

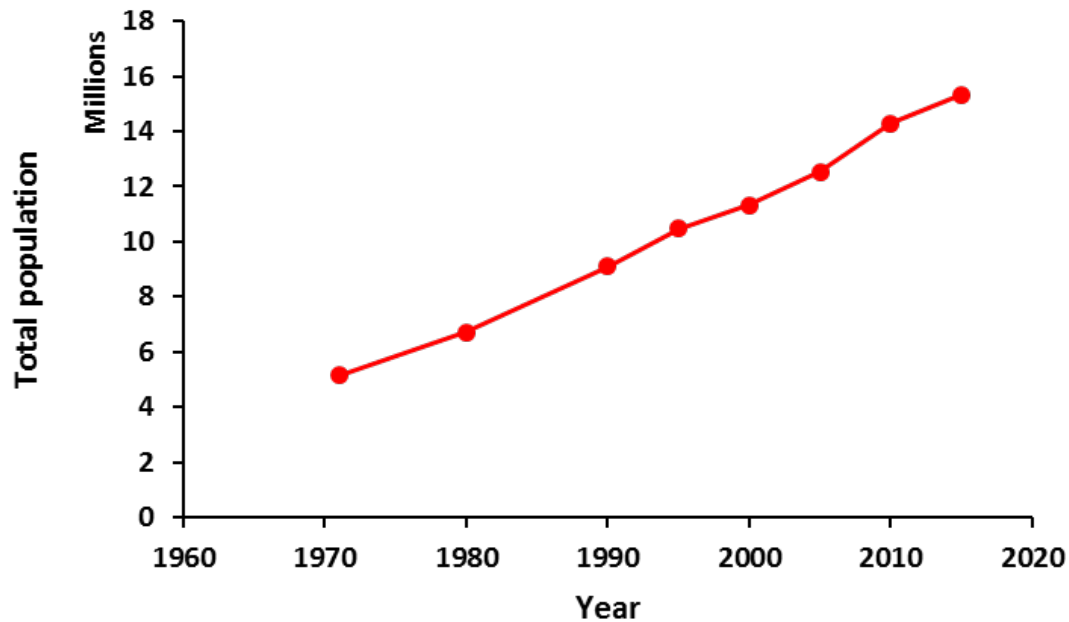
# Road Infrastructure Planning in Kalimantan, Indonesia

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# Kalimantan



# Main Economic Activities



## Oil, gas and mining

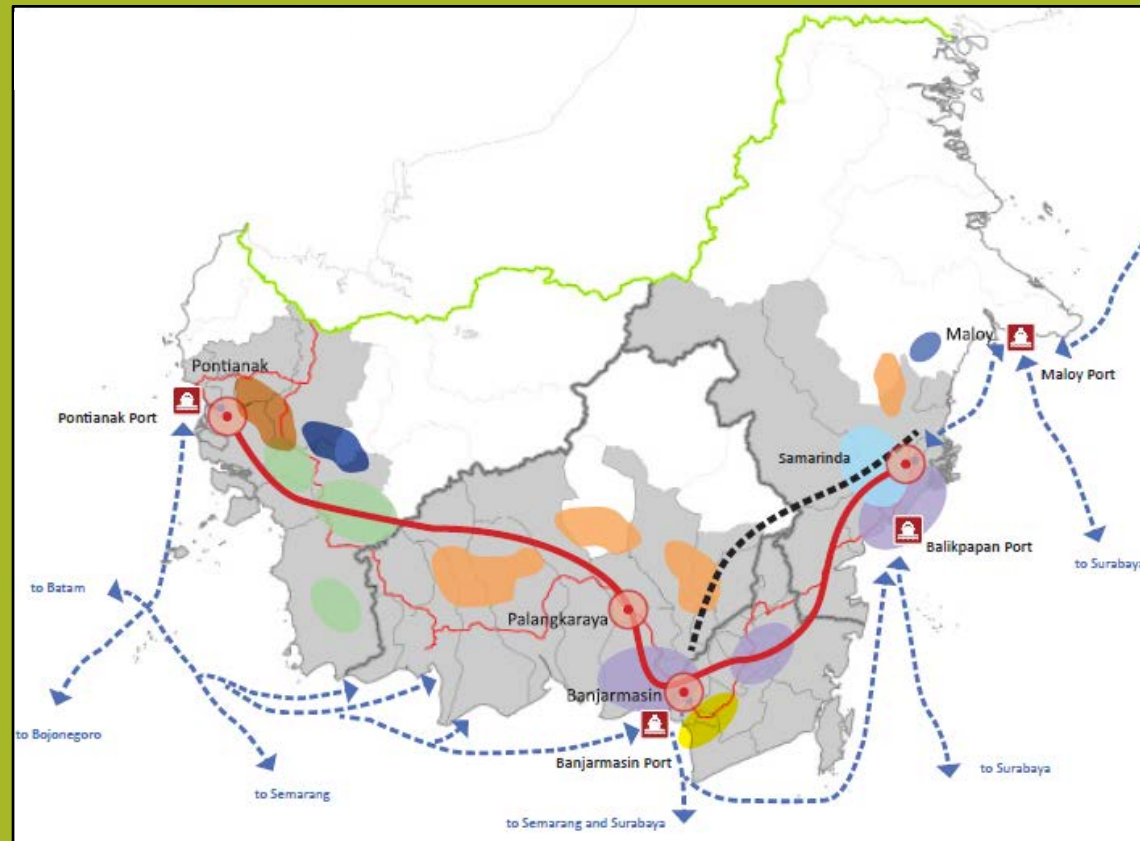
- Contributes ~ 50 % of the total GRDP
- ~ 49% of overall coal resources in Indonesia
- Second largest coal deposit after Sumatra



