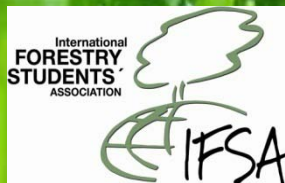




# The Effect Invasive of *Acacia sp* to Native Species on Resilience Boundary in Pelaihari Tanah Laut Natural Conservation Area, South Kalimantan

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Introduction



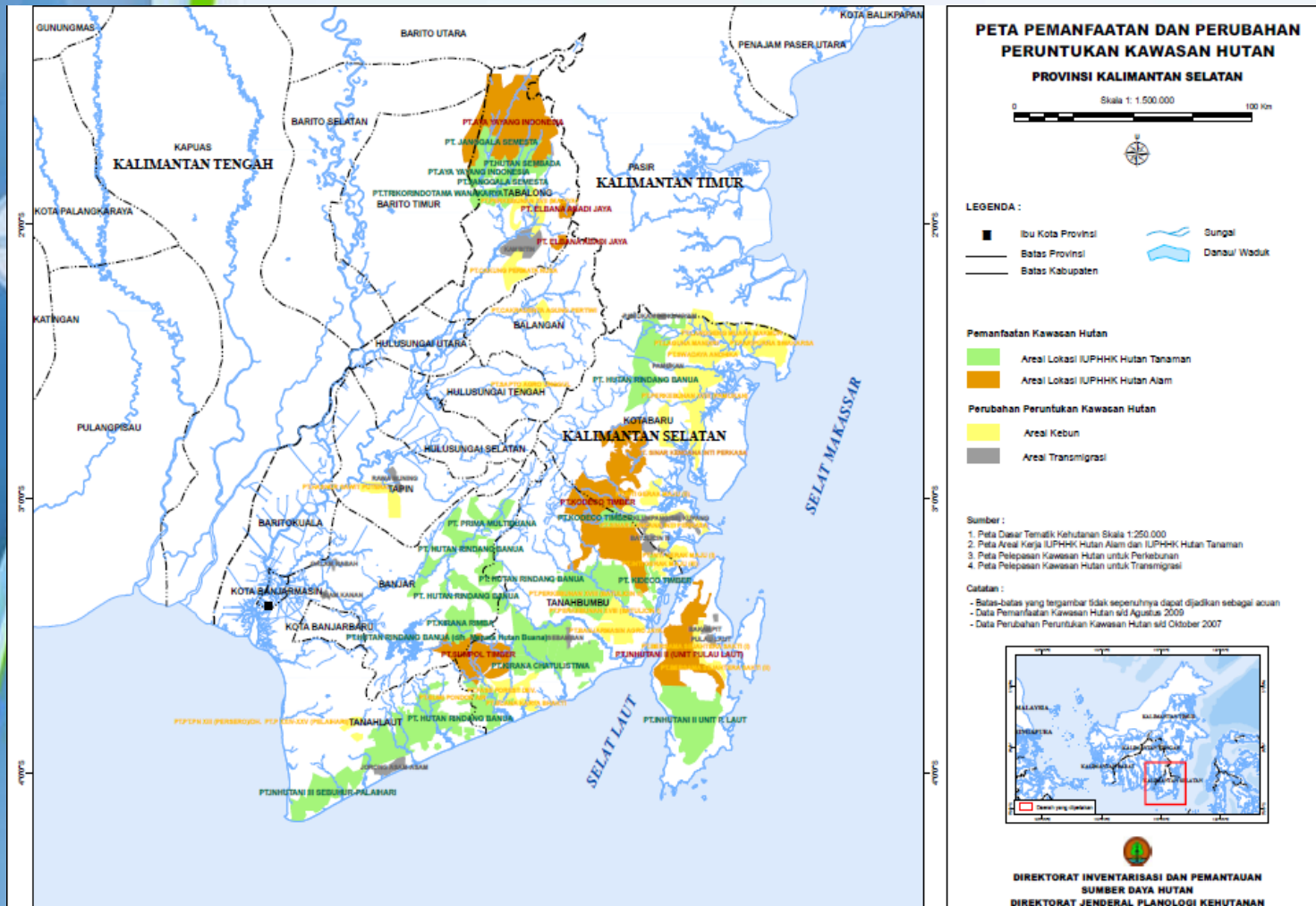
Discussion



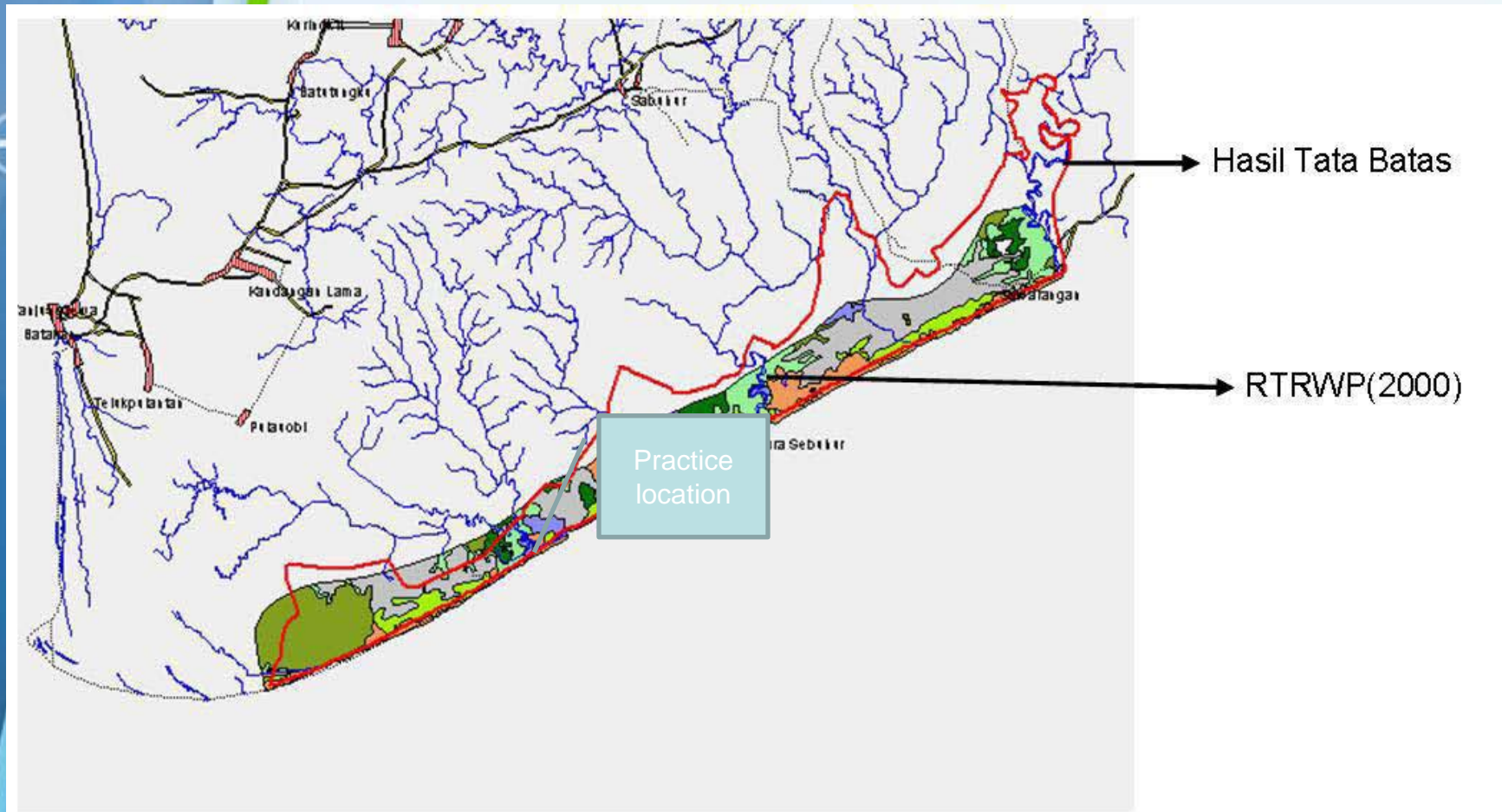
Conclusion



# South Kalimantan Forest Plantations Map



# Pleihari Conservation Area Map





# *Acacia mangium*



- *Acacia mangium* is a fast growing tree species naturally distributed across Northeastern Australia, Papua New Guinea and Irian Jaya. It naturally occurs along the boundary of the tropical warm and hot climatic zones, and either humid and wet at altitudes below 50 m. This species has a high potential for plantation program in commercial plantation and can be adapted in marginal

