BRINGING SCIENCE AND INNOVATION FOR THE FUTURE OF INDONESIA'S PEATLAND AND MANGROVE LANDSCAPE RESTORATION

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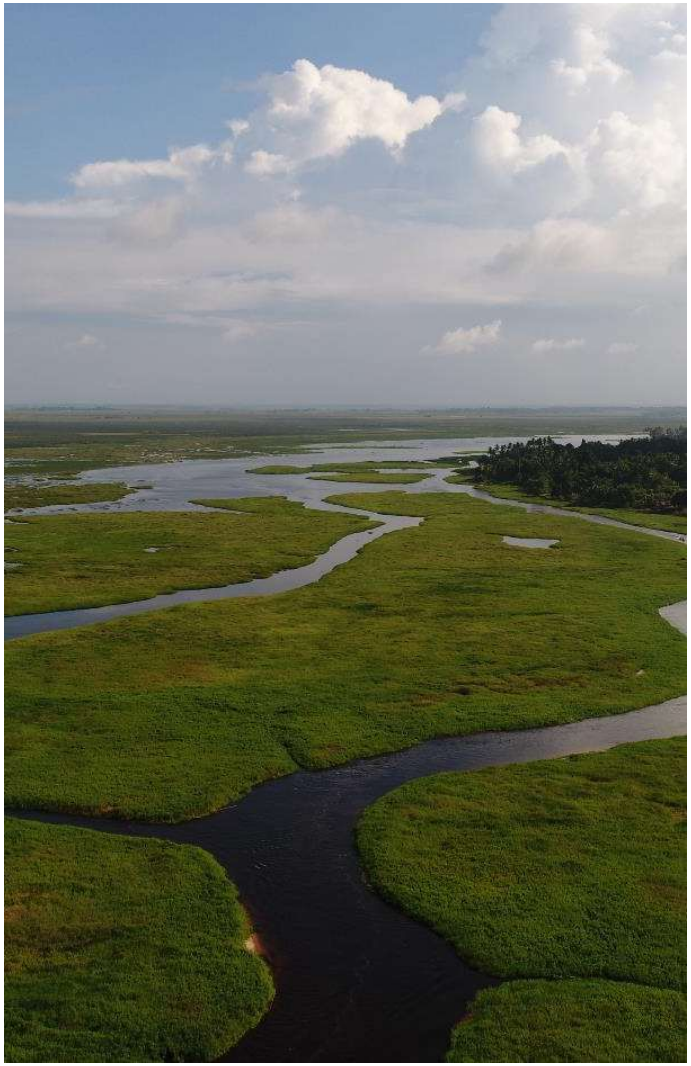


PEATLAND RESTORATION IS OBLIGATORY AND MUST BE ACCELERATED

- Peatland covers >8% of Indonesia landscape
- Peatland degradation brings devastation to people
- Indonesia’s commitment to Paris Agreement
- Science-based restoration

BEST PRACTICES: LOCAL WISDOM AND RESEARCH FINDINGS MUST BE REPLICATED AND UPSCALED

- Available publications
- Expert group of BRGM
- Available local wisdom and tradition
- Own Research with multi academic entities via ACTION RESEARCH and Show Window

INVESTING IN KNOWLEDGE, HUMAN RESOURCES, AND NETWORK

- >100 research packages conducted in collaboration with >30 research institutes/universities
- PMRGT
- Global networking
- 7 webinar series: 22 speakers
- Books and publications

WATER BALANCE CALCULATION, REWETTING AND HYDROLOGICAL MONITORING TECHNIQUES

- Developing peatland water balance calculation
- Developing most-efficient canal blocking planning, design, and construction
- Using state of the art technique to monitor hydrological aspect of peatland: water level, soil moisture, fire danger rating

IMPROVING REVEGETATION SUCCESS

- Selecting local species
- Observing rate of survival
- Replication and upscalling
- Natural regeneration is promising, but needs assistance
- Social acceptance needs to be improved

No.	Jenis tanaman	Jumlah	No.	Jenis tanaman	Jumlah
1	Belangiran	1476	10	Meranti Rawa	74
2	Bengkal	102	11	Para-para	81
3	Bintaro	39	12	Pasir-Pasir	276
4	Bira-Bira	9	13	Pisang-pisang	90
5	Briang	16	14	Pulai	58
6	Gelam	341	15	Punak	7
7	Jambu-jambu	125	16	Rengas	168
8	Jelutung	52	18	Kelat	25
9	Kranji	4			