## Oil Palm Plantation

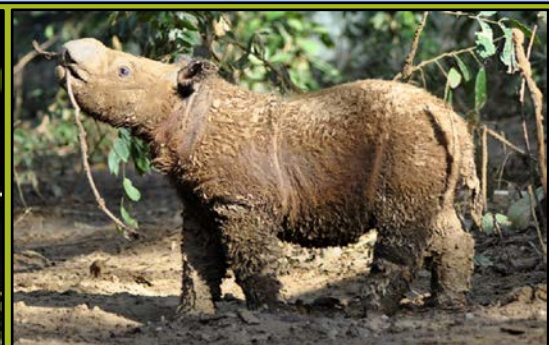
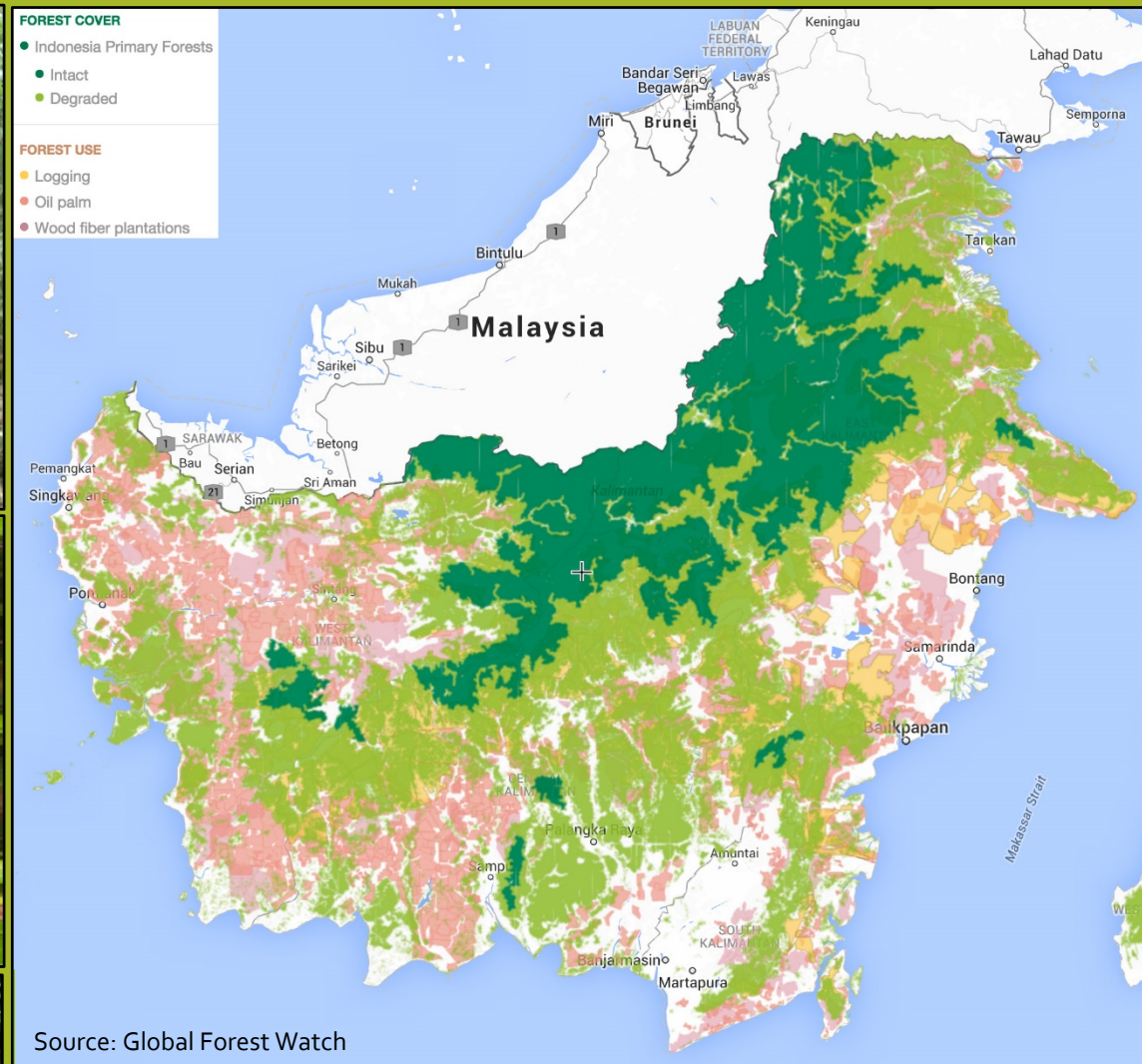
- 53% of total plantation area in Kalimantan

# A few examples of planned/ongoing road and railway development projects



- Trans Kalimantan (385 km)
- Road development from Kotawaringin to the mills (116 km), Central Kalimantan
- Pangkalan Bun development (58.5 Km), Central Kalimantan
- Development of Ketapang Road and mills facility (67.6 km), Central Kalimantan
- Simpang Tiga Apas-Simanggaris (78 km), East Kalimantan
- Sosok – Tayan (46km), West Kalimantan
- Tanjung – Batas Kota Sanggau (39 km), West Kalimantan
- Singkawang – Tebas (43 km), West Kalimantan





