,000 more mangrove trees and to continue maintenance of the 10,000 mangrove trees planted in the first phase.

Mangrove Rehabilitation in Selangor, Perak and Johor

FCP has carried out a range of projects for rehabilitation and restoration of mangroves in Sabak Bernam, Selangor, Kuala Gula and Manjung, Perak as well as Tanjung Surat Island, Johor.

In September 2019, GEC partnered with Tenaga Nasional Berhad (TNB) to rehabilitate a degraded mangrove site at Sungai Limau, Lekir in Manjung. The first phase of the project was successfully completed in 2020 via the collaborative efforts between various stakeholders; a team from SHBKG constructed by hand a 150 m tidal channel/waterway to improve the hydrology of the area and to rewet the dried site; the SHBLS ensured a continuous supply of trees for the planting activities; and the Sungai Limau community planted 10,600 mangrove trees across four hectares of degraded areas.

At its first planting, the project achieved 77% survival of trees and following the replacement planting, maintenance and monitoring activities at the sites, the survival rate increased to over 90%. TNB extended this partnership into a second phase of the project for two years (2021-2022) to plant 7,000 more mangrove trees at the site and the continued maintenance of the mangrove trees from first phase of the project.

Due the ongoing COVID-19 pandemic and various forms of Movement Control Orders (MCOs), GEC adopted new guidelines to implement the tree planting activities with the local communities, in line with SOPs by the Ministry of Health (MOH) and the National Security Council (MKN). Small-scale tree planting activities were conducted with only 10 community members planting up to 300 mangrove trees within an hour.

As a result, the SHBPTS, SHBKDH and SHBKG, successfully planted 10,000 mangrove trees in five hectares of degraded areas in Tanjung Surat, Johor, Tebuk Mendeleng, Selangor and Kuala Gula, Perak.

GEC guided us to rehabilitate and restore the degraded mangrove areas. The peer learning session with Friends of Mangrove Kuala Gula (SHBKG) helped us learnt to manage and maintain a mangrove nursery, choose and collect wildings as well as plant saplings at the degraded mangrove areas.



MANGROVE REHABILITATION WITH MAHIDAN MANAP, VICE-CHAIRMAN OF SHBPTS

As a resident of Tanjung Surat Island, Kota Tinggi, Johor, he is well aware of the importance of mangrove in his area and knows it provides various services and commercial value through ecotourism and is a habitat for diverse species such as breeding area for marine life including cloves and shells that can be caught and sold.

SHBPTS manages and maintains the mangrove nursery and tree planting activities at the degraded areas to secure their homeland and source of livelihood.



Regeneration and restoration: The regeneration of secondary forest and hydrology restoration at FC 99 & 100, RMFR.

Peatland forest rehabilitation and conservation at North Selangor Peat Swamp Forests

In 2020, GEC and the Selangor State Forestry Department (SSFD) implemented conservation and rehabilitation of degraded peatland forests at North Selangor Peat Swamp Forest (NSPSF) and South An important visit: British High Commissioner H.E Mr Charles Hay (third from left) and Deputy Minister of Energy and Natural Resources (KeTSA), YBM. Tengku Zulpuri Shah Raja Puji (third from right), with officials from Forestry Department of Peninsular Malaysia and Selangor State Forestry Department visiting the Queen's Commonwealth Canopy at RMFR in February 2020.

Selangor Peat Swamp Forest (SSPSF) in collaboration with various funders including HSBC Bank Malaysia Berhad, Innisfree Malaysia, SPARK Foundation, UPS Malaysia, United Nations Development Programme (UNDP) Malaysia, Yayasan Bursa and Prosper Palm Oil Mill Sdn Bhd.

All rehabilitation activities were aligned to the Integrated Management Plan for NSPSF 2014-2023 and Fire Management Plan of Kuala Langat North Forest Reserve (KLNFR) and Kuala Langat South Forest Reserve (KLSFR) 2016-2021. In particular, GEC, through a partnership with Prosper Palm Oil Mill Sdn Bhd, initiated long-term protection and rehabilitation of the Bukit Belata (Ext.) Forest Reserve (BBEFR) in March 2020. Located in the southeast region of the NSPSF, the project covers an area of 3,140 hectares with more than 358 hectares of the forested area severely degraded by fires and encroachment in recent years. To date, we have successfully planted six hectares of FC 25 using the mound and normal planting techniques. The planted saplings recorded 83% survival rate.

Through continuous support from the various funders and the commitment of SHGSU, more than 69 hectares of the degraded sites were rehabilitated by planting the pioneer species such as 'Tenggek Burung' (*Melicope lunu-ankenda*) and 'Pulai' (*Alstonia scholaris*). In addition, 22 canal blocks were constructed or maintained to restore the hydrology of peatland forest reserves at NSPSF and KLNFR. The canal blocks function to reduce the loss of water from the peatlands, peat subsidence and alleviate the fire risks.



Enhancing livelihoods: The SGAT community actively embarking on creating unique handicraft work to generate income for community members.



Through collaboration with the State Forestry Departments as well as local and international funders, GEC has been supporting the establishment of community organisations and formulated various strategies to empower the local communities on sustainable management of forest resources, products and services.

