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NATURE BASED SOLUTION: A CASE STUDY ON COMMUNITY BASED ACTIVITIES TO SAFEGUARD PEATLANDS IN PAHANG, MALAYSIA

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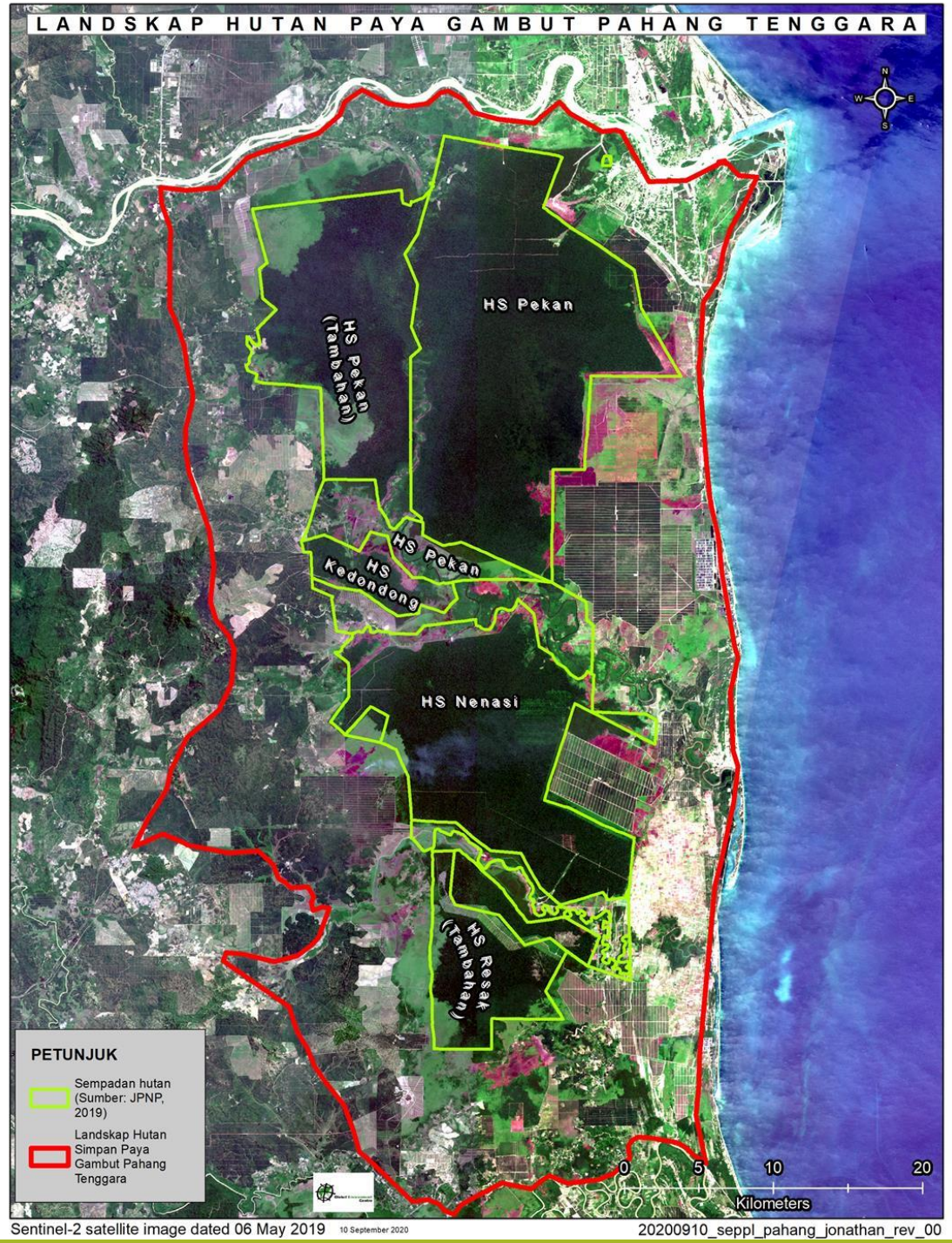
OVERVIEW

1. Southeast Pahang Peatland Landscape
2. Site assessment and rehabilitation effort
3. Stakeholder engagement
4. Free, Prior and Informed Consent (FPIC)
5. Community fire prevention effort
6. Capacity building with community
7. Challenges
8. Learning outcome
9. Sustainable Development Goals

SOUTHEAST PAHANG PEATLAND LANDSCAPE

- SEPPL is the largest peatland landscape in Peninsular Malaysia.
- It is a landscape that comprising 7 forest reserves (Pekan FR, Pekan (Extension) FR, Kedondong FR, Nenasi FR, Nenasi (Extension) FR, Resak FR and Resak (Extension) FR).
- SEPPL hosts indigenous community of Jakun tribe which co-existing with nature for a very long time.

