The Role of Non-State Actors in the Conservation of Urban Forests in Malaysia

‘Blending the Hard and Soft Landscapes within an Urban Setting; Human Landscapes’
Malaysia Forested Area

**Fragmentation of Natural Forest Cover in Peninsular Malaysia**

1954: 9.5 mil ha
1969: 8.0 mil ha
1972: 7.4 mil ha
1990: 6.2 mil ha
2000: 6.0 mil ha

Clearcutting forest reserves for timber, palm oil, and building development

Image source: https://www.researchgate.net/

Image source: https://www.says.com/
According to WWF, Malaysia’s forests cover 59.5% of the land area.
Malaysia Urban Development Rate

Over 70% of Malaysia’s population will be urban by the year 2020

**Peninsular Malaysia**
- 1991: 14.2
- 2000: 18.5
- 2020: 27.7

**Sabah and Sarawak**
- 1991: 3.6
- 2000: 4.6
- 2020: 6.3

1. Based on Review of National Physical Plan
2. Based on Department of Statistics Malaysia

SOURCE: Review of the National Physical Plan, Department of Statistics

Image source: https://news.mongabay.com/
Why Do We Need to Conserve Our Urban Forests?
Frequent landslides following intensive hillside and highland developments
Trail of landslides affecting residents of Ampang

- May 1999: Atenacum Tower
- Dec 1993: Highland Towers
- Nov 2001: Taman Hijau
- Nov 2002: Taman Hillview
- May 2006: Kg. Pasir, Taman Zoo View

Locations:
- Jalan Ulu Klang MR II
- National Zoo
Drainage Management Failure
Highland Tower Collapse 1993 (Ampang, Selangor)

48 lives lost

Image source: https://says.com/
Hillside development without adequate planning and deforestation: Loss of natural wall to withstand the rainfall and water stream pressure.

https://buildingfailures.files.wordpress.com/
Retaining Wall Collapse
Taman Zoo View Landslide in 2006 (Ampang, Selangor)

4 lives lost

Image source: https://eprints.utm.my/
Drainage Management Failure

Bukit Antarabangsia Landslide in 2008 (Ampang, Selangor)

4 lives lost, 15 injuries

Image source: https://thesundaily.com.my/
43m Concrete Embankment Collapse
Bukit Setiawangsa in 2012 (KL) - 15 luxury houses were affected.

Image source: https://thestar.com.my/
Urban Forest Landslide
Tanjung Bunga in 2017 (Penang)

11 lives lost

Image source: https://thestar.com.my/
Deforestation
Climate Change
& Flooding
Increasing Flood Incidents
Pahang, Perak, Kelantan in 2014-2015
Sungai Kelantan 2014
For Azlan Shah Nik Hassan, 56, nothing was left of his house except for the base as it was located right by Sungai Kelantan.

"That day, water spilled over from Sungai Kelantan to my house. The family and I ran to a mosque which was located higher. Within two hours only half of my house remained."
December 2014

In Pekan, Pahang, there was a significant rise in the number of people evacuated from 35,501 last night to 49,369 victims.

They are being sheltered at 262 evacuation centres in eight districts which are still flooded.

The district of Perak Tengah was still badly affected with 4,512 victims from 1,201 families being sheltered at 19 relief centres in the area.
Kuala Krai, Kelantan flooding aftermath, 2015

Image courtesy: Lim Kit Siang, 2015
Are We Doing Enough To Protect Our Limestone Hills in Ipoh, Perak?

Intensive Quarrying
I am a Friend of PENANG’S HILLS

No Hill Development
No Landslides
No Floods

Penang Hills: Penang Hill, Sungai Ara 2016

Save Penang Hill

UNDER THREAT: 15 million-are coastal mangroves, 30 species of birds and 100 plant species endemic to Penang Island. Rooftop development is obstructing the water catchment in Penang Hill.

