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DO WE NEED A ROAD MAP FOR TROPICAL PEAT?

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QUESTIONS :

- **Is tropical peat more useful for agriculture or should it be preserved as swamp land that can preserve carbon, oxygen and water?**
- **Why, in certain countries is there a high risk of tropical peat burning while in others it is never seriously damaged?**
- **How should we deal with and handle intelligently tropical peat burning incidents and their unpleasant consequences and impacts on other countries?**
- **How should we deal with the difference in opinions between Government and NGOs?**
- **What are the appropriate international solutions to decrease the detrimental effects of tropical peat, especially on global warming?**

ANSWER

- We need an iterative planning tool
- The tool is :

A ROAD MAP !!!

A PROCESS OF LEARNING

- Over the last five decades, there has been a process of learning, :

  Which started from knowing nothing – being curious and wanting to know – knowledge began in some areas –

  we carefully knew – we just knew –

  (again) being curious and wanting to know.

COMPARISON OF NATURAL RESOURCE FUNCTIONS OF PEAT SWAMP FOREST WITH PEATLAND DEGRADED DURING INCEPTION OF THE MEGA RICE PROJECT IN CENTRAL KALIMANTAN

NATURAL PEAT SWAMP FOREST	*MEGA RICE PROJECT AREA*
High biodiversity rain forest	Low biodiversity degraded landscape
Orang utan habitat	Orang utan killed or captured
Hydrology intact	Hydrology disrupted
Climate moderator	Climate extremes frequent
Chemical filter	Purification ability lost
Major carbon store	Major carbon losses
Fire resistant	Fire prone
Access difficult	Access facilitated
Good resources for local people	Only stealing trees
Sustainable	Unsustainable
Few illegal activities	Illegal activities promoted

Based on Rieley, 1999

DONAL CLARKE'S THESIS

Tropical Peat Potential Benefits:

(a) Is the project important for human life?

(b) If yes, is the tropical peatland to be used abundant or will the project affect the whole of tropical peatland?

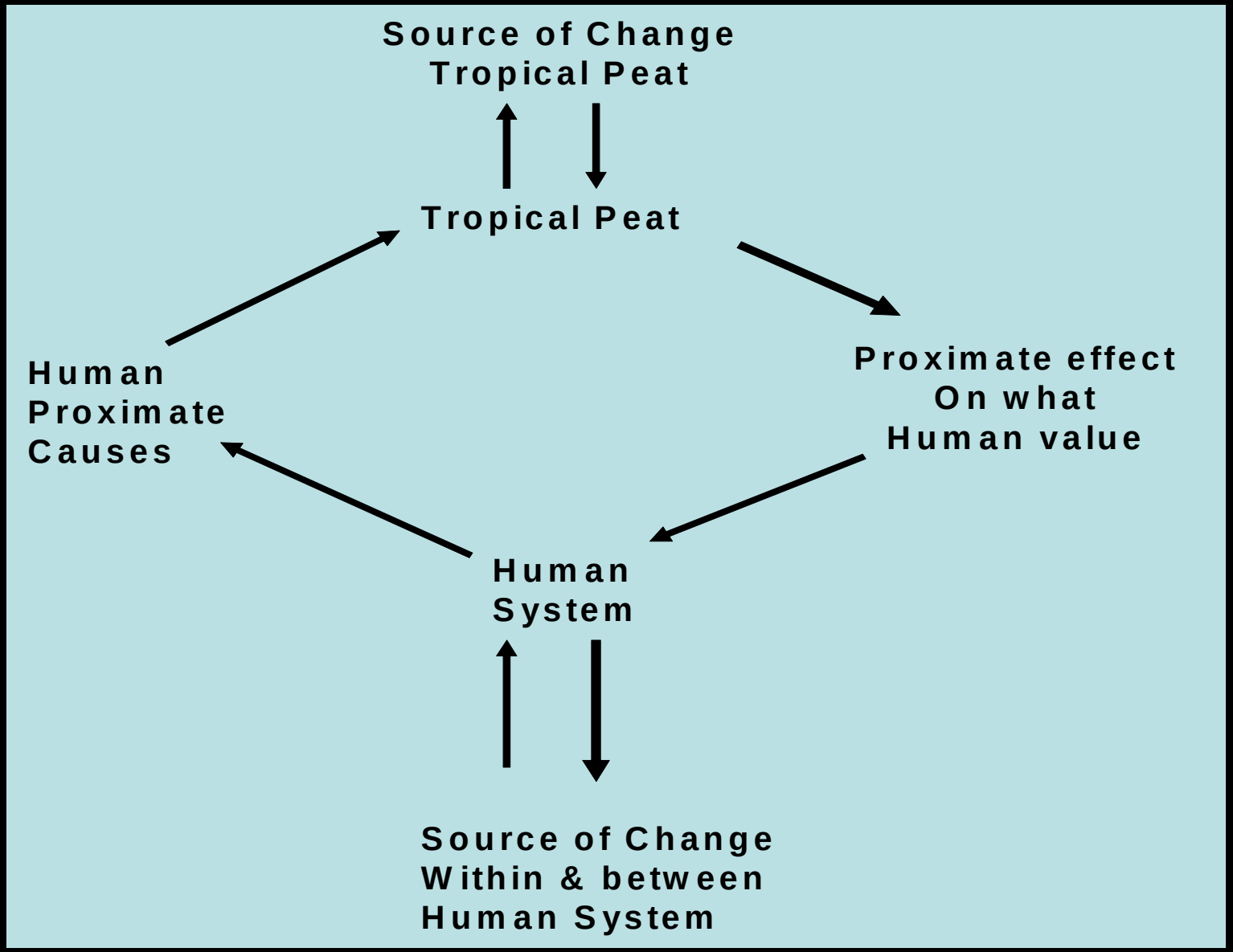
(c) If it will, how badly?