Funded by Aramco Overseas Malaysia Sdn Bhd, GEC began supporting the local communities of Tanjung Surat Island, Johor on mangrove rehabilitation activities and on 11 March 2020, they were officially registered with the Registry of Societies (ROS) of Johor as 'Pertubuhan Sahabat Hutan Bakau Pulau Tanjung Surat (PSHBPTS)'. GEC is responsible for supporting them on tree planting activities, patrolling, monitoring and maintenance of the planted sites, as well as successfully established and manage a community nursery that can accommodate up to 14,000 mangrove seedlings at a time. Besides sustainable management of mangrove, we also empowered the PSHBPTS members on sustainable livelihood options including the development of handicrafts, as well as eco-tourism packages that provide breath-taking experiences on the beauty of mangrove ecosystem, the culture of the local community, arts and food.

Meanwhile, Yayasan Sime Darby supported GEC's the establishment of another community, 'Pertubuhan Sahabat Hutan Bakau Pasir Panjang Laut (PSHBPPL)'. Sitiawan-based PSHBPPL is in the process of developing their own mangrove nursery in Manjung after obtaining approval from the Manjung District Office. The nursery will support rehabilitation activities at degraded mangrove areas in Pasir Panjang Laut and other parts of Manjung.

In Selangor, two groups supported by GEC - namely Sahabat Gambut Asli Temuan (SGAT) and Sahabat Hutan Gambut Selangor Utara (SHGSU) actively participated in forest rehabilitation and fire prevention activities in RMFR and KLNFR. Both groups conducted the patrolling and monitoring activities along the forest buffers to prevent any form of encroachment and fire occurrence. Besides patrolling, the communities undertake the maintenance and management community nurseries which generate income to the community from the sales of the saplings through a 'buy-back system'. The SGAT members also produced handicrafts from non-timber forest resources as part of their sustainable livelihood alternatives.



Cohesive community efforts: The mangrove conservation and rehabilitation activity in Pasir Panang Laut in Sitiawan, Perak is made possible thanks to the good efforts of the SHBPPL community.



Pivotal players: The local communities are important stakeholders in raising awareness amongst the community on fire risk and the Fire Danger Rating System (FDRS) is an essential tool towards this end.



The community members from Tanjung Surat Island, Johor have been tireless in their efforts to rehabilitate the mangrove forest in the area.



Tapir

Wildlife at NSPSF

NSPSF is an important habitat for many wildlife species of conservation priority GEC, in collaboration with SSFD, HSBC Bank Malaysia Berhad and Prosper Palm Oil Mill Sdn Bhd, undertook rehabilitation and periodical wildlife monitoring activities at the degraded sites of RMFR and BBEFR. The aim is to improve the quality of the forest as a habitat for the wildlife as part of the biodiversity conservation efforts.

Camera traps were installed at degraded sites of RMFR and BBEFR to record the wildlife present. The footages obtained confirmed the importance of RMFR and BBEFR as a habitat for a number of vulnerable (V), near threatened (NT) and endangered (E) species. The presence of small mammals in the disturbed sites highlights the potential for seed dispersal, regeneration status of the secondary forest and the presence of adequate food supply in these forest reserves include 17 conservation priority species recorded at RMFR and 21 conservation priority species at BEFFR.



Malayan Crested Fireback Pheasant



Sun Bear



Panther/Leopard

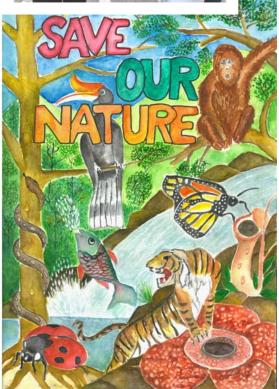


Great Argus

Online Environmental Education (EE) programmes for the PFR school students in Kuala Selangor and Hulu Selangor districts

GEC, in collaboration with HSBC Bank Malaysia Berhad and Ministry of Education, SSFD and State Education Department supported the engagement of school children in peatland conservation to educate and create awareness amongst youths in Selangor. Due to COVID-19 pandemic, physical activities for our Peatland Forest Ranger Programme (PFR) and Junior Peatland Forest Ranger Programme (JPFR) learning sessions went online, while our essay competition, poster competition and video competition continued as planned with involvement of SMK Rantau Panjang, SMK Raja Muda Musa, SMK Sultan Sulaiman Shah, SMK Kg. Soeharto and Kolej Vokasional Kuala Selangor. Between December 2020 - January 2021, GEC hosted five online learning sessions on peatlands and a quiz competition.









Engaging young, creative minds: The winning poster designs for Peatland and Junior Forest Ranger photo competition was from SMK Rantau Panjang (above) and from SK (A) Bukit Cheding respectively.

Programme:

River Care headed by Dr Kalithasan Kailasam

The programme aims to promote and support the holistic, natural and personal engagement towards integrated river basin management (IRBM), ecosystem services and Civic Science using a HEART approach. We engage stakeholders and communities, empowering them in environmental management through nature-based solutions. The programme hones in on key water, river basin and river management related issues. We believe every individual has a role to play in the environment.