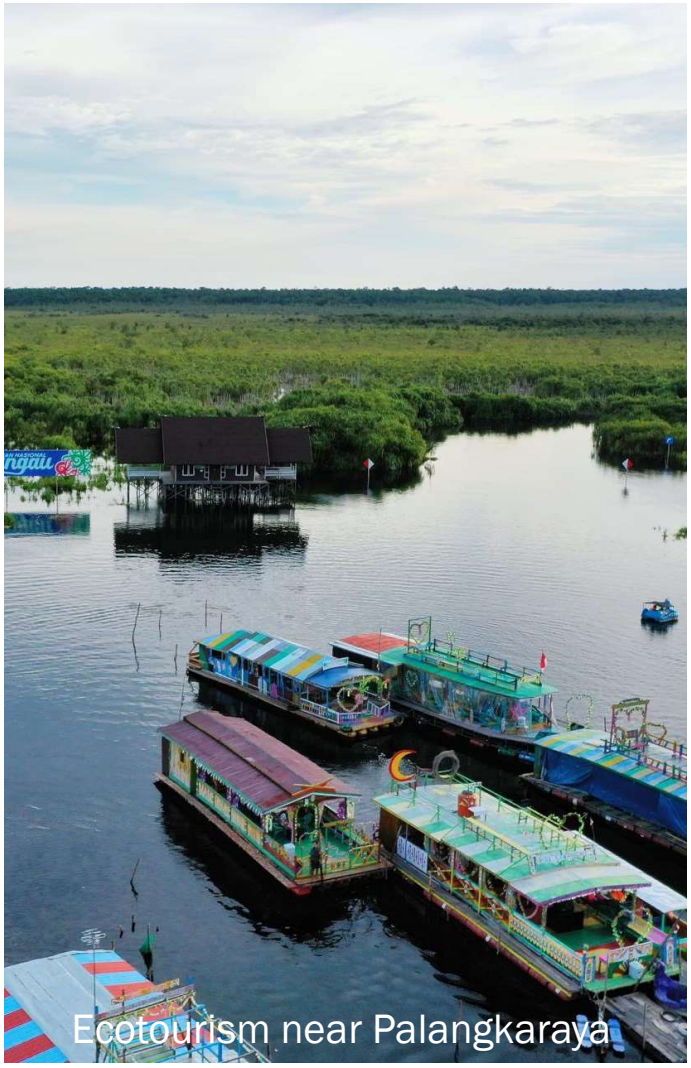
Demplot HLG Londerang. Total plants: 4820. Survived: 2977 plants. Survival Rate: 61%

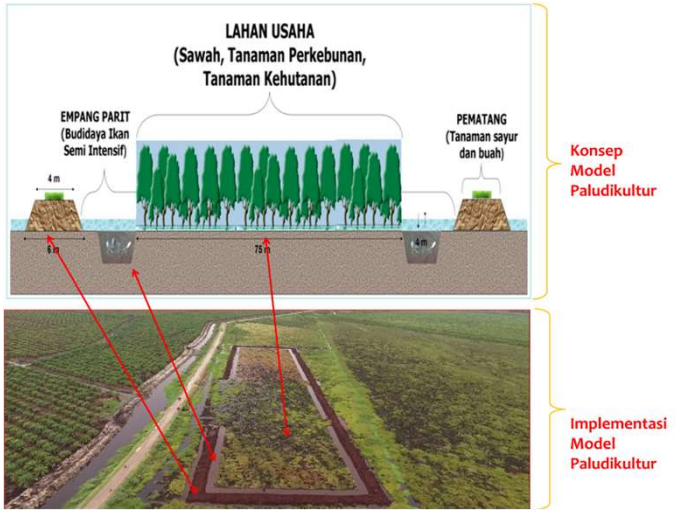
EMPOWERING GREENER AND MORE ECONOMICAL ALTERNATIVE-LIVELIHOOD

- Peatswamp Fisheries
- Peatswamp Farming
- Peatswamp Local Vegetation
- Non-Timber Forest Products
- Land-preparation without burning

INTEGRATING 3R IN PEATLAND RESTORATION

- Revegetation activities in rewetted area
- High-water table cultivation
- Agrosilvofishery
- Ecotourism


Ecotourism near Palangkaraya




Agrosilvofishery in Kedaton

PEATLAND RESTORATION AS GREEN ECONOMY DRIVER

- Peat-friendly commodities development
- Payment for Ecosystem Services as the umbrella for peat commodities
- GHG emission reduction estimation

