



FORESTRY DEPARTMENT

Presented by: Okieve Kerr

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WHO WE ARE

The Forestry Department is the Executive Agency charged with managing and conserving Jamaica's forest resources, particularly those found on Crown Lands.

About 40 per cent or 439,000 hectares of Jamaica is forested and of that amount, the Agency manages 117,000 hectares. The remainder, almost 325,000 hectares are privately owned.



WHO WE ARE



VISION

Jamaica: a country where we value our forest ecosystem and use its resources in a responsible manner

MISSION

Manage our forests in an effective and responsible manner for the benefit of current and future generations.

WHAT WE DO

 **Develop Tree Nurseries**



 **Prepare forest management plans**



 **Conduct Scientific assessments of Jamaica's forest resources**

 **Promote agroforestry practices**

WHAT WE DO

- Conduct reforestation programmes on public and private lands



- Provide recreation facilities



- Manage plantations and natural forests

- Provide forest extension services

- Engage in public education

WHO AM I?



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Informed Investment Calculated Yield



Presentation aims



Introduction into the investment possibilities of the Forest Sector

Introduction of Yield curve and its use in informing investment

Conditions that support ideal Growth and Performance.

- Water availability

The planting site is to have adequate water availability to ensure the investments optimal growth over time, as lack of water can lead to stunted growth or even death of the plants.

- Nutrient availability
- Silvicultural practices

Such as strategic thinning exercises, healthy pruning and fertilizer regime

Yield Model/Curve

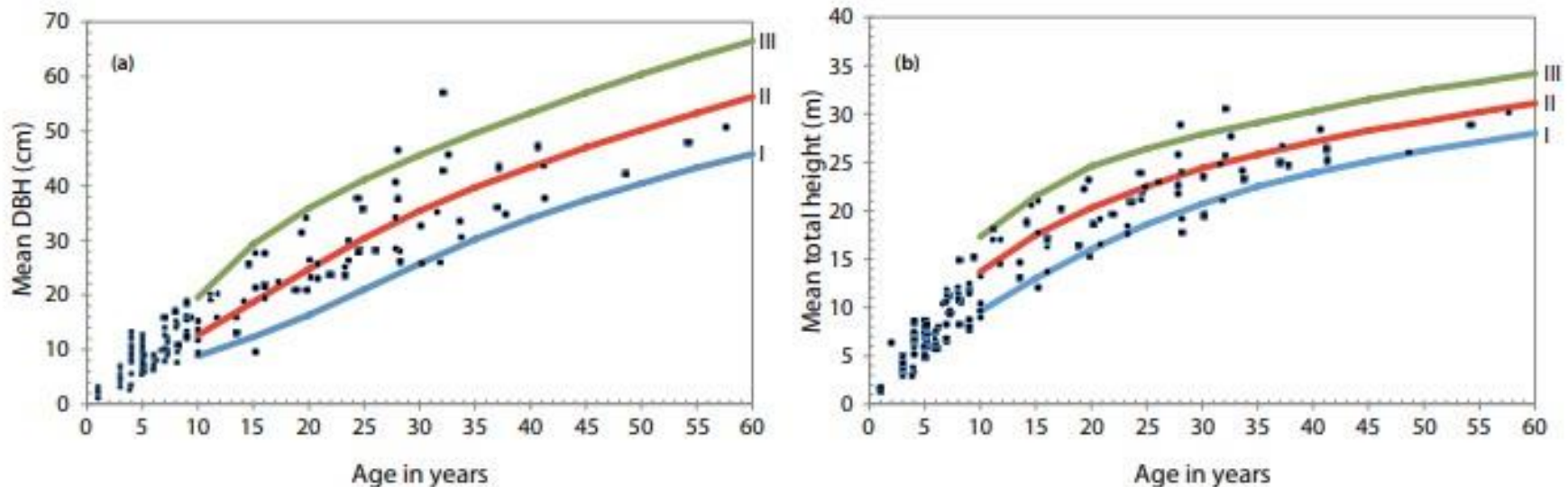


Figure 12. The relationships between age and diameter (a) and age and height (b) of *S. macrophylla* taken from measurements of temporary plots in South Kalimantan and permanent plots in Java and Nusa Tenggara (points: mean values of the plots, lines: values taken from the yield table developed by Wulfinf (1949)). Roman numerals indicate site quality class with a low class number indicating poor site quality.