Lembah Bujang Lestari supported planting of 430 mangrove trees at Sungai Merbok and upgraded their mangrove nursery with 1,330 additional mangrove seedlings.

National River Care Fund

Established in 2015, the National River Care Fund (NRCF), supports deserving local community, community-based organisations and NPOs to pursue river care initiatives, disbursing grants of RM2,000 to RM5,000 to conduct activities. These include awareness raising programme, capacity building, biodiversity conservation pollution reduction measures and best management practices.

To date, through six grant cycles, NRCF has supported 37 community grant recipients, followup assistance for grantees of nine existing grants, five trainings on RIVER Ranger, SMART Ranger, DRH20 and Flood training, and two environmental talks.

By the end of 2020, most grantees under Cycle 6 of the grant completed their projects after getting time extension to complete their activities during the pandemic.



Faculty of Civil Engineering, Universiti Teknologi MARA installed a water filter cage at the source of water intake, enabling almost 500 OA community members in Kampung Kudong, Bekok, Johor to gain access to clean water. The communities were also empowered on water quality monitoring and water filter cage maintenance.

- > Faculty of Earth Science, University Malaysia Kelantan empowered 35 Orang Asli (OA) students on river care initiatives and about 200 participants from the local communities in a gotong-royong activity in Kelantan.
- > Society of Eco Greater Melawati led river adoption activities at Taman Melawati such as trail cleaning and maintenance, food farming, trash collection and a pollinator garden.
- > KRT Kampung Goshen initiated river adoption activities by upgrading and maintaining 'pondok tagal' recreational area located by the Taraan River at Kota Marudu, Sabah.



Building a strong synergy: GEC teamed up with Yayasan Hasanah and Department of Irrigation and Drainage (DID) Perak to launch a Community Recycling Corner for the KRT Taman Tasek Jaya community.

Empowering Communities on River Care Activities

In 2020, GEC continued to expand and strengthen community engagement in Perak and Selangor.

February 15: GEC collaborated with Yayasan Hasanah and Department of Irrigation and Drainage (DID) Perak to launch a Community Recycling Corner for the KRT Taman Tasek Jaya community.

May 14: GEC's Upper Kinta Basin (UKB) project, supported by Yayasan Hasanah, organised an online webinar on Community River Monitoring, involving local communities and state agencies. Since then, communities shared monthly river monitoring data.

June 21: The OA community in UKB held their first community training on GEC's RIVER Ranger 2.0 programme to empower the community on river care initiatives including river monitoring, river mapping and biodiversity.

September 12 to 13: GEC organised a two-day training focused on riverine biodiversity for 25 community representatives from 13 community groups within the Klang River Basin at KEM ABC Janda Baik under the Mainstreaming Biodiversity in River Conservation Project. Here, they learnt to use Guidebook for the Community-based Biodiversity Inventory developed based on GEC's RIVER Ranger 2.0 Field Guide. Currently, they are actively conducting river monitoring initiatives.

October 14: Under the W.A.T.E.R. project, a webinar on community gardening was organised to showcase the steps to establish a community garden, and it was attended by over 300 participants, including over 150 participants on Facebook Live.



Trees that heal: The planting of suitable tree and plant species helps establish a natural and stable ecosystem to prevent soil erosion next to the SImpang Pulai - Cameron Highlands highway; with most tree species planted achieving 100% survival rate.

Mainstreaming Biodiversity in River Conservation

On 9 March 2020, GEC was appointed to mainstream biodiversity conservation into Malaysia's riverine landscapes through improved river planning and management practices. The project by the DID Malaysia with support of Global Environment Facility (GEF) and UNDP has two implementation sites under GEC: Klang River Basin and UKB.

Among the events held to raise awareness among stakeholders include Klang River Basin BioBlitz 2020 and an awareness programme on invasive fish species. A study on biodiversity of the UKB was conducted to identify the characteristic species and presence of rare, threatened and



Ongoing river monitoring activities: A crucial part process in UKB to help identify the characteristic species of and presence of rare and threatened and endemic, flora and fauna species.

endemic flora and fauna species. GEC also established a bio-engineering pilot demonstration site along the eroded slopes of the Simpang Pulai to Cameron Highlands highway. The site pioneers using a bio-engineering approach to control soil erosion at Upper Kinta Basin, with key support from the Kampung Pawong OA community and the Department of Public Works. GEC installed natural barricades and planted suitable tree and plant species to establish a natural and stable ecosystem to prevent soil erosion. Most tree species planted achieved 100% survival rate.



Sustainable Management at UKB

To sustainably manage UKB, the UKB Management Strategy (UKBMaS), supported by Yayasan Hasanah, was finalised as reference for stakeholders. The project includes looking into the protection and improvement of water resources in UKB, as well as enhancing sustainable livelihood and welfare of OA communities in UKB and enhancing multi-stakeholder coordination and management.

Together with the OA community, GEC established the Mount Korbu eco trail as an eco-tourism activity in Ulu Kinta, Perak. GEC also helped the KRT Klebang Selatan community group extend their urban garden project to include the production and sale of tapioca chips to enhance the community's livelihood. Through the support from UNDP, a bamboo nursery in Kampung Tonggang OA village was set up to support erosion control activities and as part of the community's secondary income generation.



