

WEB FORUM
“GEC’S ECOSYSTEM RESTORATION JOURNEY”
 organised by Global Environment Centre (GEC)
 4 June 2021, 10.00 am - 12.00 pm (GMT+8 KL)

FORUM SUMMARY

Global Environment Centre

GEC'S ECOSYSTEM RESTORATION JOURNEY

Healthier ecosystems, with richer biodiversity, yield greater benefits such as more fertile soils, bigger yields of timber and fish, and larger stores of greenhouse gases. Restoration can happen in many ways - for example through actively planting or by removing pressures so that nature can recover on its own.

In conjunction with World Environment Day 2021, GEC is organising a webinar to share GEC's experience in eco-system restoration, namely in forests and river rehabilitation, through multi-stakeholder partnership, particularly with the local communities.

**4 JUNE 2021
10AM - 12PM
(GMT+8 KL)**

Open to all. Save the date and register now at bit.ly/3fHpu2o

 Mr. Faizal Parish <i>Director</i> MODERATOR	 Dr. K. Kalithasan <i>Manager of River Care Programme</i>	 Ms. Serena Lew <i>Manager of Peatland Programme</i>	 Mr. Nagarajan Rengasamy <i>Manager of Forest & Coastal Programme</i>	 Ms. Adelaine Tan <i>Snr Coordinator of Outreach and Partnership Programme</i>
Art of Smart Partnership for Sustainable River Management	Restoring and Managing Peatland Ecosystems	Community-based Mangrove Restoration and Sustainable Livelihood	Engaging the Public and Corporate Sectors in GEC's Conservation Work	

In conjunction with 49th World Environment Day 2021, Global Environment Centre (GEC) has organised a web forum entitled “GEC’s Ecosystem Restoration Journey” and it was hosted on Zoom platform. The web forum was attended by 87 participants including representatives from government, private sector, community and civil society (see attendee list in **Annex 1**). The web forum was also streamed via Live on GEC’s Facebook page with as many as 40 viewers. The web forum discussed GEC’s experience in ecosystem restoration, namely in forests and coastal, peatland as well as river rehabilitation, through multi-stakeholder partnerships, particularly with the local communities. The web forum was moderated by the GEC Director, Mr. Faizal Parish, and featured GEC’s management team as panellists who shared their experience and insights on environmental conservation and restoration according to the respective programmes (see agenda in **Annex 2**).

Below is the summary of the web forum:

Introduction

Moderator: Mr. Faizal Parish, *Director of Global Environment Centre*

The web forum opened with GEC's corporate video followed by opening remarks from Mr. Faizal who shared on the importance of ecosystem in line with this year's World Environment Day 2021 theme "Ecosystem Restoration", which coincides with the launch of United Nations Decade on Ecosystem Restoration.

The introduction session was then followed by playing a video named "UN Decade on Ecosystem Restoration: 10 years to heal the planet" followed by a brief introduction of GEC and each panellist, outlining their work experience and portfolio in GEC. The presentation file as in **Annex 3**.

Panellists' Presentations:

1. Art of Smart Partnership for Sustainable River Management

Panellist: Dr. K. Kalithasan, *Manager of River Care Programme*

Dr. Kalithasan introduced the River Care Programme (RCP): its mission, vision, tagline and the six focus areas of the programme. He emphasised on RCP's hard and heart (soft) approaches to engage the local community and local stakeholders into holistic river care and management, highlighting, civic conscience as the most significant approach to enable local action and instil a sense of ownership to the people in order to reconnect to nature. He highlighted that the common denominator in all smart partnerships and stakeholder engagement is humanity. He pointed out that at the heart of all the smart partnerships, GEC is engaging people who are not only looking to provide for future generations but also taking account of the impact on the flora and fauna - all playing an equally important role to care for the environment.

Dr. Kalithasan said for 20 years GEC's RCP art of smart partnership adopts the "WIPSEAS" approach. He explained this approach in detail in his presentation. The RCP's smart partnership is centred on citizen science and the key initiatives driving this includes encouraging ownership, while promoting conservation, rehabilitation, pollution reduction and river health monitoring. In terms of river ownership, he explained the importance of maintaining the health of the river by observing the water quality and biodiversity of the river as well as understanding the Integrated River Basin Management (IRBM) and natural resource and pollution management.

