

Tropical Peatland Restoration based on ABCDEFs Securities

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Abstract

Lets remind what is “The Tropical Peatland Principle”. Tropical Peatland is typical case of wetland, then water is most functional element among other wetland. Especially, high water table is most rational principal for peat formation and peat conservation. Because oxygen permeability is a key factor of peat decomposition. Even if peat keep wet condition, O₂ permeate until water table of peatland, then peat is decomposed quickly.

This “The Tropical Peatland Principle” is summarized as new concept on ABCDEFs Securities as follow, because tropical natural peatland is evaluated as **High Carbon Reservoir, High Water Reservoir, High Biomass Productivity, High Biodiversity** which contribute to high value of natural capital.

-**A**quatic /water reservoir Ecosystem security

-**B**iodiversity security: High biodiversity by mix-planting and nature-conservation around peat dome

-**C**limate Change security: Mitigation as Carbon Emission Reduction & Adaptation as High Biomass Production (enough water) against El Niño

-**D**isaster: Fire & Haze security

-**E**nergy security: Biomass energy from sago starch and residuals, and other biomass materials in Sago based Ecosystem

-**F**ood/Feed security: Sago starch for food and feed (animal husbandry and fish culture)

-social security: PES and CSR&CSV by several Credit (REDD+, JCM) and SDGs

Indonesia Peatland Restoration Agency (Badan Restorasi Gambut) (BRG) has started around 200Mha peatland restoration for five year, for which it is required as 1) low price and effective technologies on peatland restoration, 2) added-value of plant products such as sago starch and biomass, 3) integrated management system (Satoyama system or paludiculture (Latin 'palus' = swamp)), and 4) social and global economic mechanisms (PES, REDD+, JCM, SDGs, and so on).

Even in one missing of the ABCDEFs Securities, peatland restoration will not success peatland restoration program.

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