Unique venture: GEC, together with the OA community and funding support from Yayasan Hasanah established the Mount Korbu eco-trail as an eco-tourism activity in Ulu Kinta, Perak.



The 300m clay dyke in RMFR completed just over a three month period.

Promoting Sustainable Use of Water

(Working Actively Through Education Rehabilitation) Project is GEC's flagship initiative in partnership with SPARK Foundation. Since 2018, the W.A.T.E.R. Project has been working on a Water Stewardship Agenda initiative to reduce stress on local water resource and ensure watershed security and water balance. By late 2020, the third phase of the project, which focuses on Selangor River Basin and Klang River Basin (Penchala River and Sungei Way) was completed. This includes the completion of the construction of a 300m clay dyke in RMFR over a three-month period. The clay dyke prevents water drainage, maintains optimum water table in the peat swamp forest especially during dry season and is part of an effective fire prevention method. Besides clay dyke, one hectare of degraded peatland was reforested by employing the rehabilitation strategies such as peatland rewetting, revegetation planting to induce natural regeneration as well as for fire prevention.

W.A.T.E.R. project initiated a pilot constructed wetland cell project in 2019 in Section 19, PJ and the project was completed in 2020. The project aims to introduce wetland islands to improve biodiversity as well as to improve selected water quality parameters of targeted stretch of river. The initiative also saw schools of fishes coming back to this particular stretch which underwent rehabilitation.

Also, GEC's long-term community partner, the Desa Mentari community in Petaling Jaya, Selangor further enhanced their community garden initiatives including incorporating hydroponics, fish tank using rainwater harvesting system and rooftop gardening. The Block 3 Desa Mentari community started chilli farming to partly address food security in the post-Covid 19 era. Block 1 Desa Mentari started aquaponics to support their food source initiative.



The introduction of wetlands islands helped improve biodiversity and enhance selected water quality parameters of targeted stretch of river. The initiative also saw a school of fish coming back to this particular stretch.



The Desa Mentari community further enhanced their community garden initiatives in 2020 to partly address food security in the post-Covid 19 era.





With guidance from GEC, we learned to establish and grow what is now an edible community garden with almost 50 plant species including vegetables, herbs, fruits and flowers. The garden is a great relief for us during the MCO as most markets were closed and some of us lost our income.



ROLPOP5 Award 2020

The River of Life Public Outreach Programme Phase 5 (ROLPOP5) running since 2017, engaged diverse stakeholders in pollution prevention and river protection in the Klang River basin in the west parts of Kuala Lumpur, and was carried out under the guidance of the DID Malaysia. The ROLPOP5 project was completed in 2020 through targeted outreach, awareness on the River of Life (RoL) Initiative, reduced pollution levels and river corridors protected through awareness campaigns, river adoption activities, volunteerism and media and social media outreach. The project successfully engaged more than 42,000 participants through 385 ROLPOP5 activities, with a total of 15km of Klang River stretches being monitored and 8.2km of Klang River being adopted by the local communities and organisations.

The closing of the project culminated with the Virtual ROLPOP5 Award on 12 November 2020. Winners were selected from eight categories for their outstanding achievement in enhancing, protecting and contributing towards the ROL Initiative.

In 2020, the pandemic prompted us to shift most of our trainings and events to virtual platforms.

May 4,5 and 8: RIVER Ranger Training of Trainer (ToT) 2.0 series was made available on GEC's Facebook page.

April 22: A ToT for Kindergarten teachers empowering them to raise awareness on river care to kindergarten students.

COMMUNITY GARDEN: A GREAT RELIEF WITH ZUREDISHAM ZULKEPLI

This resident of Pangsapuri Mutiara Magna in Kepong, Kuala Lumpur noticed that Sungai Keroh, adjacent to his housing area was neglected and soon became a site for illegal dumping.

Supported by the ROLPOP5 project, Zuredisham along with KRT Mutiara Magna organised multiple river and riverbank clean-ups to create a conducive area for residents to enjoy and appreciate the nature and the river.

KRT Mutiara Magna was dubbed champion for ROLPOP5 Award 2020 local community category for the Sungai Keroh River Care Education Centre (RCEC), launched by DID on 8 August 2020. RCEC serves as a platform for peer-to-peer learning based on their successful river care initiatives.

Besides gardening, he and the local community learnt to monitor water quality of the adjacent river. Over time, the river condition improved and dragonflies- the biological indicator of a good river, were spotted in the vicinity.

Programme:

Peatland headed by Serena Lew

The Peatland Programme aims to promote sustainable management of peatlands, especially in Southeast Asia. We work closely with various stakeholders to promote best practices in peatland management, fire prevention and rehabilitation.

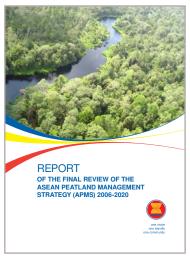


Supporting Sustainable Peatland Management

At regional level, GEC continued to support various agencies to develop modules and action guides for sustainable peatland management.

The International Union for Conservation of Nature (IUCN) and GEF appointed GEC to be implementing partner for the Sustainable Management of Peatland Ecosystems in Mekong Countries (Cambodia, Lao PDR and Myanmar), otherwise known as the (Mekong Peatlands Project. The project aims to sustainably manage peatland ecosystems in targeted countries and to conserve biodiversity and reduce GHG emissions.

