



Selamat
Pagi



Jakarta | 16 September 2021



Penyelenggaraan Konservasi

di taman nasional
Way Kambas



Jakarta | 16 September 2021

KUSWANDONO
TN Way Kambas

KONSERVASI Sumberdaya Alam Hayati & Ekosistemnya

→ *Undang-undang* nomor 5/ 1990

Berjalan
BAIK

prinsip KONSERVASI

1. **Perlindungan** sistem penyangga kehidupan
2. **Pengawetan** keanekaragaman jenis tumbuhan dan satwa beserta ekosistemnya
3. **Pemanfaatan lestari** sumber daya alam hayati dan ekosistemnya

1

PRECIPITATION, DEPOSITION / DESUBLIMATION

Water droplets fall from clouds as drizzle, rain, snow, or ice.

ACCUMULATION, SNOWMELT, MELTWATER, SUBLIMATION, DESUBLIMATION/DEPOSITION

Snow and ice accumulate, later melting back into liquid water, or turning into vapor.

ADVECTION

Winds move clouds through the atmosphere.

CONDENSATION, CLOUDS, FOG

Water vapor rises and condenses as clouds.

EVAPORATION

Heat from the sun causes water to evaporate.

HYDROSPHERE, OCEANS

The oceans contain 97% of Earth's water.

SURFACE RUNOFF, CHANNEL RUNOFF, RESERVOIRS

Water flows above ground as runoff, forming streams, rivers, swamps, ponds, and lakes.

PLANT UPTAKE, INTERCEPTION, TRANSPIRATION

Plants take up water from the ground, and later transpire it back into the air.

INFILTRATION, PERCOLATION, SUBSURFACE FLOW, AQUIFER, WATER TABLE, SEEPAGE, SPRING, WELL

Water is soaked into the ground, flows below it, and seeps back out enriched in minerals.

VOLCANIC STEAM, GEYSERS, SUBDUCTION

Water penetrates the earth's crust, and comes back out as geysers or volcanic steam

The Water Cycle

Water moves around our planet by the processes shown here. The water cycle shapes landscapes, transports minerals, and is essential to most life and ecosystems on the planet.

Perlindungan sistem penyangga kehidupan

2 Pengawetan keanekaragaman jenis tumbuhan dan satwa beserta ekosistemnya



THREE MAIN TYPES OF RAIN FOREST

There are three major types of rain forest: tropical rain forest, temperate rain forest, and montane rain forest. Each type has its own unique characteristics and is found in different parts of the world.

Type	Location	Climate	Height
Tropical Rain Forest	South America, Africa, Asia	Hot and wet	Up to 100m
Temperate Rain Forest	North America, Europe, Asia	Mild and wet	Up to 100m
Montane Rain Forest	Andes, Himalayas, Alps	Cool and wet	Up to 100m

1. Tropical Rain Forest

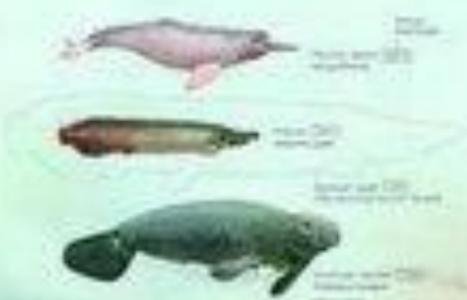
Tropical rain forests are found in the equatorial regions of the world. They are characterized by high temperatures and high rainfall throughout the year.



Diagram illustrating the structure of a tropical rain forest, showing the canopy, emergent layer, and forest floor.

2. Temperate Rain Forest

Temperate rain forests are found in the temperate regions of the world. They are characterized by mild temperatures and high rainfall.



Illustrations of aquatic animals found in temperate rain forests, including a salmon, a trout, and a bear.

3. Montane Rain Forest

Montane rain forests are found in the mountainous regions of the world. They are characterized by cool temperatures and high rainfall.



TOUCAN
The toucan is a large bird with a large, colorful beak. It is found in the tropical rain forests of Central and South America.

PARROT
Parrots are colorful birds found in tropical rain forests. They are known for their ability to mimic human speech.