He proceeded to present some of the river conservation, rehabilitation and adoption projects in Klang Basin, undertaken by GEC together with various partners from international funders, government agencies, private sector and public. These include Bras River in Taman Tugu, Sungai Way and Klang River near AU2 Keramat. To champion river care, he highlighted drains, as the nucleus of the river, must be taken care of. Cognisant of this, GEC launched the "My Drains Day" initiative circa 2009, and has since been commemorated annually with drain clean-up activities in different locations nationwide. Other examples of the projects are river basin assessment by River

Ranger 2.0, pollution management by SMART Ranger, disaster risk management, alternative water supply, nature-based solution, study and management plan and National River Care Fund and Friends of Rivers in Malaysia. Dr. Kalithasan concluded his presentation by acknowledging all the partners and stakeholders that have been working together with GEC to achieve more river care programmes. The presentation is given in **Annex 4**.

2. Restoring and Managing Peatland Ecosystems

Panellist: Ms. Serena Lew, *Manager of Peatland Programme*

Ms. Serena began by highlighting that the global peatland distribution covers around 3% of the world's land area. Peat formed from plant debris accumulation under high water level that accumulates 1-2 mm per year. Peatlands in Malaysia are estimated at 2.56 million hectares and approximately 30% of the total peatland area is found in forest reserves. In fact, peatlands are the largest natural carbon store to earth and provide numerous ecosystem services. Peat fires emit large amounts of carbon, exacerbating an already critical global climate change situation.

For Selangor's peat swamp forests, GEC rolled out their 4R strategy in phases – starting with rewetting, reduction of fire risk, revegetation since 2008, and eventually revitalisation activities began in 2014. As a result, Selangor's peat swamp forests have been rehabilitated and peat fires have been reduced by 90%. In Pahang, GEC affirms there has been no fire outbreak since March 2019 after the rewetting of an estimated 1500ha of degraded peatland in the state. The degraded peatland area also had been restored by planting fast growing tree species that manage by the community nurseries. The community nurseries of wildlings had contributed to the livelihoods of the local communities through seedling buy-back. Besides rehabilitation programmes, GEC also provides welfare support to the marginalised *Jakun* (Orang Asli) communities who live adjacent to the peatlands. These include basic necessities such as electricity (solar-based system) and clean water supply, kitchen stove and some food supplies as well as first-aid training.

To achieve the intended targets for all the programmes, stakeholder engagement and landscape approach is important, to identify viable solutions for the project's sustainability through partnerships between GEC and the various stakeholders. She emphasised that the role of local communities is key in ensuring continuity and uptake of ownership to safeguard the peatlands through Free, Prior and Informed Consent (FPIC). Through partnerships with government, private sectors, community and CSO, GEC has helped steer the programmes towards a Win-Win-Win (Triple win) scenario for all stakeholders. Ms. Serena concluded her presentation by thanking all GEC peatland partners for their contribution in GEC's regional and global involvement in peatland management and restoration efforts. The presentation given in **Annex 5**.

3. Community-based Mangrove Restoration and Sustainable Livelihood

Panellist: Mr. Nagarajan Rengasamy, *Manager of Forest & Coastal Programme*

Mr. Nagarajan began his presentation by highlighting the devastation effects of tsunami on 26 December 2004 which severely affected fishing village in Kampung Kedah, Kota Kuala Muda and other northern states of Peninsula Malaysia. This "Tsunami Memorial" now stands as a grim

reminder of the devastation that took place and the importance of coastline and mangrove as the country's "first line of defense". He highlighted that the role of local communities is often overlooked and they become the "missing link" in all efforts and initiatives in mangrove rehabilitation despite being a major stakeholder. Hence, GEC took on a community-based participatory approach to engage the local communities in order to address this local problem.

According to the 2015 National Coastal Erosion Study (NCES), about 1,348 km of Malaysia's coastlines are eroding, with Perak's coastline being the worst-affected in Peninsular Malaysia. Through GEC's Forest Restoration and Conservation Programmes in Peninsular Malaysia, five Community-Based Organisation (CBO) groups were established i.e. Friends of Mangrove in Kuala Gula, Pasir Panjang Laut, Lekir Sitiawan, Kampung Dato' Hormat and Tanjung Surat and registered under the Registrar of Society. GEC identified two key strategies on how to engage with the communities: 1) establish and promote the community-based forest management programme; and 2) setup of small-scale social enterprise. Through the first key strategy, more than 120 hectares of degraded mangrove areas had been successfully rehabilitated with 310,000 trees planted by 26,000 volunteers.