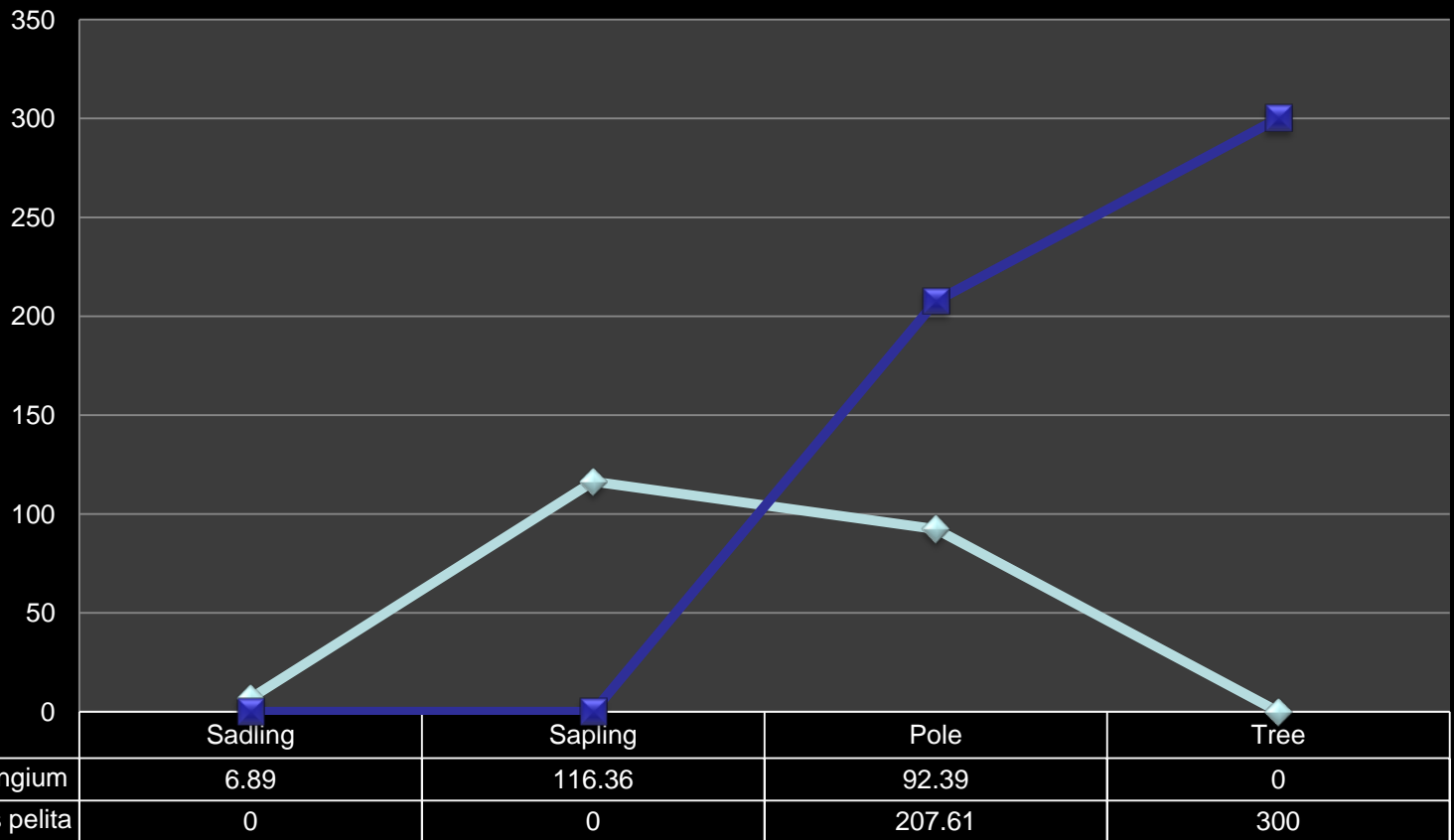
# *Acacia mangium*



- In the area of Industrial Plantation Forest Concessions (HPHTI) PT Inhutani III, they are planted acacia for pulpwood paper industry raw materials. Acacia planted in the early 1990s and then evolved and grown poorer in the conservation area which located in southern of Plantation Forest Concessions area. This species grows not only along the border area with the conservation area, but went as far as 2 km into the conservation area