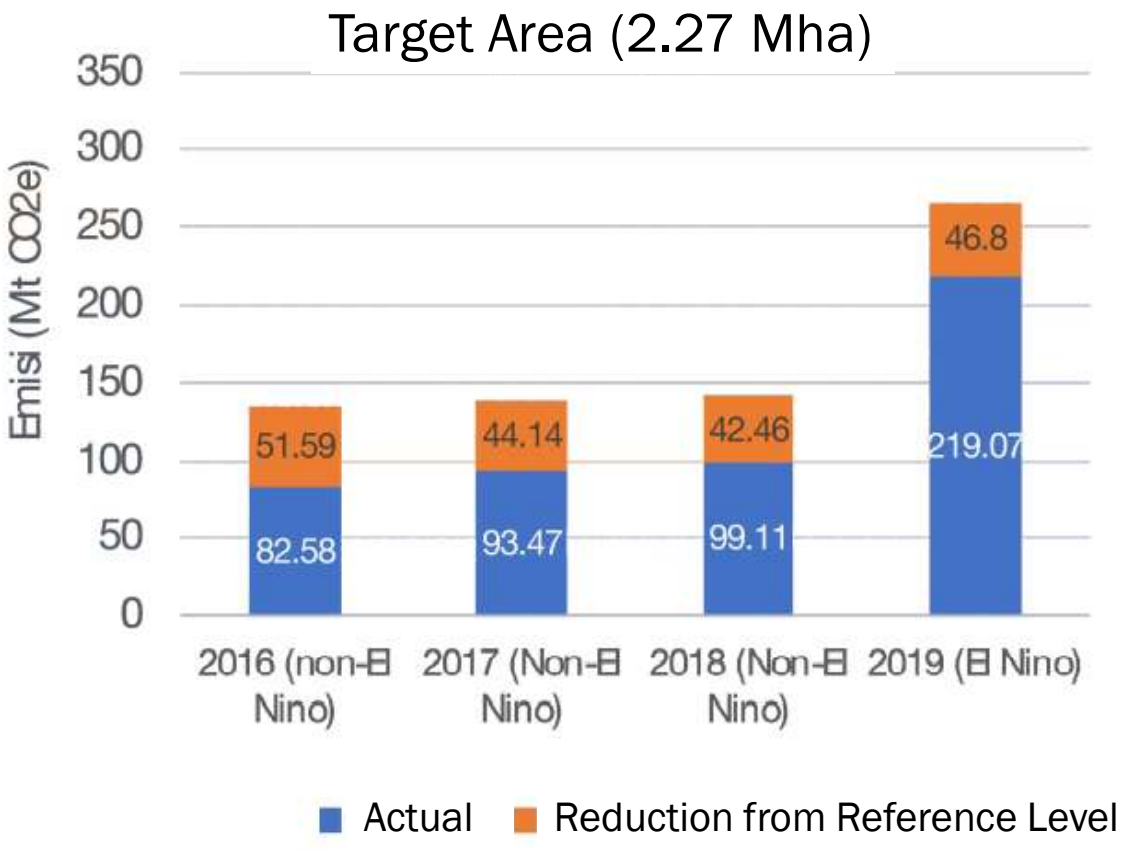
PES

CO2 EMISSION REDUCTION

EARLY FINDINGS
(*TO BE CHALLENGED*)

IT IS ESTIMATED THAT 181.27 MT CO2 EQ IS AVOIDED AFTER BRG INTERVENTION IN 7 PROVINCES (2.27 MHA)

CONTRIBUTE TO 37.08% NDC 2030



INDONESIA TO FACE DECADE OF ECOSYSTEM RESTORATION (2021-2030)

- BRGM established – The Peatland Mangrove Restoration Agency 2021-2024
- Accelerate peat restoration and improve local prosperity in the restoration priority area in Riau, Jambi, South Sumatera, West Kalimantan, Central Kalimantan, South Kalimantan, and Papua (1.2 Mha)
- Accelerate mangrove rehabilitation in North Sumatra, Riau, Bangka Belitung, West Kalimantan, East Kalimantan, North Kalimantan, Papua, and West Papua (0.6 Mha)

INDONESIA'S PEATLAND IN 2030

- 2021-2030 decade of ecosystem restoration. 2.4 Mha peatland and >600 kha mangrove restored
- Local-species based economic development: jelutung, sago, bintangur, geronggang, meranti, etc
- Precise and high-resolution monitoring in hydrology, emission and deforestation reduction, carbon accumulation
- Village can monetize their GHG emission reduction via PES scheme

CONCLUSION

- Best practice and research findings are used as the basis of peatland restoration activities
- Local, regional, and global network are developed to strengthen peatland restoration at even smallest scale
- Restoring water balance on peatland is the key, but needs precise monitoring at macro scale
- Peatland commodities are abundant, but peatland ecosystem services needs to be valued
- Peatland will bring prosperity if maintained properly
- Global collaboration for peatland and mangrove restoration is very strategic considering its importance for climate change adaptation and mitigation