Under the second key strategy, the five Friends of Mangrove community groups have been generating income through selling the mangrove saplings including the said 310,000 trees. Mr. Nagarajan emphasised the participation of local communities through GEC's sustainable alternative livelihood programme that encourages the women folk in these communities to develop and commercialise their craftwork from plastic bottles, brooch and hair clips made of seashells, herbal (Acanthus) tea and souvenirs made using recycled materials. The promotion of ecotourism packages of the mangrove forests is also one of the sources for additional income to the local communities. He summed up his presentation by highlighting the importance of the environmental education programme - Mangrove Forest Ranger Programme. More than 150 to 250 students benefited from this programme but unfortunately due to COVID-19 pandemic, the programme has been suspended in 2020 and 2021. The presentation is available in **Annex 6**.

4. Engaging The Public and Corporate Sectors in GEC's Conservation Work

Panellist: Ms. Adelaine Tan, *Senior Coordinator of Outreach & Partnership Programme*

Ms. Adelaine began her presentation by highlighting the role the GEC's Outreach and Partnership Programme (OPP) team: to carry out are capacity building, environmental education, information exchange and awareness raising on global environment issues. Open to the public, GEC's volunteer programmes include tree planting activities in Raja Musa Forest Reserve, that has been running for eight consecutive years, and the river clean-up and river rehabilitation activities for RCP. GEC also carries out campaigns and advocacy work on current environmental issues including the ongoing Save the Kuala Langat North Forest Reserve campaign under the Coalition for the Protection of Selangor's Forest to oppose the degazetting of the forest for land development. The campaign received massive visibility on social media, and within just 20 days they have garnered support from 4,300 individuals.

Aside from campaigns, OPP also issues press statements and publishes materials on environmental awareness and education. Ms. Adelaine welcomed participants of the forum to download and share the materials made available on GEC's website. Talks and trainings have been conducted locally, regionally and globally and in conjunction with environmental-related international commemorative days. Corporate companies across the country also extend their support through CSR programmes for forest rehabilitation efforts, river care initiatives and community empowerment activities. Among the current ones is the ongoing Yayasan Petronas' Walk4Trees (Tree Planting) Programme that is being carried out phases across 11 states throughout Malaysia.

Ms. Adelaine also shared on GEC's forest protection and rehabilitation programme under Recovery Projects by Yayasan Petronas Plantation, which brought about positive impact on the local communities empowering them and enhancing their livelihoods through a community-based natural resources management model.

Through the CSR programme, GEC has established a partnership network with government, private sector and local community and built long term partnerships with various corporates including HSBC Bank and SPARK Foundation. She ended her presentation by calling on those who are interested to contribute towards GEC's Ecosystem Restoration efforts by signing up as a volunteer, following GEC on social media platforms, making monetary contributions to GEC's projects, forming an action group or developing a partnership initiative with GEC, and most importantly reducing one's individual ecological footprint. The presentation given in **Annex 7**.

Q&A Session

During the Q&A session, attendees raised several questions on RCP. Dr Kalithasan explained that everyone can initiate their own river care activities within their neighbourhood by connecting with GEC which functions as the link between local communities and relevant government agencies, and provides training and tools for river monitoring. Dr. Kalithasan also stressed on importance of proper use of drains, for example he highlighted how throwing waste into the drains is an actual source of river pollution. He urged everyone to take care of the drains in their own backyard as the first step towards river protection since drains are meant only for rainwater.

Commenting on the status of peatlands in Malaysia, Ms. Serena explained it varies depending on the location of the peat forests. There are different categories of forest reserves within the protected area, for example, production forest reserves allow logging under a particular threshold. On how GEC is tackling challenge of developers and loggers whose projects threaten the ecosystem of peat forests, she said GEC has developed smart partnerships and stakeholder engagement to address these matters.