# Index Value Important

## Index Value Important







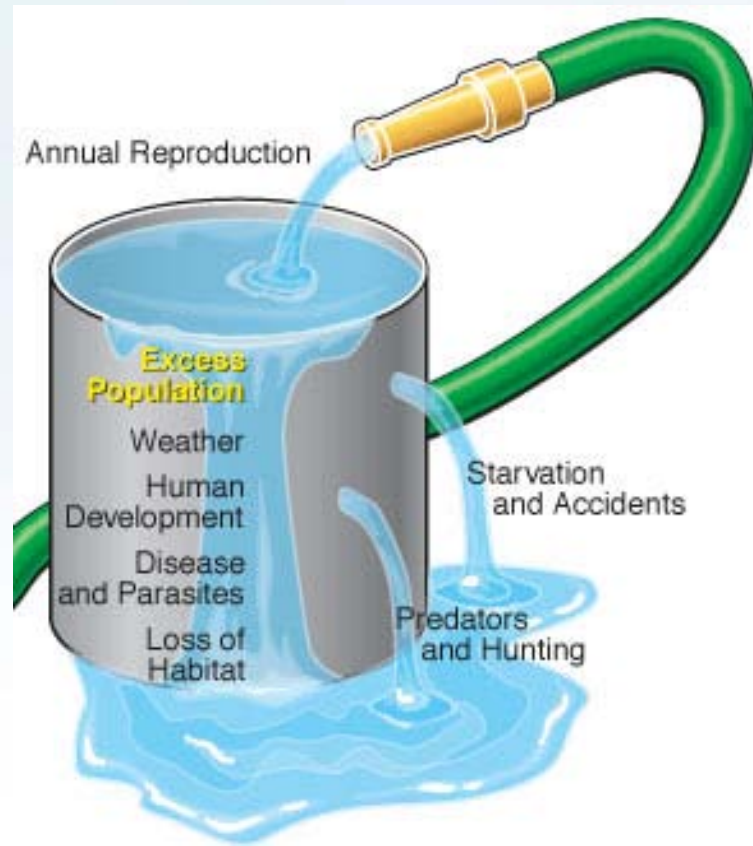
- With invaded swamp forest which domineer by *Melaleuca* sp even close to the beach in the area, acacia mangium actually been shown that original properties. According Sindusuwarno and Utomo (1981), in his native habitat (Queensland) the acacia mangium found in mangrove forests




Three of the many mechanisms invasion of acacia to conservation area is as follows:

- First, acacia seeds carried by transport equipment
- Second, the seeds carried by runoff from the area plantation forest to sea.
- Third, acacia seedling and grow rapidly after fire into forests

most primary forest ecosystems are resistant and resilient to natural disturbances





- 
- the acacia species which invaded have similar characteristics for ecosystem, there are:

1. Intolerant

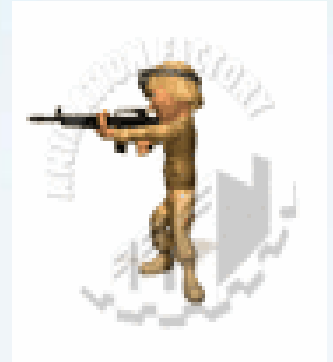
2. Very quick to response environmental degradation

3. Able to survive in a dry climate

# Biodiversity and resilience forest



Should we reject the forest plantation?



# Should we reject the plantation forest ?



# Local Species can be develop

No	Jenis	Berat Jenis	Kualitas Pulp
1.	<i>Paraserianthes falcataria</i>	0.37	I
2.	<i>Anthocephallus cadamba</i>	0.42	I
3.	<i>Cananga odorata</i>	0.43	I
4.	<i>Macaranga hypoleuca</i>	0.34	I
5.	<i>Alstonia angustiloba</i>	0.36	I
6.	<i>Camptosperma auriculata</i>	0.4	I
7.	<i>Duabanga mollucana</i>	0.39	II

# Conclusion

- Biodiversity has a direct relationship with the resilience of forest state

Acacia respond quickly to environmental damage, but also the other species become invaded

Loss of biodiversity will be difficult to restore and will change the resistance of forests in the state to restore ecosystem

Needs further research, concerning data collection, modeling and prediction of ecological damage

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