CAP’s Objections to the Penang Hill Special Area Plan

- The SAP should control and not expand tourism development on Penang Hill.
- The natural sanctuary in Penang Hill must be preserved.
- The carrying capacity of Penang Hill is already breached during peak holiday seasons. The number of visitors must be controlled.
- The SAP must use the carrying capacity numbers in the gazetted Bukit Bendera Local Plan and not introduce new numbers.
- New developments in the water catchment areas must not be allowed.
- Commercialisation of existing residences should not be allowed.

Proposed developments in the Special Area Plan

- Redevelopment of Crag Hotel and 4 surrounding areas into a boutique hotel and villa development in the sensitive water catchment areas, in an area as large as 122 acres.
- Redevelopment of Cooke Lines with 50 rooms, with cafes, retail shops, health service centres like aromatherapy, reflexology, etc.
- Aviary parks, rain zoos, butterfly farms, herbariums, camping sites, and tourist accommodation.
- Allowing the commercialisation of heritage buildings (39) into tourist accommodation like boutique hotels, hostels, guesthouses, etc.
- 2 or more cable cars announced, but not mentioned in the SAP.

Image courtesy: Guido Alberto Rossi & Tara Sosrowardoyo, 2002
‘Friends of Bukit Kiara’ and residents protesting the high-rise development

Fauna diversity habitat endangered

Loss of town’s green lung

Image source: https://www.themalaymailonline.com/
No land title for the whole Taman Rimba Kiara

Plot number issued for the entire Taman Rimba Kiara

Taman Rimba Kiara land was halved with a portion given for a high-rise project
Public objection to the privatization of part of Taman Aman for a private condominium development in 1980s - Saved this much treasured Urban Green.
Blending the Hard and Soft Landscapes within an Urban Setting
Working in Collaboration
Urban Community Forest Federal Hill
Kuala Lumpur
FEDERAL HILL IS A NATIONAL HERITAGE SITE

PRE-MERDEKA HISTORY

Upon the formation of the Federated Malay States (FMS) in 1916, a new residence was built for the Resident-General of Pahang and Perak. The site chosen was Federal Hill, located on the top of the hill overlooking the lake of Bukit Nanas. The new residence was designed by the Selangor State Engineer, Charles Edward Spooner, to accommodate the governor, his family, and the staff of the Resident-General's Office. The residence was completed in 1917 and was known as the Governor's House.

A large number of semi-detached quarters were built for the staff of the Governor's House. These quarters were designed by the Selangor State Engineer, Charles Edward Spooner, and were occupied by staff members of the Resident-General's Office. The architectural style of these quarters was similar to the Governor's House, with white walls and tiled roofs.

In 1933, the quarters were upgraded and modernized to accommodate a larger number of staff members. The upgrade included the addition of electricity and plumbing facilities. The quarters were occupied by staff members of the Resident-General's Office and their families.

In 1939, the quarters were abandoned and left in a state of disrepair. The buildings were later used as a temporary accommodation for the staff members of the Resident-General's Office during World War II.

BUILT HERITAGE OF FEDERAL HILL

The heritage buildings of Federal Hill are located on the top of the hill, overlooking the lake of Bukit Nanas. The buildings include the Governor's House and the staff quarters. The Governor's House is a two-story building with a tiled roof and white walls. The staff quarters are a series of semi-detached buildings, each with a white wall and tiled roof.
RUMAH TAPIR

The Rumah Tapir is the last standing structure of the early Damansara Road Federal Quarters in keeping the theme of conservation and Adaptive Reuse of natural and built heritage, the frequently and repurposed Malaysian Nature Society bungalow is to be restored and re-imaged in the style of a colonial black-and-white bungalow as found throughout the Peninsula of Malaysia. The colour-schema of the proposed heritage building upgrade alludes to the black-and-white Tapir, also the logo of the MNS.
Thank you
Bandar Utama,
Petaling Jaya
Taman Tun Dr Ismail, Kuala Lumpur
Carcosa Seri Negara, KL

Image courtesy: Guido Alberto Rossi & Tara Sosrowardoyo, 2002
Govt holds the key to affordable housing

Climate change calamity

Climate change is now widely accepted as the "near-term future", or, more appropriately, "a longer-term phenomenon". It is causing changes in the climate and variability of relevant quantities over a period of time ranging from decades to millennia. The Earth is currently experiencing a marked warming trend, which has been attributed to human activities, particularly burning of fossil fuels and deforestation. The Intergovernmental Panel on Climate Change (IPCC) has concluded that it is extremely likely that more than half of the observed warming over the last 50 years is attributable to human influence.