MONKEY
Monkeys are primates found in tropical rain forests. They are known for their intelligence and social behavior.

FROG
Frogs are amphibians found in tropical rain forests. They are known for their vibrant colors and ability to camouflage.

LEOPARD
Leopards are big cats found in tropical rain forests. They are known for their spotted fur and hunting skills.

ELEPHANT
Elephants are large mammals found in tropical rain forests. They are known for their intelligence and social behavior.



2 Pengawetan keanekaragaman hayati di TN Way Kambas

Pengelolaan spesies KUNCI di TNWK (Badak, Gajah, dan Harimau)

UU 5/1990

**Berjalan
BAIK**

Ketiga spesies kunci tersebut merupakan spesies bendera, spesies payung, dan terutama berfungsi untuk menjaga keseimbangan ekosistem SEKALIGUS **kebanggaan RI** di mata dunia internasional

Perlu **PENGUATAN** dalam revisi UU5/1990:

- **Penguatan kerjasama multi pihak (terutama penegak hukum)** dalam Pengelolaan untuk satwa prioritas negara RI.
- Ada 2 kategori badak yang dikelola yaitu **badak liar & program SRS**: diperlukan atensi dari multipihak.

• Bioprospeksi menurut BAPPENAS



R O A D M A P PEMBANGUNAN HUTAN

2 0 4 5



Forestry 4.0



Now

Redesign
Kawasan



Precondition



2025

Kemantapan
Penataan dan
Penggunaan
Kawasan Hutan



SFM



2030

Pengelolaan
Hutan
Berkelanjutan
Berbasiskan
Masyarakat



Pasar Dunia



2035

Menguasai
Pangsa Pasar
3 Dunia
Produk Hasil
Hutan



Bioprospeksi



2040

Menguasai
Pangsa
Pasar
Bioprospek
si Dunia



Goal



2045

Sumber
Daya Hutan
Untuk
Kedaulatan
Pangan
Energi dan
Air

3 Pemanfaatan lestari sumber daya alam hayati dan ekosistem

UU 5/1990

**Berjalan
BAIK**

Eksplorasi bioprospeksi dan perlindungan plasma nutfah di TNWK:

- Indonesia memiliki **sumberdaya alam** dan tradisi yang sangat baik dalam **mendukung upaya bioprospeksi**.
- Dalam **roadmap pembangunan hutan 2045** (Bappenas): **2040 Indonesia kuasai pangsa pasar bioprospeksi DUNIA**

Perlu **PENGUATAN** dalam revisi UU5/1990:

- **Penguatan kerjasama** multi pihak untuk menjadi peluang **kesejahteraan rakyat & income negara**
- Eksplorasi dan pemanfaatan **mikroba** dari TN Gunung Ciremai: **PGPR** (penyubur tanaman), **pathogen hama dan antifrost**
- Pemanfaatan **kotoran gajah** untuk **pupuk, bricket tanaman miskin hara, biogas** dll memiliki peluang untuk meningkatkan **kesejahteraan rakyat**

BIOPROSPEKSI

Bioprospeksi adalah eksplorasi dari keanekaragaman hayati menjadi sumber daya **genetik** dan **biokimia** yang mempunyai nilai secara **komersial** (Polski, 2005). Menjadi solusi Pertanian Pegunungan dan perubahan Iklim (**Pertanian Sehat**)

Menghasilkan 3 kelompok mikroba berguna bagi tanaman dari TNGC yaitu: cendawan patogen, bakteri pemacu pertumbuhan (PGPR) dan bakteri antifrost



MANFAAT PERTANIAN SEHAT



Biaya Lebih Murah



Waktu Panen Lebih Cepat



Harga Jual Lebih Tinggi



Kualitas Lebih Bagus



Kualitas Beras Lebih Baik, Tidak Kuning dan Tidak Bau Bila Dimasak

Lokasi Demplot Pertanian Sehat di **KUNINGAN** (Bandorasa Kulon, Setianegara, Cibuntu dan Gunung Sirah) dan di **MAJALENGKA** (Bantaragung, Sunia, Cikaracak) dan di **INDRAMAYU**

Terima kasih

Hatur

Nuhun