One of the key milestones in 2020 was the completion by GEC of the Final Review of the ASEAN Peatland Management Strategy 2006-2020 (APMS) between February to December 2020. APMS is a strategy to guide action and support the sustainable management of peatlands in the ASEAN region for the period of 2006-2020. The review is to prepare for the development of the next phase of the APMS (2021-2030).



Regional Activities under MAHFSA

Inaugurated in December 2019, the Measurable Action for Haze-Free Sustainable Land Management in Southeast Asia (MAHFSA) is a joint initiative to reduce transboundary haze pollution and its impacts in Southeast Asia by strengthening the existing regional coordination mechanisms to facilitate a more harmonised response to tackling the transboundary haze pollution problem. It was co-developed by a consortium of ASEAN Secretariat (ASEC), CIFOR and GEC, supported by IFAD and working in close consultation with AMS.

July 2020: GEC also initiated a Capacity Development Need and Gap Analysis (CDNGA) in collaboration with the ASEAN Secretariat, to identify needs and gaps of AMS and at regional level.

September 2020: MAHFSA and Sustainable Use of Peatland and Haze Mitigation in ASEAN (SUPA) organised three online training sessions for 54 participants from six AMS (Cambodia, Lao PDR, Myanmar, Philippines, Thailand and Viet Nam) based on the theme: Strengthen the Capacities of the Northern ASEAN Member States on Peatland Assessment and Mapping, Land and Forest Fire Detection and Monitoring.





Lending support: Yayasan Gambut, our sister organisation has been engaging local communities on agroforestry and paludiculture, facilitating the improvement of sago marketing and supporting locals in establish a Village Forest (Hutan Desa).

Yayasan Gambut — GEC's sister organisaton in Indonesia

Yayasan Gambut was established to support sustainable management of wetlands and natural resources ecosystems through strategic partnerships with various stakeholders and local communities in Indonesia.

In 2020, Yayasan Gambut supported the Management of Peatland without Burning Programme in Pulau Bengkalis and Giam Siak Landscape. It has been engaging local communities on agroforestry and paludiculture, facilitating the improvement of sago marketing as well as supporting the local community in establishing a Village Forest (*Hutan Desa*).

Yayasan Gambut also supported GEC for activities under the IFAD-funded TAKE-SMPEM and APMS Review.

Supporting Sustainable Palm Oil Implementation

GEC continued to contribute to the smallholder sub-group for the Roundtable on Sustainable Palm Oil (RSPO) Peatland Working Group (PLWG), working on simplifying the RSPO BMP Peat manuals for independent oil palm smallholders, mainly focussing on peat characteristics, peat depth measurement, peat water management as well as alternate crops to be considered for intercropping and flood risk assessment. GEC also supported the updating of the RSPO Drainability Assessment Procedures. GEC also contributed to the review and update of the Malaysian Sustainable Palm Oil (MSPO) Standard.



Aside from activating fire patrolling measures, canal blocks were constructed to rewet the peatland ecosystem, maintain optimum peat water table and prevent fire occurrence at SEPPSF.

Sustainable Management of Southeast Pahang Peatland Landscape

GEC continued peatland rehabilitation and conservation activities in Southeast Pahang Peat Swamp Forest (SEPPSF), Pahang with ongoing multi-stakeholder partnership, including the OA communities. As the programme at Bukit Leelau Mini Landscape area and Pekan (Extension) Forest Reserve continued, work expanded to nearby peat areas within the SEPPSF, including the degraded areas in Nenasi (Extension) Forest Reserve.

To prevent peatland fires, we have been carrying out communitybased fire prevention initiatives by following the strict SOPs. Additionally, 11 FDRS signboards were erected within the SEPPSF to raise awareness on fire risk among the local communities and the plantation sector. Apart from fire patrolling, canal block construction was implemented to rewet the peatland ecosystem, maintain optimum peat water table and prevent fire occurrence at SEPPSF.

To date, the stakeholders including government, private sector, project donors together with the local communities have constructed a total of 13 of canal blocks within SEPPSF and rewetted 1,700 hectares of degraded areas since 2019.

No fire has been recorded since the start of the programme. The implementation of these initiatives are made possible through generous contribution and continuous support from the Bursa Bull Charge (BBC), UNDP OA Micro Grant Facility and IFAD supported TAKE SMPEM and key partnership with the Pahang State Forestry Department, Jabatan Kemajuan Orang Asli (JAKOA), Sahabat Hutan Gambut Kampung Tanjung Kelapa (SHGKTK), Pekan District Office, Department of Agriculture (DoA) and Department of Fisheries (DoF).

We learnt how our canal blocks promote natural regeneration. I noticed the differences the canal blocks and other sustainable measures have brought to the peatland; the water is high, no more fire occurrence and the forest is green again.





GEC approached Lan Asa and other OA

community members to raise their awareness and empower them on the best management practices for peatlands.

Though initially reluctant, he and his family soon realised the merit of the efforts and GEC's approach to enhance the lives of the community and the environment. They soon became catalyst to protect their homeland and gain alternative income through various initiatives and programmes.

