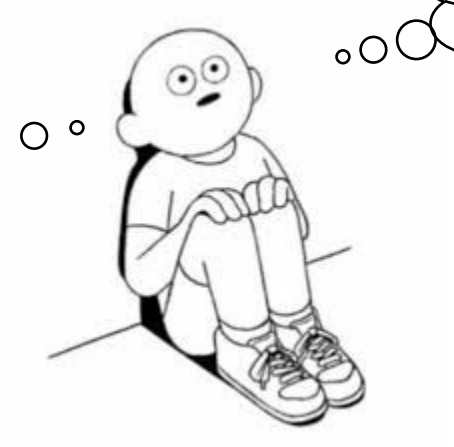
What's on your mind when you hear:

Peatland or “lahan gambut”?

Oil palm expansion

Fires and smokes

Carbon emission



detikNews Kamis, 11 Jun 2020 09:19 WIB

Potret Kebakaran Lahan Gambut di Aceh Barat

Kebakaran lahan gambut di Aceh Barat, terus meluas. Meluasnya area yang terbakar ini diakibatkan angin kencang disertai suhu udara panas.

Selasa 11 Agustus 2020, 08:43 WIB

'Food Estate' di Kalteng Picu Konflik dan Kerusakan Lingkungan

mediaindonesia.com | **Politik dan Hukum**

Kebakaran lahan dan pembuatan kanal sebab utama kerusakan lahan gambut

Senin, 2 Agustus 2021 13:04 WIB

Kabut Asap Kian Parah, Malaysia Tutup 145 Sekolah

CNN Indonesia | Selasa, 17/09/2019 10:43 WIB

Bagikan :

NEWS 1 tahun lalu

FOTO: Aktivitas Warga Riau Terganggu Akibat Kabut Asap

Banjarmasin Post

Kebakaran Lahan Gambut Sekitar Bandara Tjilik Riwut Palangkaraya, Pemadaman Berlangsung 1,5 Jam

"Kebakaran terjadi pada bagian atas dan bawah lahan gambut sehingga memunculkan asap dari dalam tanah gambut yang terbakar," ujar dalah satu ...

1 bulan lalu

PERISTIWA 1 tahun lalu

Kadishut: Kabut Asap Akibat Kebakaran Lahan Gambut akan Abadi

Kalau pemadaman melalui water bombing dengan dana ratusan miliar pun hanya akan memadamkan di permukaan lahan gambut saja.

But, not all peatland uses are associated with fires!

Really? ~~That sounds like a hoax.~~

Alleviating peatland fire risk using water management trinity and community involvement

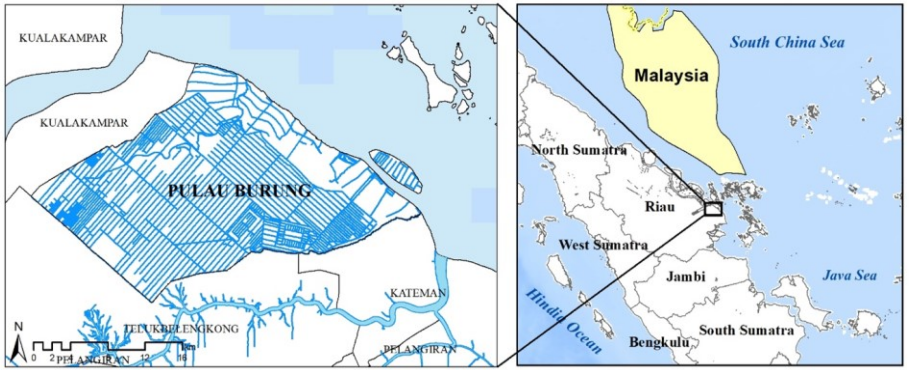
Nurul Ihsan Fawzi, Ika Zahara Qurani, Rifat Darajat

Research Objective and Location

Objective:

> "This study aimed to examine, elaborate, and validate the application of Water Management Trinity (WMT) and community contribution in minimizing the risk of fire in peatland."