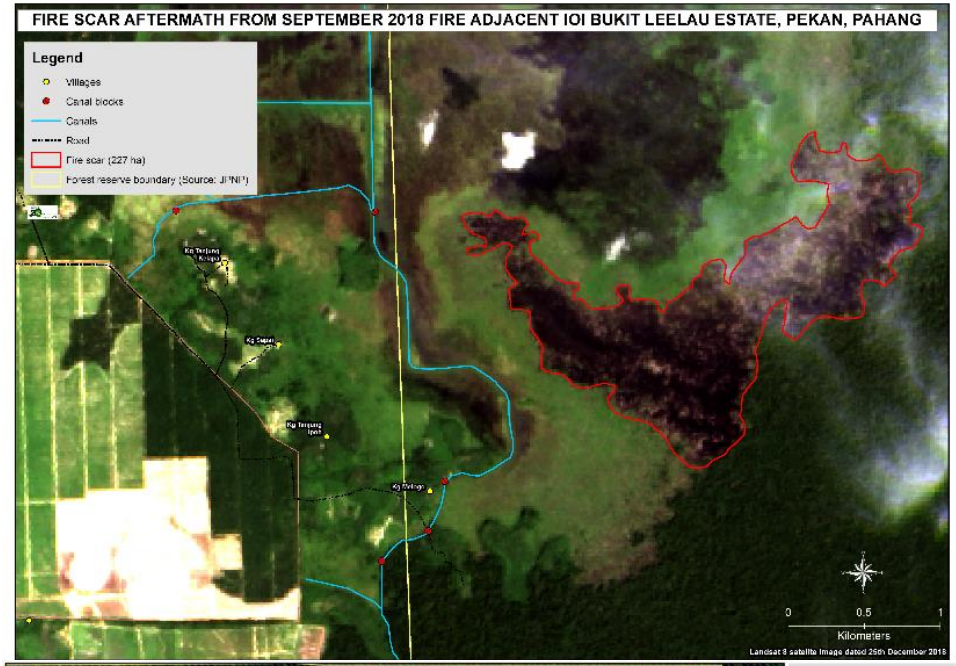


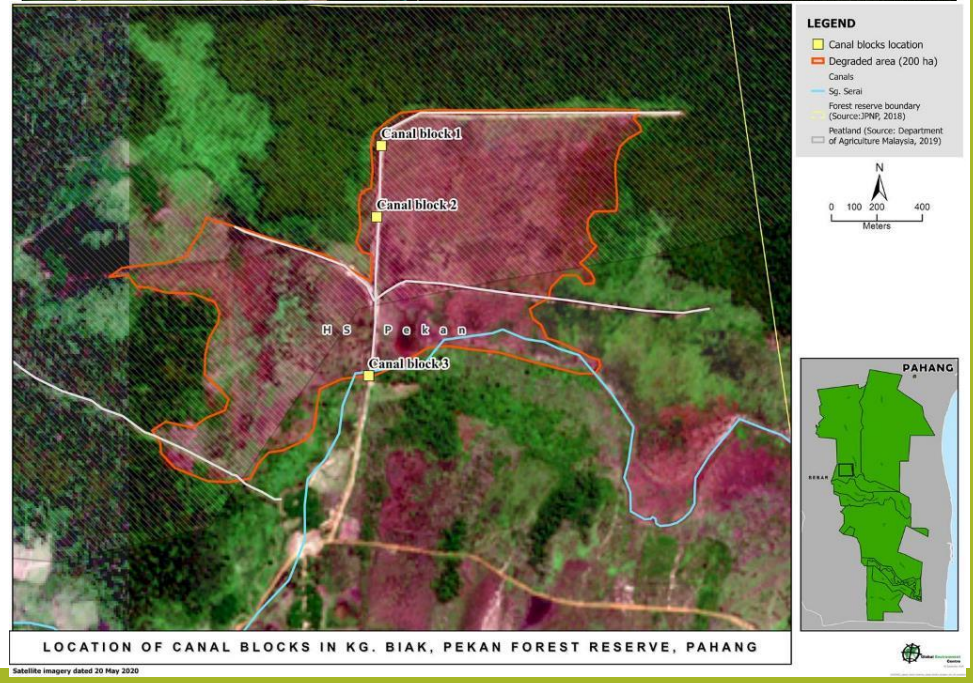
SOUTHEAST PAHANG PEATLAND LANDSCAPE

- This landscape is threatened by fire risk and further degradation that halt natural regeneration.
- Degradation is due to existing abandoned logging canals that drain and lowered water table from the peatland ecosystem.
- It has been contributing to GHG emission from its carbon rich peat ecosystem.