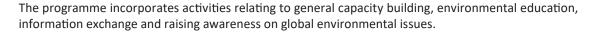
GEC also supported the Malaysian government to prepare for the implementation of the GEF-IFAD USD 9.5 million (RM39.44 million) Sustainable Management of Peatland Ecosystems in Malaysia (SMPEM) Project. The support included preparing the project implementation manual and providing guidance on developing the annual work plan and budget, while awaiting the official signing of the Financing Agreement between the Government of Malaysia (GoM) and IFAD in December 2020.

GEC developed a Catalogue of Methods for Sustainable Peatland Management in Malaysia under the EU-supported SUPA programme. This catalogue documented 34 different best management practices (BMP) methods available and applied on peat and it will be used to support SUPA Project in Malaysia.

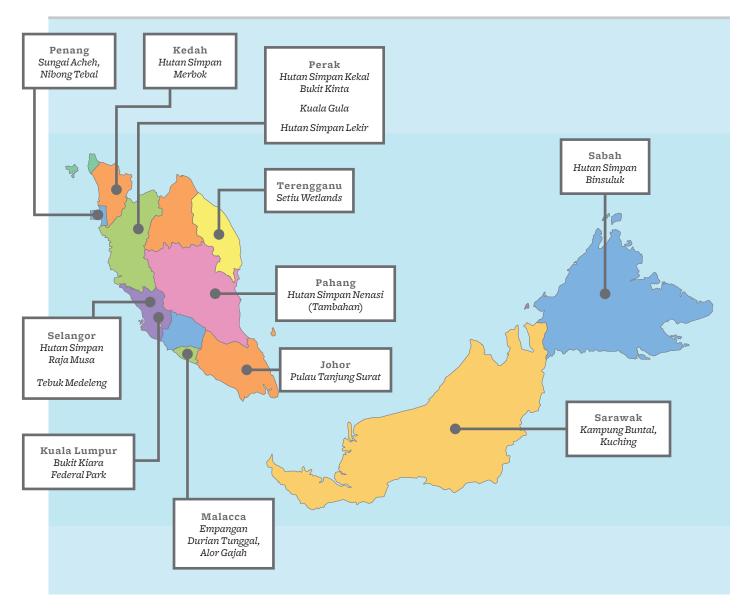
Programme:

headed by Adelaine Tan

Outreach & Partnership







Nationwide Tree Planting with Yayasan Petronas

In Q4 of 2020, GEC partnered with Yayasan PETRONAS to initiate a three year project to plant 50,000 trees with local communities at 14 degraded forest sites across 11 states in Malaysia. The Yayasan PETRONAS tree planting initiative, a part of the PETRONAS Walk4Trees programme is aimed at making a positive impact on PETRONAS employees' health, while supporting PETRONAS' sustainability agenda through a nationwide tree planting initiative.

GEC kicked off its largest ever tree planting project partnership with site visits and engagement meetings and discussions with the government agencies (Ministry of Environment and Water (KASA), Forestry Department of Peninsular Malaysia (FDPM) and state forestry departments and relevant local authorities) and local partners (community-based organisations) from November to December 2020. Nursery setups to prepare for the tree planting activities were initiated at several sites. The planting of trees is planned for completion by the end of 2021, followed with monitoring and maintenance activities until 2023.





Power to the people: After an intensive 20-day online and media campaign, the Coalition for the Protection of Selangor's Forests presented the 43,502 objections from the public and local residents of Kuala Langat district. to the State government on 4 March 2020.





Save Kuala Langat North Forest Reserve

On 5 February 2020, SSFD published a notice calling for public feedback on the proposed degazettement of 930.93 hectares (97%) of KLNFR to make way for a mixed development project. GEC, having worked closely with the local communities for five years, at the invitation of the Selangor State government to protect and rehabilitate this forest reserve. We believe that degazetting the reserve and developing it would have a great adverse impact on ongoing rehabilitation efforts as well as the local Orang Asli communities who have been the guardians of the forest for more than 130 years. Stakeholders were given only 30 days to submit their objections, so GEC collaborated with six other environmental and social NGOs¹ to form the **Coalition for the Protection of Selangor's Forests** to object to the proposal.

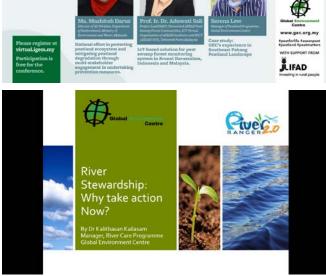
An online and media campaign was organised and in just 20 days, the Coalition collected 43,502 objections from the public and local residents of Kuala Langat district. The Coalition presented the objections to the State government on 4 March 2020. Subsequently activities were limited due to the Movement Control order for the pandemic – but GEC was actively engaged in facilitating local community and stakeholder views to be shared at a Public Inquiry held in September 2020.

After the Public inquiry, GEC joined forces with eight more NGOs to form a larger coalition, 'Pertahankan Hutan Simpan Kuala Langat' (PHSKLU), engaging actively with the media. Together we released press statements, articles and broadcast interviews on the issue, constantly reminding the State Government of the people's voices. The issue received more than 61 media coverages in 2020. The Coalition also helped support action by the Selangor State Assembly that unanimously passed a resolution in November 2020 to protect all the forest reserves in the state including KLNFR².