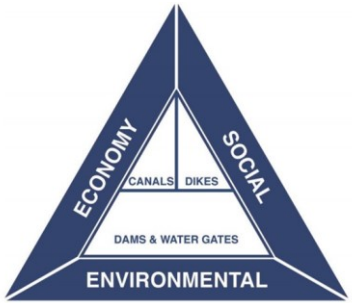
Research location:



Pulau Burung District, Indragiri Hilir, Riau Province which is a very large producer of coconut.

- 1/10 Indonesian's coconut production is from this region.
- Once a village, it is now a district of 14 villages with population of 84,484 people in 2018.
- KHG Sungai Kampar – Sungai Gaung

Water Management Trinity



- An integrated water resource management to **regulate water resource and mitigate fire risk**
- Canals - dikes - water gates and dams.
- A close system.
- Canal is **not to drain** but to reserve.

Data and Analysis

Water table depth

- Water table depth recorded by Sambu Group in one of 22,650 ha of their plantations
- 1 April 2017 - 31 December 2020, 106 points, twice a month.

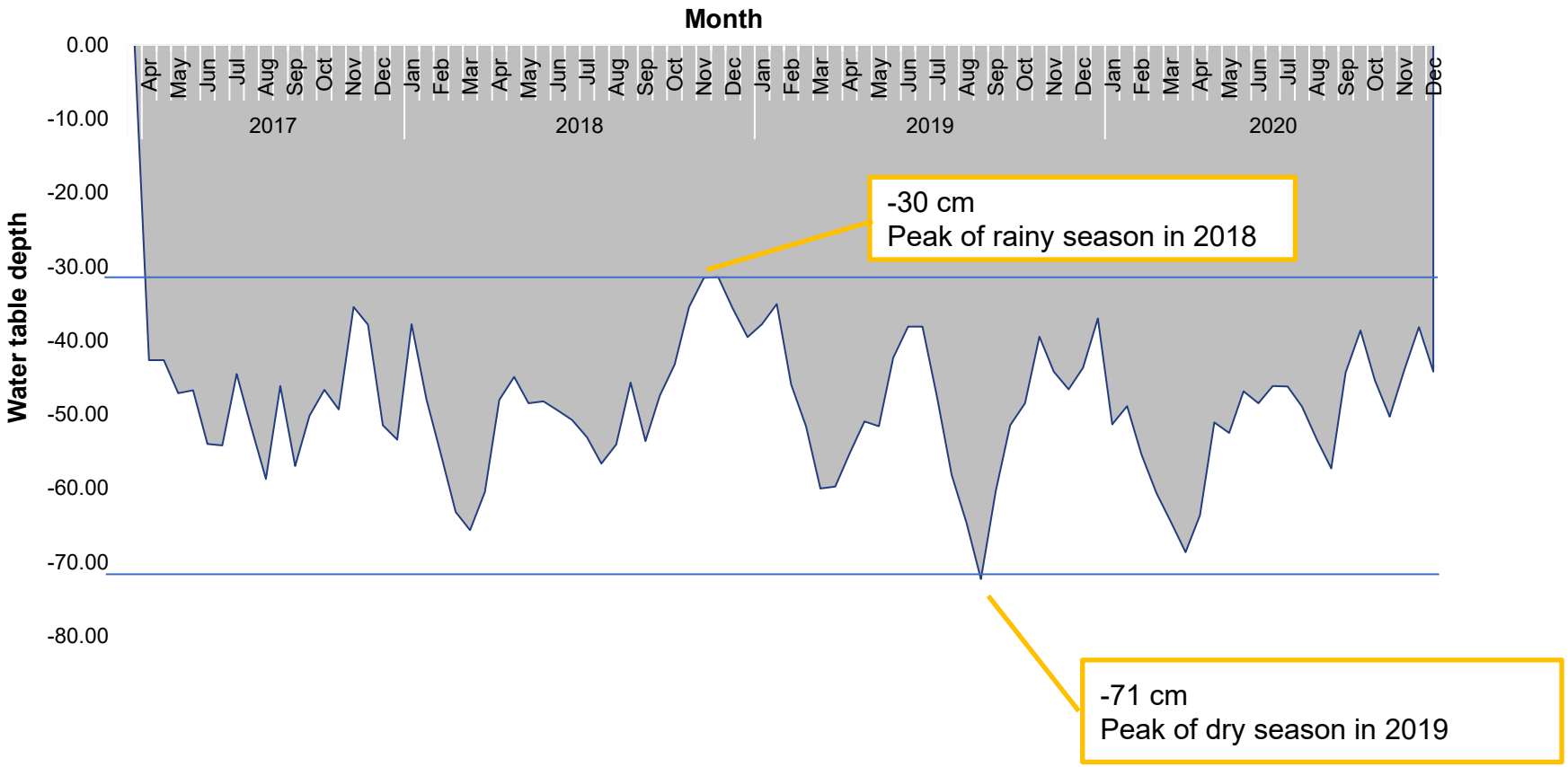
Focus Group Discussions

- Five villages in Pulau Burung District.
- The questions:
  - *How was the history of land and forest fires in the area?*
  - *How is the fire's management in Pulau Burung?*

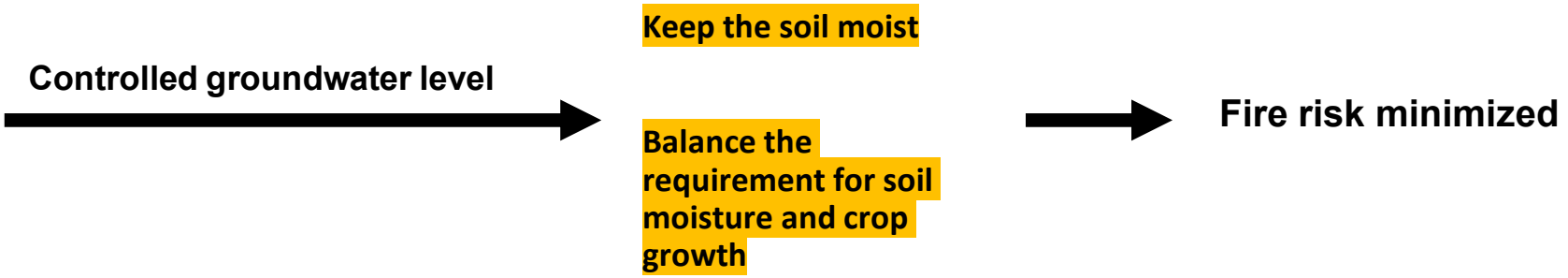
Remote sensing validation

NASA's Fire Information for Resource Management System (FIRMS)

Water Table Level



Water Table Level's Implication to Fire Risk



Shifting Habit and Community Involvement

Before

Farmers burn the land to decrease the soil acidity

The worst forest fire was observed by the farmers back in 1999

After

The existing law drive a habit change of the people (enforcement from TNI and Police)