SITE ASSESSMENT AND REHABILITATION EFFORT

- Since 2018, GEC had started a pilot project with local community living adjacent to Pekan (Extension) Forest Reserve.
- 274 ha were severely degraded due to fire outbreak.
- Multi-stakeholder approach has been applied
- Local stakeholder such as State Forestry Department and adjacent plantation companies have been engaged along with local community for rehabilitation plan.





SITE ASSESSMENT AND REHABILITATION EFFORT

- GEC's main approach is to rewet the degraded peatland by constructing canal blocks.
- This aims to slow down water flow and increase water level which will restore hydrological function of peatland ecosystem.
- This effort followed by re-vegetation to restore the degraded area by planting fast growing tree species (e.g. *Macaranga pruinosa*).
- Wildings were prepared by the local community in their nurseries

SITE ASSESSMENT AND REHABILITATION EFFORT

- An estimated of 1500 ha of the degraded peatland area have been rewetted within the Pekan (Extension) FR and 200 ha in Pekan FR by a total of 13 canal blocks constructed by multi stakeholders.
- Community nurseries have been established and providing seedlings for planting purpose. The local community has been expanding the nursery with more choices not only for replanting but preparing ornamental plants to increase household income.

STAKEHOLDER ENGAGEMENT

- Engagement of multi stakeholder is necessary in performing good rehabilitation plan and effort for **a common objective**.
- Encouraging stakeholders to participate is crucial to ensure project's **sustainability**.
- Understand perceptions of different stakeholders and existing land use and challenges to **identify solutions**.
- Establishment of local community group (e.g. Friends of Peatland Kampung Tanjung Kelapa) to ensure **continuity** and uptake of **ownership**.

FREE PRIOR AND INFORMED CONSENT (FPIC)

- FPIC process has been carried out with local community before starting on-site work.
- This is to ensure mutual understanding between both parties.
- Community meetings are being conducted from time to time to build trust, connection and clear misunderstanding between both parties.

COMMUNITY FIRE PREVENTION EFFORT

- The local community members are engaged and trained for a community based patrolling team in two villages.
- This effort is to encourage local community to assist in fire prevention by regular monitoring.
- Signboard of Fire Danger Rating System (FDRS) have been installed to inform community of fire risk.

CAPACITY BUILDING WITH LOCAL COMMUNITY

- GEC has been conducting a series of capacity building events with the local community on sustainable uses of peatland.
- Provided awareness emphasizing on prevention measures for fire outbreak and the uses of FDRS.
- Also provided basic first aid training to educate the local community on immediate actions needed to tend injuries.
- Community acceptance on these capacity building series has been tremendous and positive.

Covid-19 pandemic and restriction of interstate travel have limiting on site work between GEC and community

Canal blocking in SEPPL is considered hard work where not all community willing to contribute

CHALLENGES

Flooding peatland landscape due to wet season and enhanced canal blocking

Indigenous community tends to be more vulnerable due to low education level

LEARNING OUTCOME

Stakeholder Engagement

- Engagement is varied depending on stakeholders' priority
- To ensure community understand and following discussions to prevent misunderstanding and miscommunication.

Ecosystem Rehabilitation

- Local community beware of fire risk during dry season thus they support monitoring
- Re-vegetation versus mortality rate on flooded/rewetted peat ecosystem
- Conduct selective planting during suitable time
- Water table is crucial to be maintained to prevent fire and ensure successfulness of revegetation

Empowerment

- Trained community to be able perform activities independently with effective communication and guidance.
- Community also appreciated pilot projects to enhance livelihood activities with support from technical departments and study tours and visit to peer villages.

- Managing peatland forest sustainably in Malaysia **directly supports the implementation of SDGs 1, 3, 5, 6, 8, 11, 12, 13, 14, 15 & 17**

Thank You for your attention

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Peatland Rehabilitation in Pahang with Orang Asli (https://www.facebook.com/watch/globalenvironmentcentre/863040440906201/)