¹ Centre for Orang Asli Concerns (COAC), Persatuan Alam Sekitar Sejahtera (GRASS) Malaysia, Persatuan Aktivis Sahabat Alam (KUASA), Malaysian Nature Society (MNS), Sahabat Alam Malaysia (SAM), and Treat Every Environment Special (TrEES)

² 2021 Update: The state government went ahead with the degazettement of half the forest reserve in August 2021, but was forced to reverse these 10 days after announcing it, due to immense objection from the public, government agencies and political parties.





21 OCTOBER 2020 | 2:00 - 4:00 PM (GMT+8 KUALA LUMPUR)

CONFERENCE PEATLAND & CLIMATE CHANGE MITIGATION:
SESSION

HAZE IN THE ASEAN REGION

FIRE PREVENTION & MONITORING

BRINGING TOGETHER DIFFERENT STAKEHOLDERS TO

SHARE THEIR ROLE AND EXPERIENCE IN MANAGING
THE PEATLAND SUSTAINABLY AND IN PREVENTING

ACTION FOREMAN MCCG

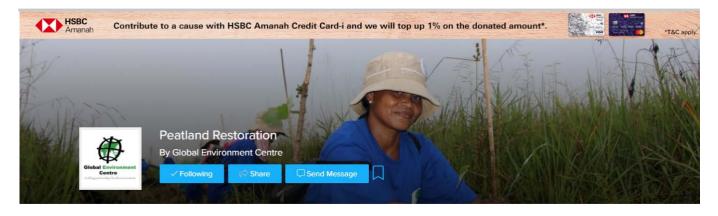
Powerpoint presentation from River Stewardship: Why take action now? on 22 October 2020.

Levelling up on digital platforms

The pandemic proved to be an opportune time for GEC to pivot online and take our outreach and education programmes to stakeholders using digital platforms. GEC has participated in several webinars, including the Peat Festival (31 May 2020) and Global Green Festival (5 June 2020).

For World Environment Day 2020 (5 June 2020), we have also organised an online regional web forum: Biodiversity in Peat Swamp Forests in Southeast Asia.

GEC also became a conference partner for Virtual International Greentech & Eco Products Exhibition & Conference Malaysia (IGEM) 2020 co-organising two webinars with the Malaysian Climate Change Group (MCCG): Peatland & Climate Change Mitigation: Fire Prevention & Monitoring on 21 October 2020 (Video link: youtu.be/epfy9UC2WFE) and River Stewardship: Why take action now? on 22 October 2020.



Donation Made Easy

Since 2011, GEC has been a long-term partner of HSBC Bank Malaysia working on rehabilitation and conservation for the environment.

At the end of 2020, GEC was selected as one of the charity organisations to receive ongoing support via HSBC Amanah. HSBC unveiled a new charity feature for HSBC Amanah Credit Cards which allowed users to donate for a selected cause seamlessly. Additionally, for every donation made via HSBC Amanah Credit Card-i, HSBC will provide additional funds.





The many local communities working with us who were faced with unsurmountable challenges during the pandemic received various forms of aid and support to help them ride the storm of Covid-19.

Expand the Support

In 2020, as the world was hit by an unprecedented crisis crippling the economy and affecting the lives and livelihoods of billions of people, the plight of the hard-core poor and indigenous communities, were amplified further by the pandemic and its devastating effects.

While the government has disbursed financial aid to many of





By Q2 2020, during the RMCO period, GEC distributed food supplies to 16 indigenous families living within the SEPPSF as well as 9 kitchen sets (stove and gas tank) to improve their welfare and reduce reliance on wood for cooking.

the country's poor, in reality, not all hard-core poor or OA were registered with the government, with many not having even bank accounts making it difficult for them to receive financial assistance. Realising the constraints faced by these groups, GEC and our project partners distributed RM45,000 worth of food and other supplies by hand during the first MCO. A total of 530 people from underprivileged (B40) families and OA communities in five states (Federal Territory of Kuala Lumpur, Selangor, Perak, Johor and Pahang) benefited from the support. The support helped to lighten their financial burden and reduce their need for movement to the outside, thus reducing the risk of exposure and infection to COVID-19.

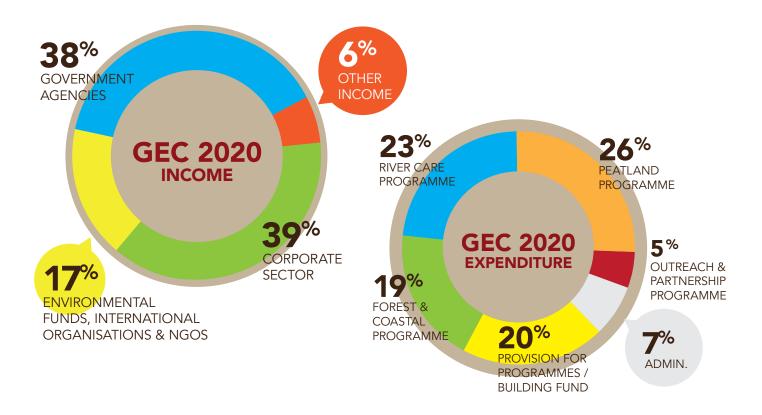
During the course of 2020, GEC was able to channel a total of more than RM900,000 directly to benefit local community members through welfare support, grants and funding of community projects.