(d) Can the damage be contained or reversed?

(e) What is the objective of the project and is it project achievable

International Seminar and Workshop on Tropical Peatland in Yogyakarta (Clarke, 2008)

INTERACTION BETWEEN HUMAN AND TROPICAL PEAT SUBSYSTEMS.

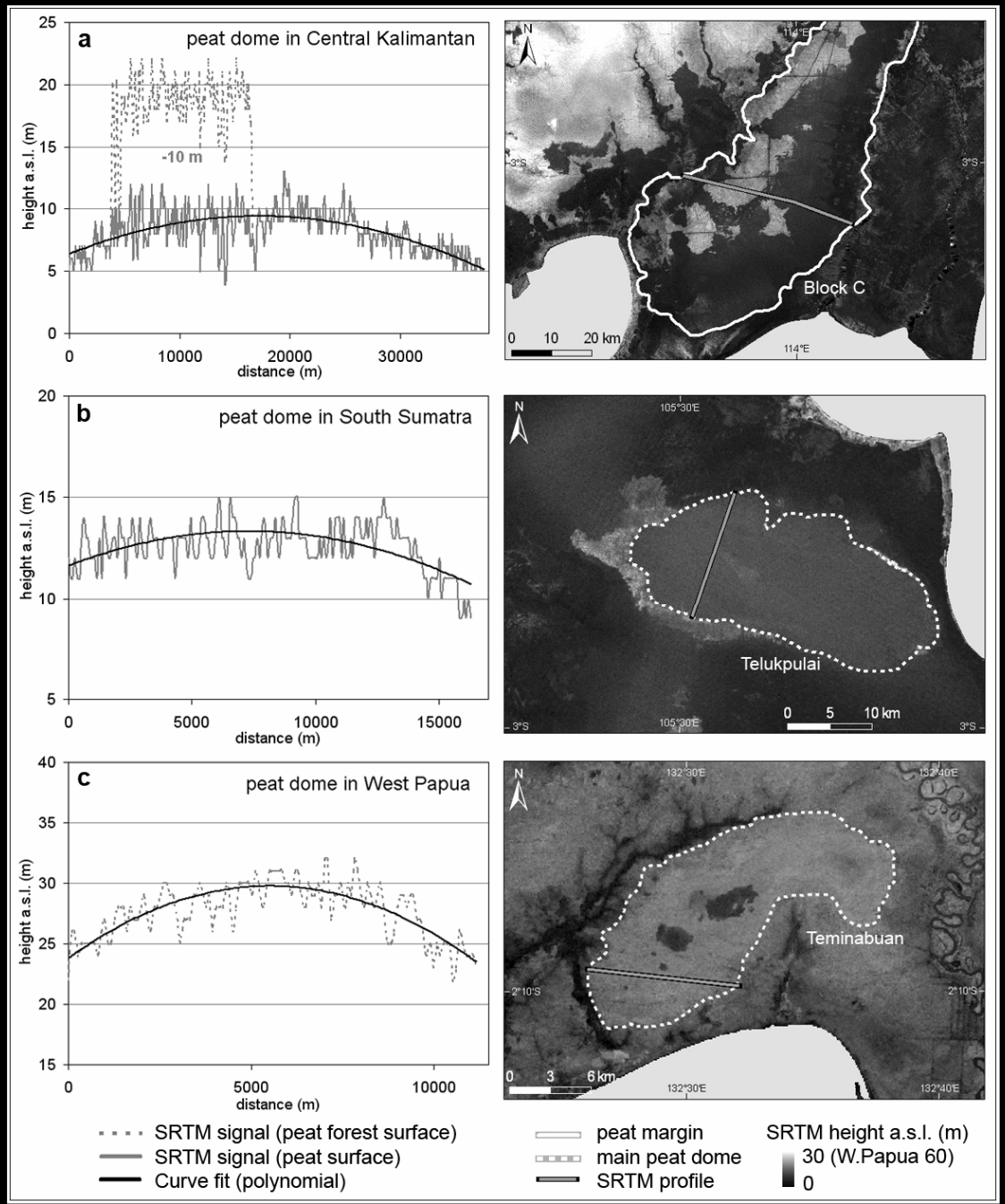


PRIORITY CONSIDERATIONS FOR TROPICAL PEATLAND

1. TROPICAL PEAT DOME
2. WATER IN TROPICAL PEAT
3. WATER LEVEL CONTROL
4. STRATEGIES FOR CARBON MANAGEMENT
5. CARBON CONSERVATION
6. CARBON SEQUESTRATION

RTSM ELEVATION PROFILE OF PEAT DOME

TYPICAL FOR THE INDONESIAN (Based on ESA and MASLI, 2007)



a. **The peat dome, and therefore the flora and fauna, react strongly and in as yet uncertain ways to changes in hydrology.**

b. **As soon as water is allowed to drain away from the peat dome at a rate in excess of the natural rate, the peat from which the water flows starts to dry out.**

c. **This has a negative effect on the flora and fauna and the numerous ecological functions of the peat dome.**

…Based on Penguang Manggil)