# Peat swamp forests

# Livelihood activities



# Remote villages

# Indigenous people



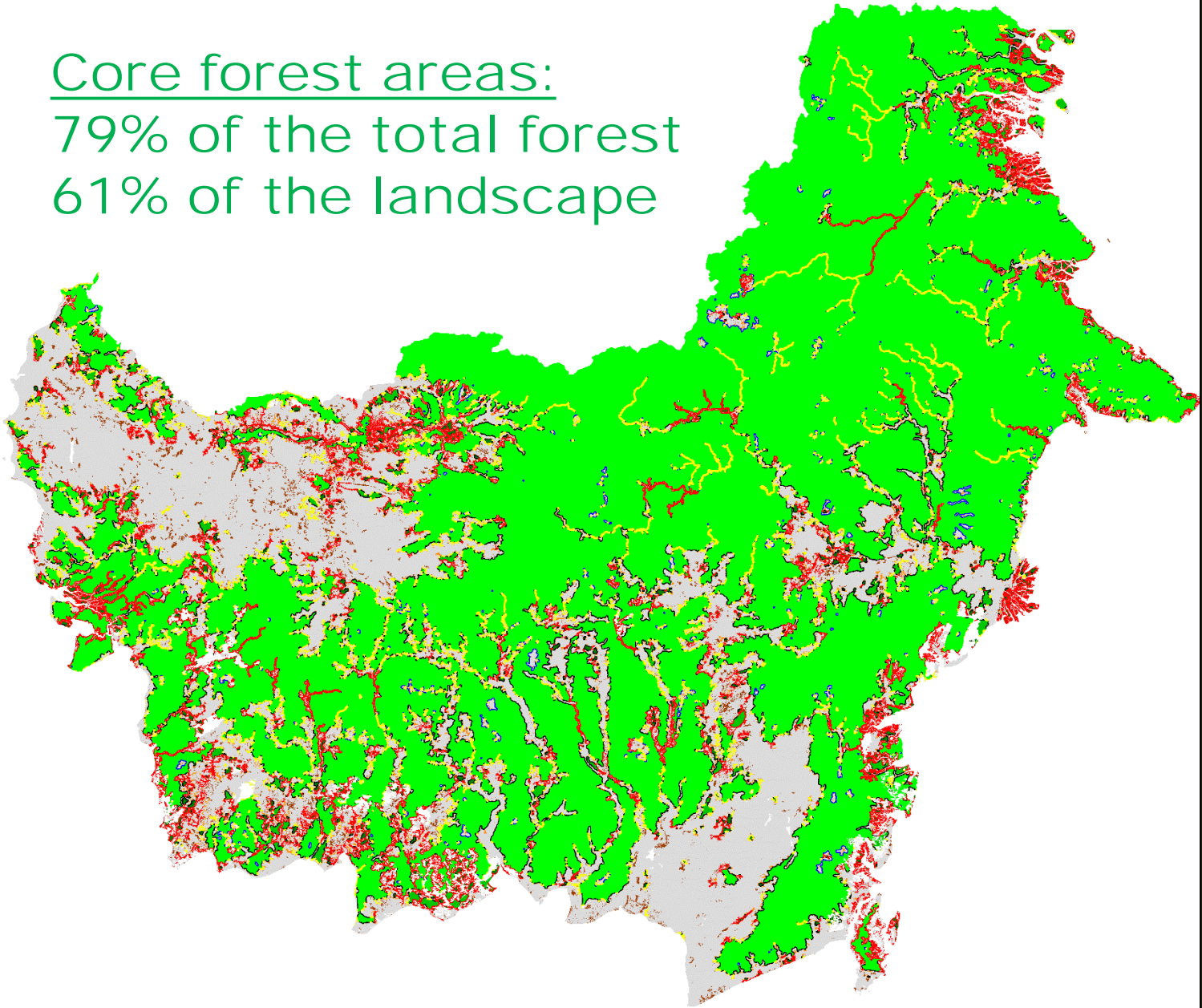
**Forest Edge**



**Core Forests**

1973

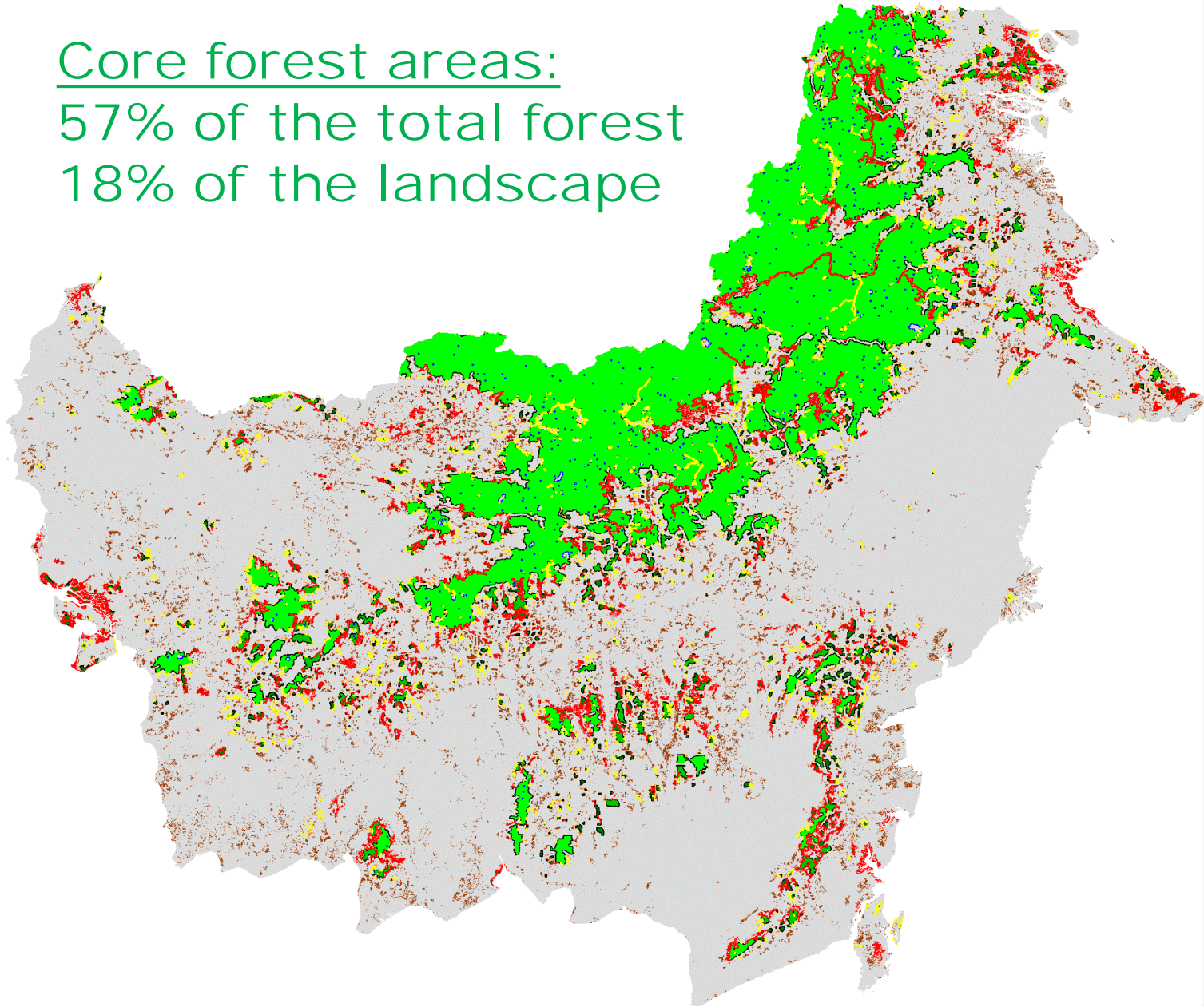
Core forest areas:  
79% of the total forest  
61% of the landscape