To support community livelihood during this pandemic time, GEC with support of Yayasan Hasanah's Special Grant worked with local communities to establish immediate alternative livelihood activities for the UKB OA communities.

Financial Summary

INCOME	2020	2019
Government Agencies	4,475,877.15	2,216,469.27
Environmental funds, International Organisations & NGOs	2,043,424.03	1,398,370.50
Corporate Sector	4,526,601.08	4,617,405.90
Other Income	696,167.25	294,615.00
TOTAL	11,742,069.51	8,526,860.67

EXPENDITURE	2020	2019
Forest & Coastal Programme	1,888,042.98	1,834,815.29
River Care Programme	2,355,911.23	2,321,914.11
Peatland Programme	2,597,551.65	1,456,051.16
Outreach & Partnership Programme	549,020.98	431,583.32
Admin & Finance	683,539.66	768,417.35
Provision for Programmes/Building Fund	1,960,000.00	870,000.00
TOTAL	10,034,066.50	7,682,781.23
NET SURPLUS	1,708,003.01	844,079.44



Partnership & Sponsorship

GEC relies on the generosity of individuals and companies to continue our conservation work and community education/building. Through corporate partnerships and donations, donors have funded our projects. Key initiatives have included protection and rehabilitation of peat swamp forests in Pahang and Selangor States, mangroves in Perak, Selangor and Johor States, and rivers in Selangor, Perak and Kuala Lumpur, prevention of peatland fire and haze and provision of sustainable livelihood for local communities, and public outreach programme. GEC is fortunate to work in partnership with a number of dedicated organisations who are committed to protecting our environment. For their exceptional support during the past year, we gratefully acknowledge the generosity of the following organisations:

List of International & Government Partners:

- · ASEAN and ASEAN Secretariat
- Center for International Forestry Research (CIFOR)
- Department of Environment, Malaysia
- Department of Irrigation and Drainage (DID), Malaysia
- Forestry Department of Peninsular Malaysia (FDPM) and State Forestry Departments
- International Fund for Agricultural Development (IFAD)
- · Ipoh City Council

- International Union for Conservation of Nature (IUCN)
- Kuala Lumpur City Hall
- Klang Municipal Council
- Ministry of Education, Malaysia
- Ministry of Energy and Natural Resources (KeTSA), Malaysia
- National Landscape Department (JLN), Malaysia
- National Water Services Commission (SPAN), Malaysia

- Public Works Department
- Perak Water Board (LAP)
- Roundtable on Sustainable Palm Oil (RSPO)
- Petaling Jaya City Council
- State Governments of Sabah and Sarawak
- Selangor Water Management Authority (LUAS)
- United Nations Development Programme (UNDP)
- Yayasan Gambut

List of Contributors:

For grants/contributions more than RM500K

- ASEAN Secretariat
- Department of Irrigation and Drainage (DID), Malaysia
- International Fund for Agricultural Development (IFAD)
- Prosper Palm Oil Mill Sdn Bhd
- SPARK Foundation
- Yayasan Hasanah

For grants/contributions RM200K - 500K

- Aramco Asia Singapore
- GIZ EU-ASEAN SUPA Project
- HSBC Bank Malaysia Berhad
- Tenaga Nasional Berhad
- UNDP-Ministry of Finance Orang Asli/Orang Asal Micro Grant Facility
- Yayasan Bursa Malaysia
- Yayasan Sime Darby

For grants/contributions RM100K - 199K

- International Union for Conservation of Nature (IUCN) -GEF
- The Coca- Cola Foundation
- The United Parcel Service (UPS)
- Yayasan PETRONAS

For grants/contributions RM50K - 99K

- Amorepacific Malaysia Sdn Bhd
- Gamuda Land Development Berhad
- Lestari Capital Sdn Bhd
- Liverpool John Moores University
- Vale Malaysia Sdn Bhd

For grants/contributions RM5K - 49K

- Boh Plantations Sdn Bhd
- Bunge Loders Croklaan
- Forestry Department of Peninsular Malaysia (FDPM)
- Ministry of Energy and Natural Resources (KeTSA), Malaysia
- The Tides Foundation/Origins

For grants/contributions up to RM5K

- Destination Asia Management Sdn Bhd
- Evermore Creative Sdn Bhd
- Ikano Handel
- IPG Mediabrands
- Malaysian Australian Business Council (MABC)
- · Simply Giving Sdn Bhd
- The Fairview International School
- The International School of Kuala Lumpur
- University Kebangsaan Malaysia (Mangroves)
- Donations from Individuals



A: 2nd Floor, Wisma Hing, 78, Jalan SS2/72, 47300 Petaling Jaya, Selangor Darul Ehsan, Malaysia

T: +60 3 7957 2007

F: +60 3 7957 7003

E: outreach@gec.org.my

WWW.GEC.ORG.MY



