CRC 990



Ecological and Socioeconomic Functions of Tropical Lowland Rainforest Transformation Systems Sumatra, Indonesia



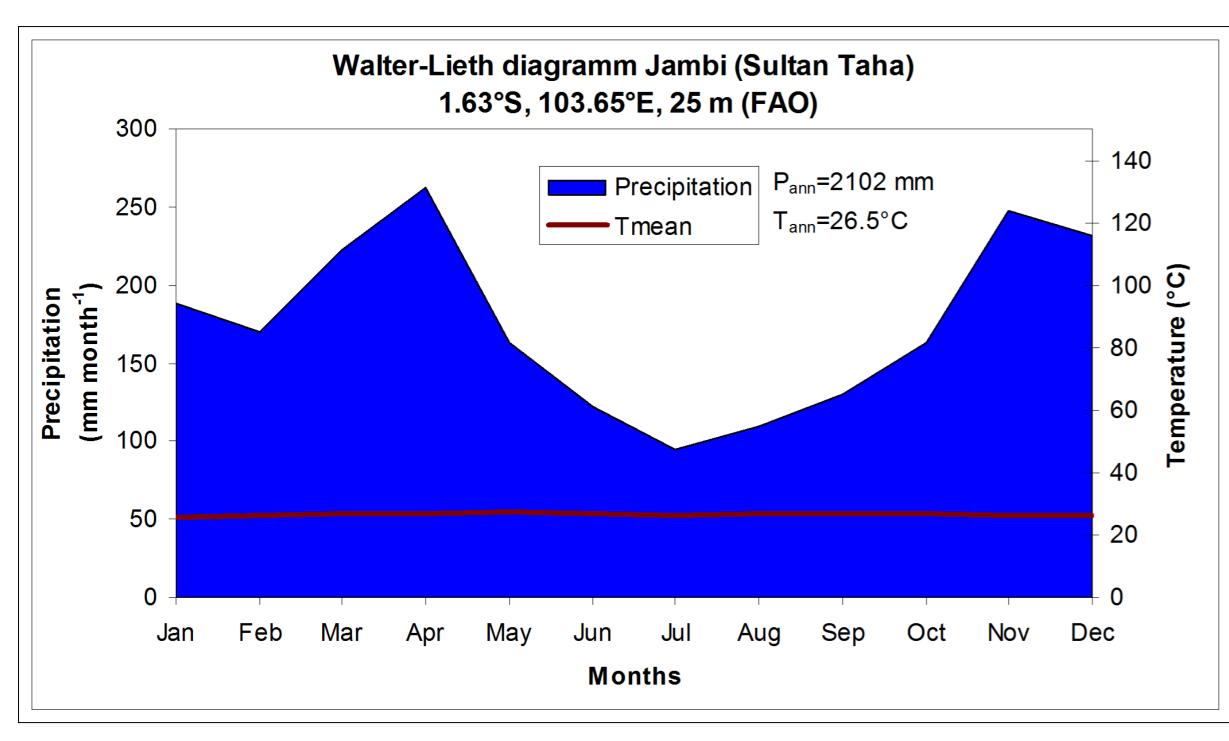
Z02

Central Scientific Support – Meteorological Data

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Aim: To provide CRC 990 with meteorological data from core and reference sites

Climatology of Jambi (1960-1990):