Mr. Nagarajan provided clarification on policy response to community participation on mangrove forest rehabilitation in Malaysia. He said community engagement is integrated within the respective state's forest management ecosystem policy. He also urged local communities to be empowered about policy frameworks and to speak out against the issue of land use before plans

legalised as to tackle the destruction of mangrove caused by large companies embarking on ventures such as unsustainable aquaculture practices in the affected areas.

To a question raised on GEC activities in northern states of Peninsular Malaysia (Perak, Penang & Kedah), Ms. Adelaine highlighted the Mangrove Rehabilitation Programmes located in Perak and the ongoing Yayasan Petronas Walk4Trees programme, where GEC with Penang Inshore Fishermen Welfare Association (PIFWA) and the local community in Kedah established a nursery for tree planting activities. Dr. Kalithasan spoke of the conservation of Upper Kinta water catchment in Ipoh, where GEC help the Orang Asli communities secure water supply and a recently-established project on post COVID-19 Eco Trail in Mount Korbu under Hasanah Foundation.

Mr. Faizal took on the last question on evaluating the country's successes and failures in conservation efforts. He pointed out that over the years GEC has evolved its strategy in conservation efforts, taking into account multiple values and engaging the key beneficiaries and stakeholders. The key is multiple stakeholder engagement and look at the benefits and find the middle ground on how we can get them to adopt sustainable practices. He cited working with the highly-criticised palm oil sector, responsible for large-scale clearing and destruction to the forests. Through our involvement in RSPO and various government framework policies, led to the landmark decision by the government of Malaysia to ban palm oil plantation on peatland in Malaysia from December 2019. Mr Faizal also acknowledge that aquaculture is a massive issue for mangrove loss citing the 2004 tsunami. GEC released a press statement highlighting the value of mangrove to protect against the natural disasters which that led to the creation of National Mangrove and Coastal Forest Planting Initiative. Suffice to say, multiple stakeholder engagement remains the most critical aspect driving GEC's success, especially with the local communities.

The collated responses to the questions fielded during the forum are reflected in **Annex 8**.

Closing Remarks

The web forum was wrapped up with final words from each panellist:

Dr. Kalithasan encouraged people to continue to protect the rivers while staying at home during the MCO period: (i) by cleaning their backyard drains regularly; and (ii) by managing resources with through wise and prudent consumption practices. Ms. Serena urged the public not to blindly buy into fake news but instead to exercise responsible citizenship to take care of the earth - starting with our immediate surroundings. Mr. Nagarajan's parting message was: "if we heal the earth, we will heal ourselves" – reminding the people to adopt sustainable restoration practices in the daily living. Ms. Adelaine called on Malaysians to be more vigilant and stand up against irresponsible destruction of the environment by voicing their concerns to the government to take action before it is too late.

Mr. Faizal summed the web forum by calling on the Malaysian government to take the following actions:

1. Halt destructive projects that degrade forests, peatlands, rivers and coastal ecosystems;
2. To expand networks of protected ecosystems to meet the global targets under the Convention of Biological Diversity - of 17% of terrestrial ecosystems and 10% of marine ecosystems to be protected by 2020.
3. Recognise the critical role of local and indigenous communities of stewards of natural resources and expand support for community-based ecosystem management.
4. Allocate major resources as part of the Post COVID-Recovery to support large-scale measures to create green jobs and mobilise rural communities to protect and restore degraded ecosystems and safeguard the life support services of our nation.
5. Take a leading role at national and international levels to promote a fair and equitable collective action by all countries to address global climate change, land degradation and ecological crises.

ANNEX 1 - LIST OF ATTENDEES (On Zoom Platform)