The Earth's climate has changed throughout its history, but climate change in recent times has been caused by human activities. This has led to an increase in greenhouse gases, which are trapping more heat in the Earth's atmosphere. This is causing global warming, which is leading to changes in the Earth's climate system, such as rising sea levels, more extreme weather events, and shifts in climate zones.

According to the Intergovernmental Panel on Climate Change (IPCC), the Earth has warmed by about 1.1 degrees Celsius since pre-industrial times. This warming is leading to changes in the Earth's climate system, such as rising sea levels, more extreme weather events, and shifts in climate zones. The IPCC predicts that the Earth's temperature will continue to rise, leading to more extreme weather events and sea level rise.

In Malaysia, the government has taken steps to address climate change. The National Climate Change Policy (NCCP) was launched in 2012 to guide the country's climate change efforts. The strategy focuses on reducing greenhouse gas emissions and adapting to the impacts of climate change. The government has set targets to reduce greenhouse gas emissions by 20% by 2030 and 35% by 2050.

The government has also launched several initiatives to promote sustainable practices, such as the Green School and Green Home campaigns. These initiatives aim to raise awareness and encourage individuals and communities to adopt sustainable practices.

In conclusion, climate change is a global issue that requires collective action. It is important for governments, individuals, and communities to take steps to reduce greenhouse gas emissions and adapt to the impacts of climate change. The National Climate Change Policy is a key component of Malaysia's efforts to address climate change, and it is important to continue to support and promote sustainable practices to ensure a sustainable future.
De-Urbanization

Is this the time for the *urban* people to move to *rural* area?
Symbiotic relationship between Nature and Building
Displacement of Indigenous People of Sarawak

Kenyah
Penan
Kayan
Bakun Dam, Bakun Belaga, Sarawak.
A Penan man watches a passing Shin Yang Timber truck loaded with logs.

Belaga, Bakun, Sarawak

Petrified trees and floating logs on the Bakun Dam reservoir. This area was once home to the Kenyah People of Long Geng.

Courtesy of Nigel Dickinson, 2012
Malaysian tribe ends protest as mega-dam floods their homes

SARAWAK 2013 - “They have no choice, the water is rising fast so they have to get their belongings,” Peter Kallang, chairman of the NGO Save Sarawak’s Rivers Network, told AFP.

He said their homes were already being flooded before promised resettlement houses had even been completed. The Murum dam is one of a series of hydroelectric facilities planned by the Sarawak government as it pushes economic development in one of Malaysia’s poorest states.

The 944-megawatt dam is expected to flood 245 square kilometres and cause 1,500 Penan and 80 Kenyah natives to lose their homes.

Taib, who has ruled Sarawak for over three decades, has faced mounting accusations of enriching himself and cronies through a stranglehold on the state’s economy, charges which he denies.
300 included members of dam affected community members from Bengoh, Murum and Bakun and also community members from the proposed dam sites at Baram and Limbang. (Observer Tree, 2013)
Loss of the Esplanade in Malacca Conservation Zone

Malacca Town, showing the position of the old fortifications, from Historical Guide of Malacca, Malacca Historical Society, 1936. (Antiques of the Orient)
HISTORIC MELAKA

PRESERVATION / LANDSCAPING OF BUKIT CINA, BUKIT ST. JOHN & BUKIT ST. PAUL
SUNGEI MELAKA REJUVENATION,
PEDESTRIANIZATION
Collaboration together

Building community

Restore and new life for heritage building, the chance of forest being destroyed

Symbiotic relationship between nature and buildings

Surrounding townscape and building

Why we are refurbishing tapir house? Developing focal point for the meeting of the members and surrounding community, stronger and dynamic community, they are volunteers

Forest - people living inside - community who is advantaged by the forest, helping country economy and eco tourism