Meteorological stations at core plots

• 1 meteo station in each core plot

Plot distribution / core sites

- 2 Landscapes:
- 1) Harapan
- 2) Bukit Duabelas

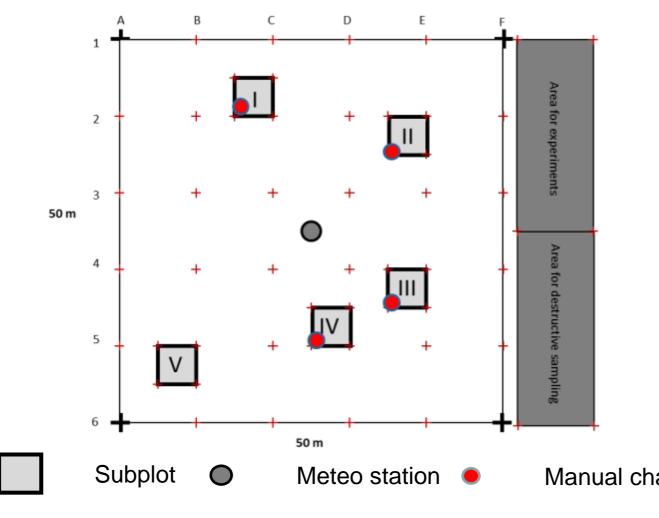
4 Transformation systems

F = forest

O = oil palm

R = rubber plantation

J = jungle rubber



Plot Scheme in Core Sites

• 4 replicates for each landscape and transformation system

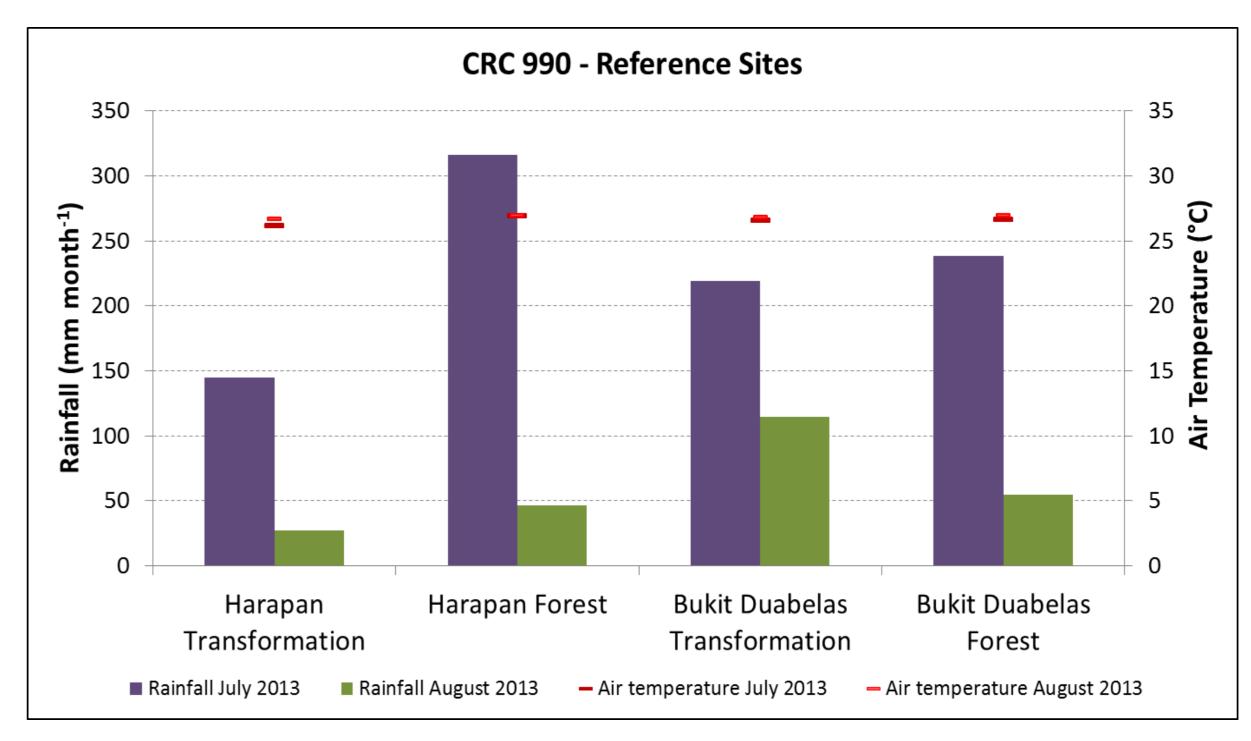
→ 16 core sites per landscape → 32 core sites in total

- Variables measured (1 Hz, Average: hourly data):
 - Air Temperature
 - Relative humidity
 - Soil temperature
 - Soil moisture





Rainfall and Air Temperature in Jambi (July-August 2013):



Meteorological stations at reference sites

- 5 reference meteo stations :
 - Harapan landscape:
 - Forest: Reki
 - Transformation Systems: Pompa Air (temporary location)
 - Bukit Duabelas landscape:
 - Forest: Permatang Kabau Ranger Station
 - Transformation Systems: Lubuk Kepayang
 - UNJA





Variables measured (1Hz, Average: 10 min. data):

- Wind speed, direction (3.5 m)
- Net radiation (3m)
- PAR (3m)
- Short wave radiation (3m)
- Air Temperature (0.5 and 2 m)
- Relative Humidity (0.5 and 2 m)
- Soil Moisture (x3 0.3m)
- Soil Temperature (x3 0.3m)
- Rainfall (x2)
- Air Pressure
- Soil Heat Flux

All measurements available from June/July 2013