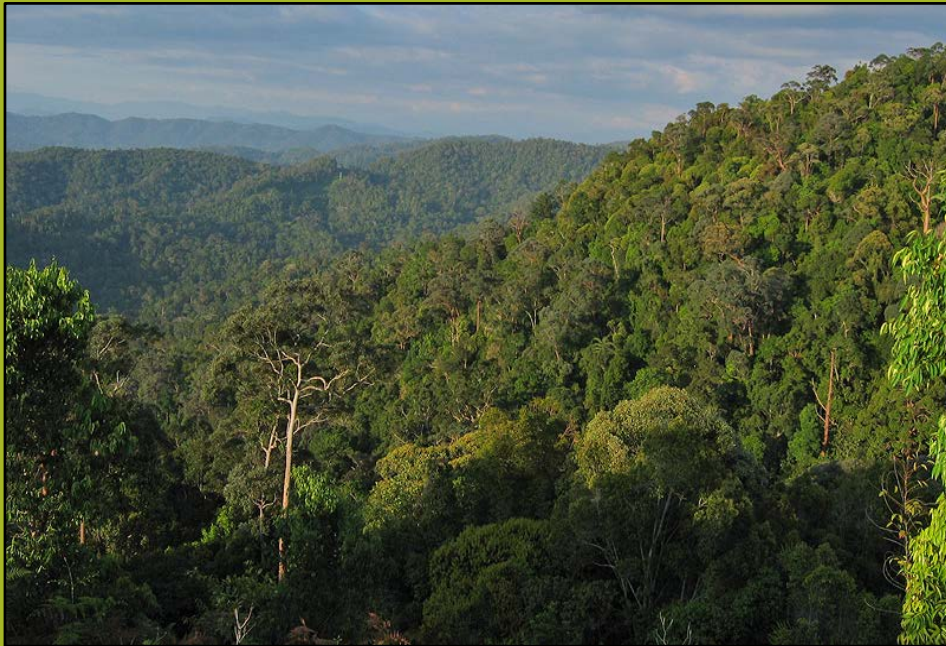


# 2015

Core forest areas:  
57% of the total forest  
18% of the landscape



# Fragmentation