No.	First Name	Last Name	Organisation	Country
1.	Salmah	Zakaria	Academy of Science Malaysia	Malaysia
2.	Jean	Weber	Arboribus Databases Sdn Bhd	Malaysia
3.	Micheal	The	Boh Plantations Sdn Bhd	Malaysia
4.	Kaixiang	Chin	Bunge	Malaysia
5.	Jhanani	Thorairajoo	Department of Environment	Malaysia
6.	Nivaashini	Sandran	Department of Environment	Malaysia
7.	Masturina	Mansor	Earthworm Foundation	Malaysia
8.	Li Shuen	Ng	Earthworm Foundation	Malaysia
9.	Akmal	Razali	Earthworm Foundation	Malaysia
10.	Syarifah Nur Afni	Syed Abdullah	FGV Holdings Berhad	Malaysia
11.	Hyrul Izwan	Mohd Husin	Forest Research Institute Malaysia	Malaysia
12.	Clinton	Ang	Friends of Bukit Kiara	Malaysia
13.	Daniel	Quilter	Fuze Ecoteer	Malaysia
14.	Li	Su	Genesis Energies	Malaysia
15.	Siti	Aishah	Jabatan Perhutanan Semenanjung Malaysia	Malaysia
16.	Pei Shi	Liew	KETSA	Malaysia
17.	Rabiah	Ghani	LeapEd Services	Malaysia
18.	Shamry Mubdi Bin	Subra Mullisi	Loranet Technologies PLT	Malaysia
19.	Lim	Suan	Majlis Perbandaran Kuala Langat	Malaysia
20.	Vincent	Ng	Malaysian Association of Food Animal Veterinarian	Malaysia
21.	Chow Hock	Lim	Malaysian Capacity Development Network for Sustainable Water Management (MyCDNet)	Malaysia
22.	Yoke Mooi	Liew	Malaysian Nature Society	Malaysia
23.	Pasupathy	Jayaraj	Malaysian Nature Society	Malaysia
24.	Corinne	Woo	Malaysian Nature Society	Malaysia
25.	Dominic	O'Sullivan	Malaysian Nature Society, Turtle Conservation & Research Programme, Free Tree Society et al	Malaysia
26.	Muhammad Hafizzuddin	Ibrahim	Northern Safety Sdn Bhd	Malaysia
27.	Yin Choo	Wong	RA SS20 Central Zone	Malaysia
28.	Asokan	Kandiah	Rotary	Malaysia
29.	Bindi	Rajasegran	Rotary	Malaysia
30.	Lucus	Asirvatham	Rukun Tetangga	Malaysia
31.	Loga	Veeraiah	Suruhanjaya Perkhidmatan Air Negara (SPAN)	Malaysia
32.	Stephen	Page	Talkin' Technical	Malaysia
33.	YouZhen	Koh	Technip Energies	Malaysia
34.	Muhaizah	Arshad	Technip Energies	Malaysia
35.	Su San	Yap	Technip Geoproduction (M) Sdn Bhd	Malaysia

36.	Nithyarubuni	Thamlarason	Traders Hotel KL	Malaysia
37.	Rosli	Omar	Treat Every Environment Special (TrEES)	Malaysia
38.	Lucy	Wong	Tropical Rainforest Conservation & Research Center	Malaysia
39.	Margaret	Lee	TTDI Edible Community Garden	Malaysia
40.	Fadiah	Zabidey	World Health Organization Global Service Centre	Malaysia
41.	Rozilah	Abdul Rahman	Yayasan Sime Darby	Malaysia
42.	Nadia	Azlan	Yayasan Sime Darby	Malaysia
43.	Saiful	Islam	Yayasan Sime Darby	Malaysia
			SCHOOL/ UNIVERSITY	
44.	Yusnita	Binti Dolah	Excel College	Malaysia
45.	Kay Yi	Chook	Monash University	Malaysia
46.	Azilah	Khamis	School	Malaysia
47.	Teo	Boon	SK Ampang	Malaysia
48.	Ong	Kien Eik	SMART Ranger SK Sri Kelana	Malaysia
49.	Kumari	Thannimalay	SMK Taman Melati	Malaysia
50.	Muneeb	Musthafa	South Eastern University of Sri Lanka	Sri Lanka
51.	Siti Nur Farzana	Khairuzzaman	Student	Malaysia
52.	Wen Soong	Chua	Sunway University	Malaysia
53.	Kalpana	Das	Taylor's College	Malaysia
54.	Shinnee	Teh	Taylor's University	Malaysia
55.	Khai Ern	Lee	Universiti Kebangsaan Malaysia	Malaysia
56.	Affan	Nasaruddin	Universiti Malaysia Water Warrior	Malaysia
57.	Nik Muhamad	Nik Ab Majid	Universiti Putra Malaysia	Malaysia
58.	Siti Izaidah	Azmi	Universiti Sains Malaysia	Malaysia
59.	Siti Zulfarina	Fadzli	Universiti Teknologi Malaysia	Malaysia
60.	Nor Lailatul Wahidah	Musa	Universiti Teknologi MARA	Malaysia
61.	Nur Thabitah	Binti Shaikh Nasir	Universiti Teknologi MARA Pahang	Malaysia
62.	Amir	MJ	Universiti Tun Abdul Razak	Malaysia
63.	Joshua Chow	Keng Fatt	Universiti Tunku Abdul Rahman	Malaysia
64.	Anis	Aisyah	Universiti Malaya	Malaysia
65.	Tapan Kumar	Nath	University of Nottingham Malaysia	Malaysia
			INDIVIDUAL	
66.	Ahlami Mirza Ahmad	Ahmad	Individual	Malaysia
67.	Sumiitra	Sooriaarratchi	Individual	Malaysia
68.	Helmi	Ali	N/A	Andorra
69.	Chin	Wen Yen	Self	Malaysia
70.	Dheeraj	Bhargave	N/A	Malaysia
71.	Aimi Lee	Abdullah	N/A	Malaysia
72.	Pui Yi	Wong	N/A	Malaysia
73.	Az-Zahra	Alex	None	Malaysia
74.	Barrie	Kho	Private	United States