PRIORITY CONSIDERATIONS FOR TROPICAL PEATLAND

2. WATER LEVEL CONTROL

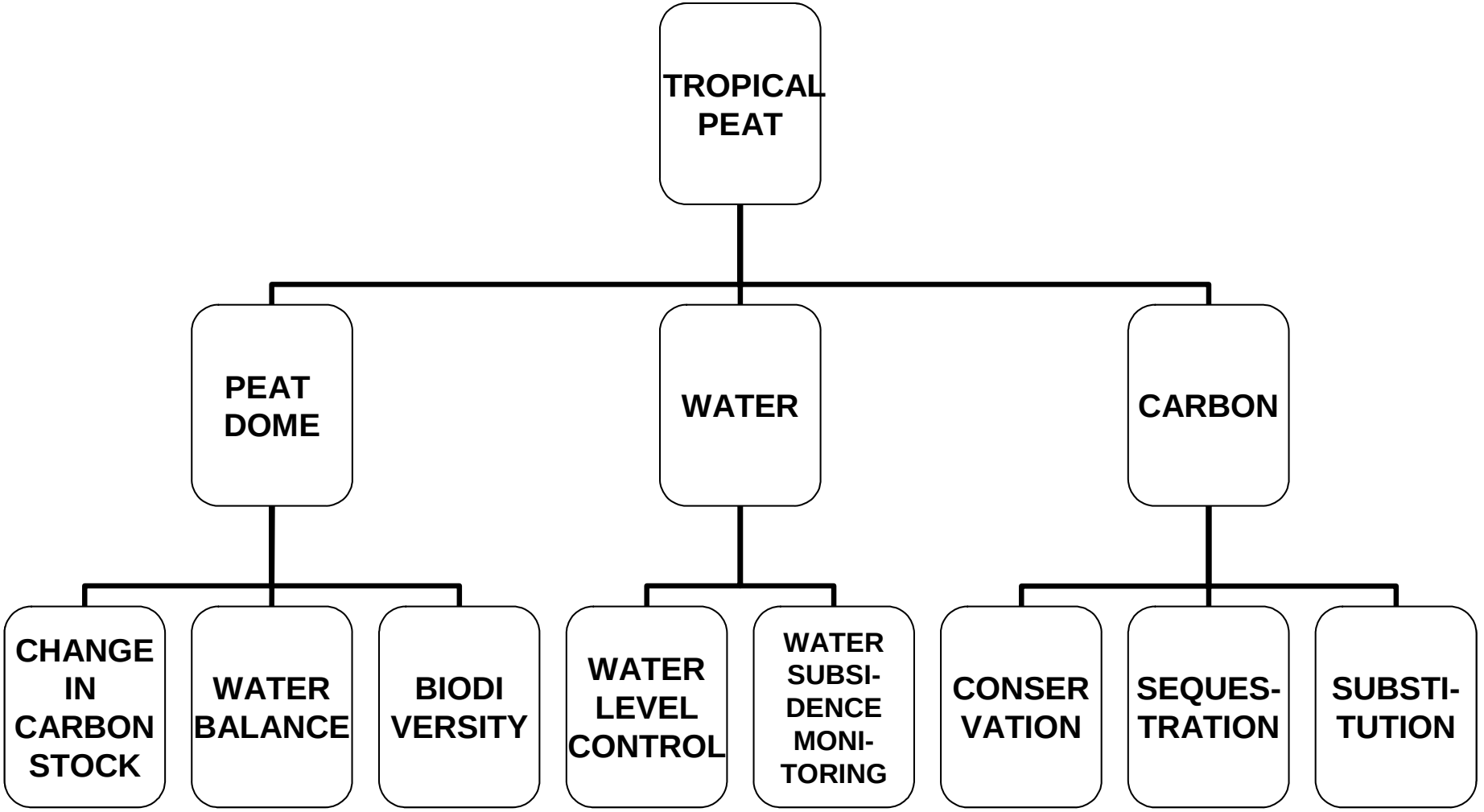
a. The water table should be maintained at less than 100 cm below the peat surface.

b. Minimize peat oxidation (decomposition) and subsidence and to control water

c. Monitor water levels and subsidence rates.

PRIORITY CONSIDERATIONS FOR TROPICAL PEATLAND

3. STRATEGIES FOR CARBON MANAGEMENT



PRIORITY CONSIDERATIONS FOR TROPICAL PEATLAND

4. ***CARBON CONSERVATION***

Options include afforestation, reforestation and restoration of degraded peatland. Improved silvicultural techniques need to be developed and applied together with appropriate agroforestry practices on agricultural peatland.

5. ***CARBON SEQUESTRATION***

It is essential to conserve biomass and carbon in existing forests, both above and below ground. There is a need for improved harvesting practices and better wood processing efficiency, fire protection and more effective control of burning.

6. ***CARBON SUBSTITUTION***

Increased conversion of forest biomass into durable wood products for use in place of energy-intensive materials should be investigated. There should also be increased use of biofuels (*e.g.* introduction of bioenergy plantations), enhanced utilization of harvesting waste (*e.g.* sawdust) for biofuel (Jauhiainen, 2004).

WE NEED A ROAD MAP FOR TROPICAL PEAT, WHY…?

- The road map would become a protocol of tropical peat potential benefit, for all of us and the world.

CONCLUSIONS

- We need a road map which contains certain rules to guide us, even the world as tropical peat owner.
- IPS needs to be involved in, formulating the road map, since nowadays tropical peat is not only owned by certain countries but is also the responsibility of the whole world.
- A road map for tropical peat benefits has to be made internationally in years to come, starting from this Tullamore Peat Congress.
- The road map should become a protocol of tropical peat potential benefit, for all of us throughout the world.
- It would be a great foundation for knowledge & technology of tropical peat tropical benefit in certain aspects of life, prosperity, and nation gains in the world.

THANK YOU