Farmers find a way to manage their land without burning using BioPeat

Community commitment to reduce land burning for clearing

Community perception on fire risk

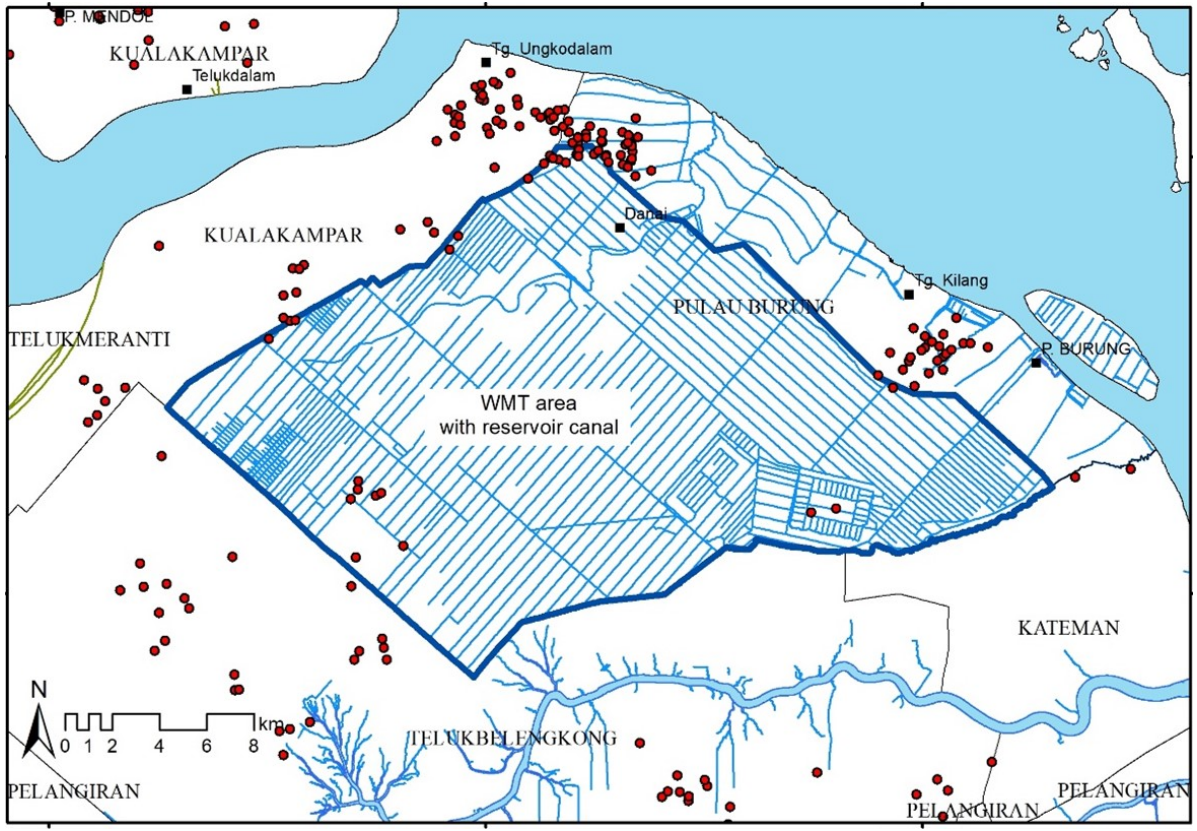
“Last time we had a fire incident was in 2016”

Pak Susanto, *coconut farmer & the head of village*

Previously, farmers burned the peat land to fertile the acidic soil for agriculture. But they don't do that anymore

“With burn practice free, people have benefit on sustainable harvest and improve their welfare.”

Hotspot validation using remote sensing



El Niño is not the only main contributor to massive forest and land fires.

Our field visit and interview found no burned area inside WMT, despite the satellite spotted hotspot.

Hotspot recorded, but the fires was estingushed (small and short period of fires).

SWOT Analysis of Peatland Management in Pulau Burung

Strengths

WMT provides biophysical aspects that naturally prevent fire

People's awareness on the bad impact of burning practice has been increased

S

W

Weaknesses

Farmers still conduct small-scale controlled burning to manage their land

Not all farmers have the capacity and capital to manage their land sustainably

Opportunities

All stakeholder supports the effort in minimizing peatland fire in Pulau Burung

The trend of fire occurrence is low since the source of fire risk was reduced

O

T

Threats

Accidental fire could happen, such as from cigarette butt or spark from controlled burn

Periodic drought season induced by El Niño events.

Conclusion

“It is impossible to banish all of the fire in peatland. Eliminating risk is a visible way to minimize fire in peatland.”

- Nurul Ihsan Fawzi, *Researcher*

Maintain infrastructure of water management system (WMT) in coconut plantation is important to make soil less susceptible to fires while give benefic economic to communities.

Improve the awareness of people not only because of fear from the laws, but to make burn-free practice is a necessity.

Join our community by following our social media, visit our website, send us an email at:

info@tayjuhanafoundation.org

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