75.	Chew	Lye Teng	Retired	Malaysia
76.	Alwyn	Goh	Self	Malaysia
			MEDIA	
77.	Dhesegaan		New Straits Times	Malaysia
78.	Fatihah	Manaf	Revon Media	Malaysia
79.	Prema	Kana	Roots & Shoots Malaysia	Malaysia
80.	Edward Rajendra	Henry	Star Media	Malaysia
81.	Birruntha		The Malaysian Reserve	Malaysia
			GEC	
82.	Ksiva		Global Environment Centre	Malaysia
83.	Linda	Archibald	Global Environment Centre	Malaysia
84.	Muhamad Faizuddin	Zainuddin	Global Environment Centre	Malaysia
85.	Ummi Nur Asyiqeen	Zulkefly	Global Environment Centre	Malaysia
86.	Su Jun	Kong	Global Environment Centre	Malaysia
87.	Elavarasi	Kasirajan	Global Environment Centre	Malaysia

ANNEX 2 – AGENDA

Time	Programme
9.55 am	Video screening
10.00 am	Welcoming and Introduction of GEC by Moderator Mr. Faizal Parish , <i>Director, Global Environment Centre</i>
10.15 am	Art of Smart Partnership for Sustainable River Management by Dr. K. Kalithasan , <i>Manager, River Care Programme, GEC</i>
Presentations by Speakers	Restoring and Managing Peatland Ecosystems by Ms. Serena Lew , <i>Manager, Peatland Programme, GEC</i>
	Community-based Mangrove Restoration and Sustainable Livelihood by Mr. Nagarajan Rengasamy , <i>Manager, Forest & Coastal Programme, GEC</i>
	Engaging the Public and Corporate Sector in GEC's Conservation Work by Ms. Adelaine Tan , <i>Snr Coordinator, Outreach and Partnership Programme, GEC</i>
11.15 am	Q&A session
11.45 am	Summary & Conclusion
12.00 pm	Ends
12.00 – 12.30 pm	Media Interview

POWERPOINT PRESENTATION SLIDES:

ANNEX 3: INTRODUCTION

ANNEX 4: PRESENTATION 1: Art of Smart Partnership for Sustainable River Management

ANNEX 5: PRESENTATION 2: Restoring and Managing Peatland Ecosystems

ANNEX 6: PRESENTATION 3: Community-based Mangrove Restoration and Sustainable Livelihood

ANNEX 7: PRESENTATION 4: Engaging The Public and Corporate Sectors in GEC's Conservation Work

(NOTE: GIVEN IN SEPARATE FILES, LINK: <https://bit.ly/2U0mBCj>)