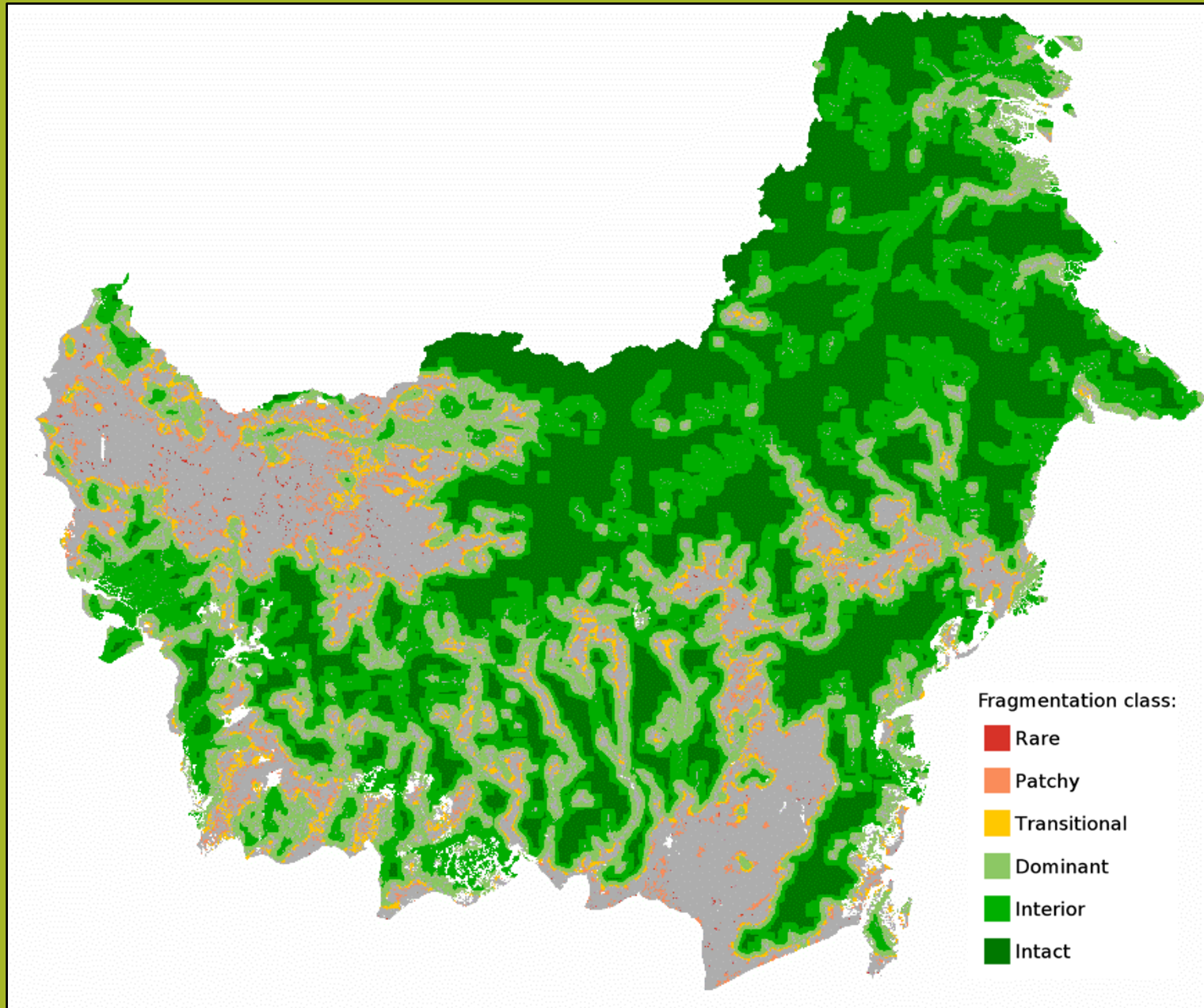
**Intact forest patch**



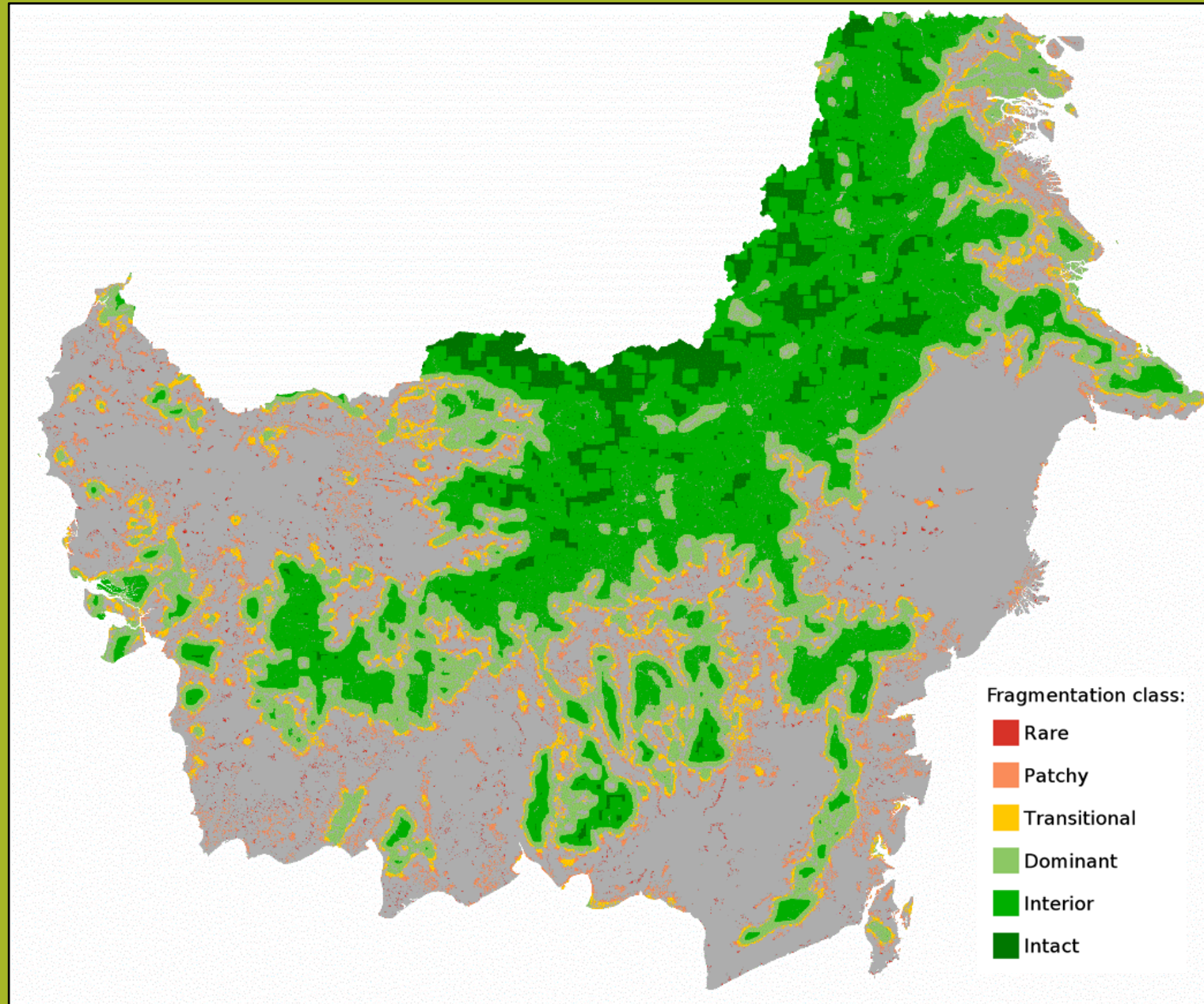
**Rare forest patch in a fragmented landscape**