ANNEX 8 - QUESTIONS & ANSWERS

No.	Question	Asker Name	Question to	Answers
1.	Will we be able to stop the Selangor from destroying the Kuala Langat North Forest Reserve (KLNFR) ?	Sumiitra Sooriaarratchi	Mr. Nagarajan	We have initiated successful campaigns and information has been communicated clearly to the state government. Various support and positive actions have been obtained from the local elected representatives (ADUNs) in Selangor. We are still waiting for feedback from the Selangor Menteri Besar and Selangor state executive council.
2.	If I start initiating river monitoring nearby my house, how do I engage the relevant agencies for support?	Kong Su Jun	Dr. Kalithasan	You may contact your local Department of Irrigation and Drainage (JPS) in your district to express your interest. Or you could communicate with GEC and we can help you to initiate river monitoring in your area by providing the right tools and skills, and link you with the nearest Friends of Rivers communities and relevant agencies.
3.	<p>How did you make the islands inside the rivers? It's a very nice idea!</p> <p>Also what is your suggestion for long-term drain cleaning strategy, should we add covers to prevent the litter from going in in the first place or add grills to catch the litter before it goes into the river?</p>	Daniel Quilter	Dr. Kalithasan	<p>The River-within-River concept was developed 10 years ago under WATER project through smart partnership approach with all key river agencies. We actually establish wetland island as part of nature based solution by introducing the wetlands plants to reduce the pollutants as well habitat for aquatic life. Please do visit our project website or contact our team for more details.</p> <p>In terms of drain cleaning, as you rightly mention, we need to tackle before it enters the monsoon drain or river. But</p>

				the best is for all of us look after my backyard drain and ensure nothing ends up in the drain. Remember: drain is only for rainwater!
4.	Just curious, are the peatlands in Malaysia well protected or under great threat?	Kong Su Jun – from Facebook	Ms. Serena	It depends on the status of the forest reserve because there are different categories of forest reserves within the protected area, for example, production forest reserves allow logging under a particular threshold.
5.	Has GEC done any work in the northern region i.e., Perak and Penang?	Asokan Kandiah	All presenters	<p>Yes, for example, Mangrove Rehabilitation Programmes located in Perak and Yayasan Petronas Walk4Trees programme, where GEC with Penang Inshore Fishermen Welfare Association (PIFWA) and the local community in Kedah established a nursery for tree planting activities.</p> <p>Also, the conservation of Upper Kinta water catchment in Ipoh, where GEC help the Orang Asli communities secure water supply and a recently established project on post COVID-19 Eco Trail in Mount Korbu under Hasanah Foundation.</p>
6.	Can I get a copy of the River Care Action Guidebook?	Dominic O'Sullivan	Dr. Kalithasan	Yes, you can! Please visit our website: www.riverranger.my to download the soft copy or do contact GEC for a printed edition.
7.	Three main private sectors cause damage to peatlands: Developers, Planters (for Palm Oil plantations) and	Chow Hock Lim	Ms. Serena	This has to be linked with the development of the country. We cannot stop them from logging the production forest, but we can address the issues to state government or forestry department to

	Loggers. How can GEC engage with them to tackle this problem?			suggest sustainable logging technique or replant saplings in nearby areas as some form of compensation and restoration efforts. Hence, smart partnership is important in managing peatlands and not to trade off the natural resources.
8.	Why the peatland fire is so common? How to prevent it?	Vincent Ng	Ms. Serena	<p>Human activity is the main cause of peatland fires. Burning is the cheapest method for farmers to clear the cultivated peatland for the next plantation. Thus, GEC promotes Zero Burning Approach to engage the farmer use the crop residues as fertilisers.</p> <p>In terms of fires along Selangor highway, it might be caused by littering of lit cigarette butts, which ignite fires on the grass especially during dry season. The best way forward is to educate the and the young not to litter and throw the rubbish into trash bin.</p>
9.	<p>You have been doing this for many years in Malaysia, I think since the '70's. If I may ask how successful have you been in your efforts?</p> <p>And how do you evaluate the country's successes and failures? What is your greatest frustration?</p> <p>Malaysia continues to destroy the environment.</p>	Nik Muhamad Nik Ab Majid	Mr. Faizal	Over the years, GEC has evolved its strategy in conservation efforts, considering multiple values and engaging the key beneficiaries and stakeholders. The key is multiple stakeholder engagement and to look at the benefits – finding the middle ground on how we can get them to adopt sustainable practices. GEC has been working with the palm oil sector, responsible for large-scale clearing and destruction of the forests. Through our involvement in RSPO and various