1973



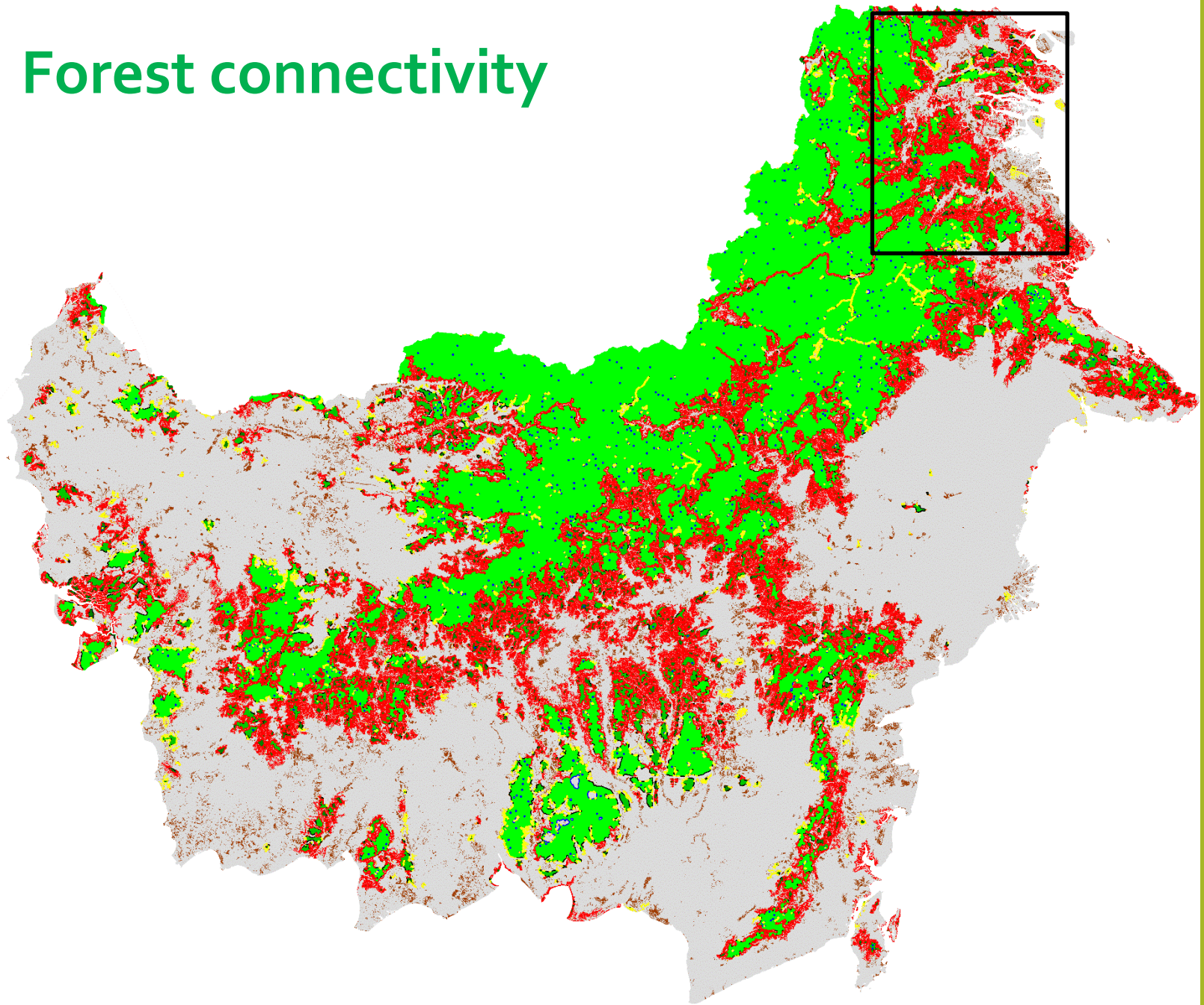
2015

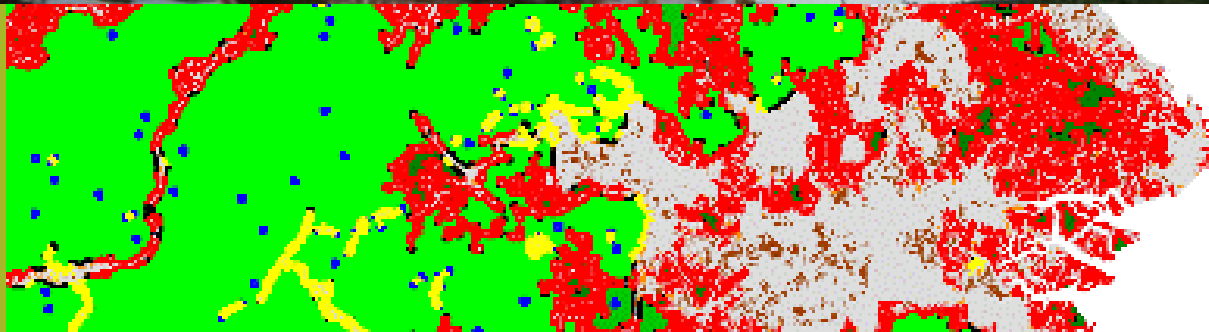