	<p>From Prof Dato Nik Muhamad Majid.</p> <p>Thank you for not giving up</p>			<p>government framework policies, led to the landmark decision by the government of Malaysia to ban palm oil plantation on peatland in Malaysia from December 2019. In addition, aquaculture is a massive issue for mangrove loss. GEC released a press statement highlighting the value of mangrove to protect against the natural disasters which that led to the creation of National Mangrove and Coastal Forest Planting Initiative. Overall, multiple stakeholder engagement remains the most critical aspect driving GEC's success, especially with the local communities.</p>
10.	<p>What are the policy responses towards community participation in mangrove and other forest management needs in Malaysia? Are there sufficient policy frameworks in the country (e.g., Forestry Policy) to support community participation?</p>	Tapan Kumar	Mr. Nagarajan	<p>Yes, it exists in a way that community engagement is integrated within the respective state's forest management ecosystem policy.</p>
11.	<p>How is GEC addressing the destruction of mangroves for the purpose of large-scale business ventures such as prawn-breeding?</p>	Asokan Kandiah	Mr. Raj	<p>GEC has empowered local communities to speak out courageously against the issue of land use before plans get legalised so as to tackle the destruction of mangrove caused by large companies embarking on ventures such as unsustainable aquaculture practices in the affected areas.</p>
12.	<p>Who can I speak to regarding opportunities in</p>	Dominic O'Sullivan	Mr. Faizal	<p>Feel free to contact us. We are more than happy to work with you.</p>

	GEC? I might be available for free and maybe on a full-time basis.			
13.	There are not enough trees in the city of Petaling Jaya. Can GEC work together with MBPJ to plant more trees in the city. Hats off to GEC! Our community in SS20 Central Zone has benefitted much from our collaboration with GEC. Keep up your good work. Thank you.	Yin Choo Wong	Mr. Nagarajan	GEC is ready to work together for that purpose.
14.	Do we need to credit/mention GEC if we use your materials?	Kong Su Jun – from Facebook	Ms Adelaine	You are welcome to use materials from our website but kindly credit GEC for those materials. Just drop us an email to notify us that you will doing so.
15.	How do you measure the success rate of reforestation? Is there an observed and quantifiable increase in wildlife population and biodiversity (avian, freshwater and marine species etc including bio-indicator species) returning to the degraded habitats that have been restored through reforestation?	YM Liew	Mr. Nagarajan	The success rate of reforestation is monitored through the presence of marine species and natural regeneration as well as income generation by locals at restored site.

16.	What is GEC's stand on Off River Storage (ORS) systems?	Clinton Ang	Dr. Kalithasan	<p>Generally, GEC encourages the ORS concept. It plays dual role: for storage and as mitigation; and. as alternative water source to supply to treatment plants.</p> <p>Having said that, we really need to look into aspect of proper implementation and enforcement to ensure the water quality is maintained at optimum levels.</p>
17.	Is there a coordinating group for KLNFR action?	Dominic O'Sullivan	Ms. Adelaine	<p>There are 2 coalitions championing the KLNFR cause, which GEC is part of:</p> <ol style="list-style-type: none"> 1. Coalition for Protection of Selangor Forests (comprising 7 NGOs). 2. Pertahankan Hutan Simpanan Kuala Langat Utara (a bigger coalition).
18.	When in Kuala Lumpur city recently, I was looking at a riverside garden project, when I noticed dozens of turtles being washed downstream but unable to escape from the concrete clad walls. Is there a way of providing escape slopes for them at frequent intervals?	Dominic O'Sullivan	Dr Kalithasan	<p>The River within River Concept could be one of the mitigations in which the wetland island in the middle of the river act as a habitat for the animals to stay. GEC also encourages agencies and private sectors to look into this issue to suggest solution.</p>
19.	Some mangroves have been reported to invade mudflats. and has to be removed. Are such cases reported in Malaysia or any measures by GEC to	Chin Wen Yen	Mr. Nagarajan	<p>The tidal channel has to be improved. Hydrological restoration is key important for such area.</p>

	mitigate and prevent this backfire?			
20.	Is there really such a thing as a guaranteed reserve? Or is it simply reserved until someone finds a way of making money from it?	Dominic O'Sullivan	Dr Kalithasan	Yes, river reserve is legal requirement. Yet the real issue is if it been gazetted!