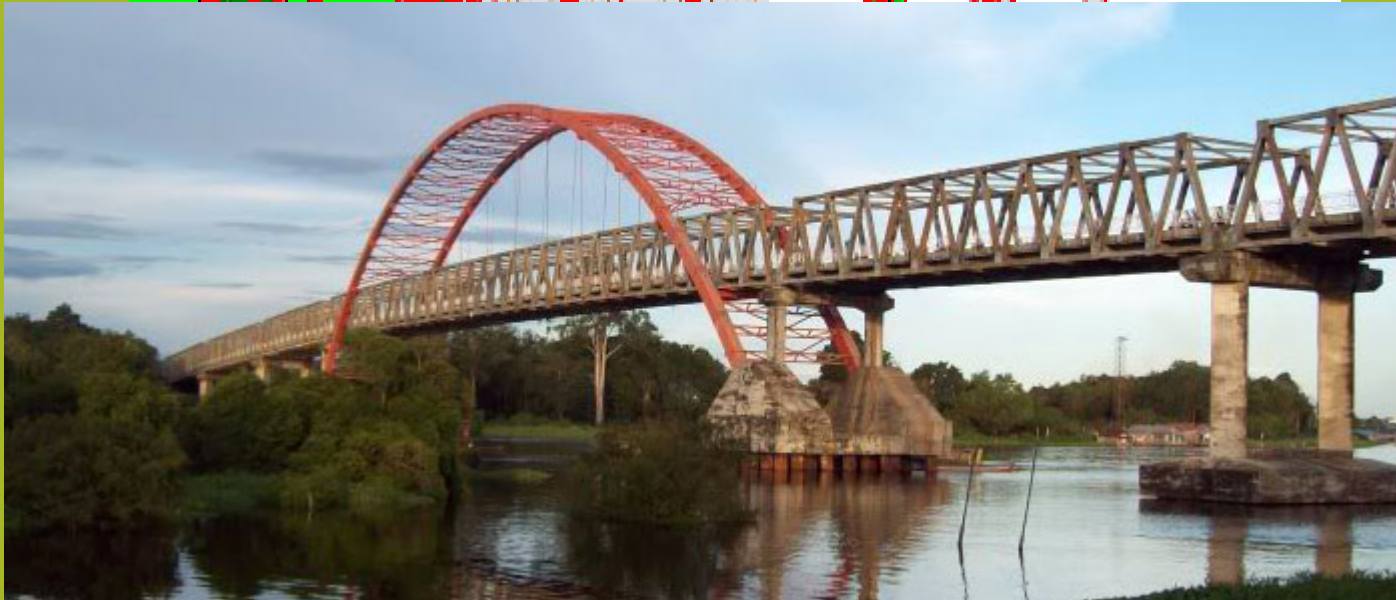
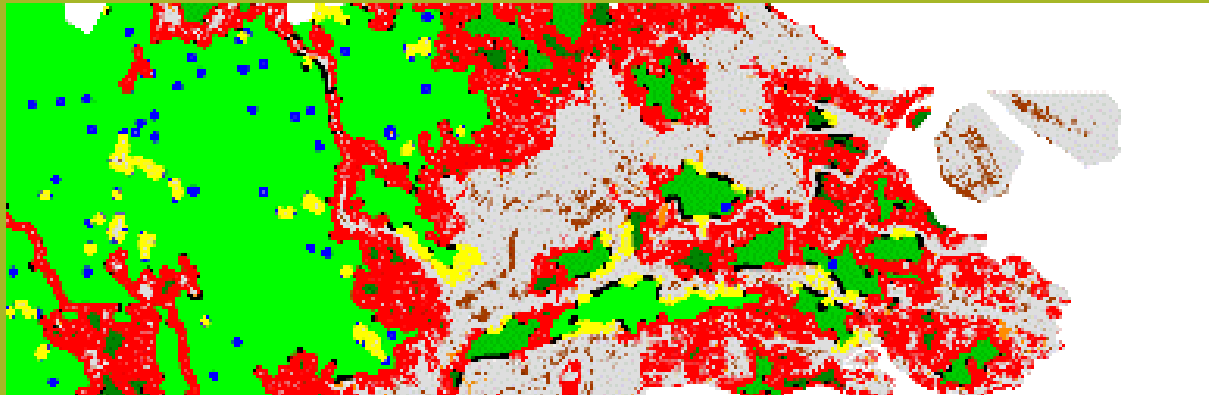


# Forest connectivity



# Forest connectivity





# Stakeholders engagement

Environmental Agency, Balikpapan



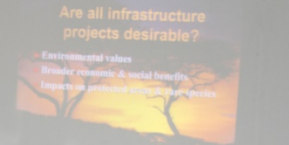
BAPPEDA, East Kalimantan



WWF, Central Kalimantan



BAPPEDA, West Kalimantan



WWF, West Kalimantan

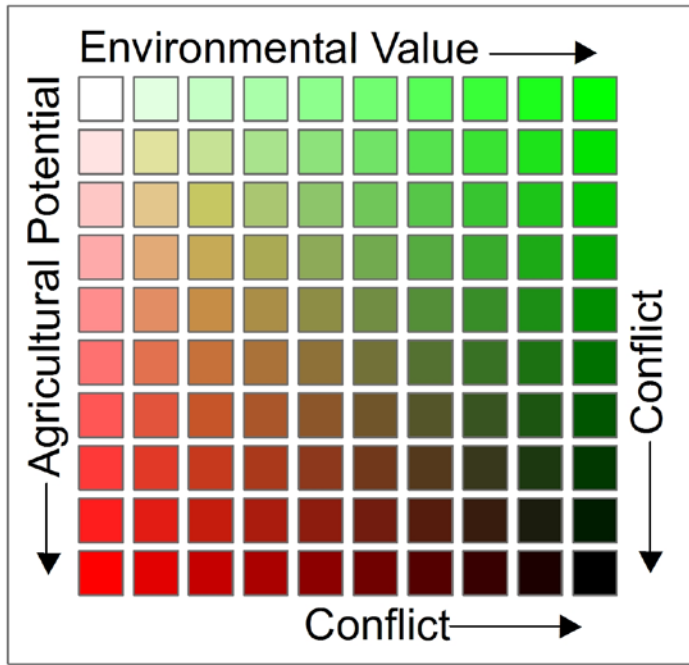
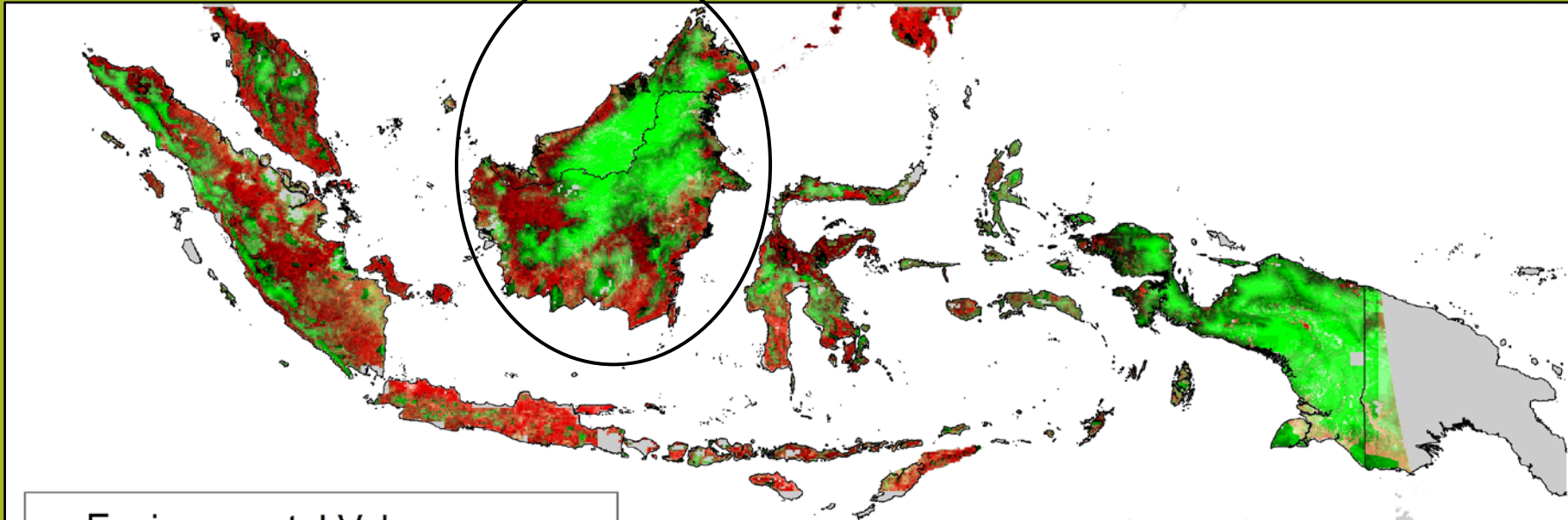
Mulawarman University, East Kalimantan



Universitas Tanjungpura, West Kalimantan



# Proactive Planning



# Conclusion

- A unique complex landscape-potential for socio-economic development, and very high value of natural ecosystems.
- Optimization of road infrastructure development will maximize the economic growth, social benefits and limit the environmental costs.
- Proactive infrastructure and land use planning is vital.



An aerial photograph of a vast, dense tropical forest. The canopy is a mix of various shades of green, indicating a rich biodiversity. A dark, winding river or stream flows through the lower right portion of the forest. The overall scene is lush and vibrant.

**Thank You**