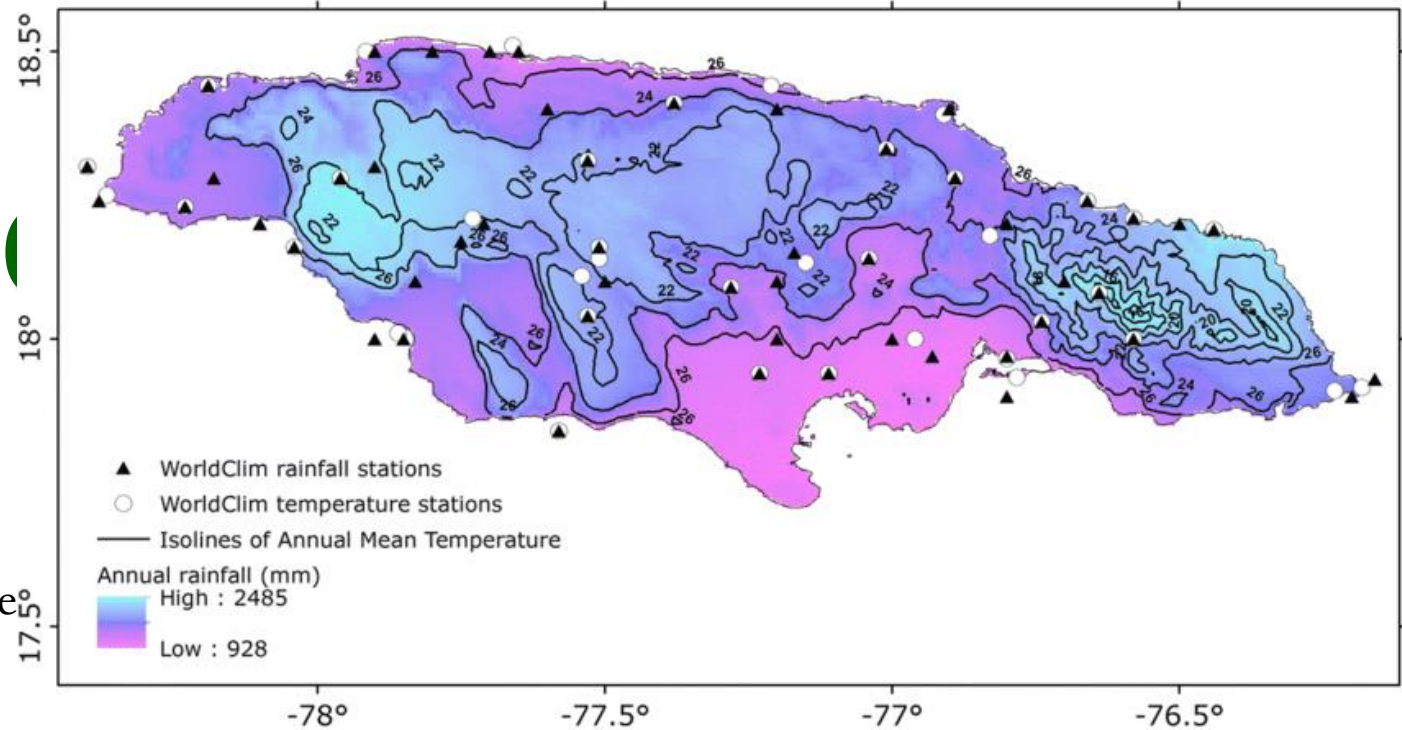
Yield Modelling by the Forestry Department

The Forestry Department has started field assessments with the aim of developing yield models for six species of economic importance, namely the Jamaican Mahogany (*Swietenia mahagoni*), the West Indian Cedar (*Cedrela odorata*), Teak (*Tectona grandis*), Santa Maria (*Calophyllum calaba*), Spanish Elm (*Cordia gerascanthus*), and Blue Mahoe (*Hibiscus elatus*).

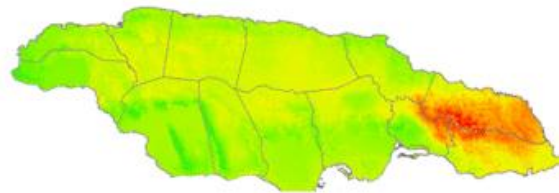


Data

- Age of tree
- DBH (Diameter)
- Height
- Canopy Position
- Soil Map data
- Climatic data



Temperature change by 2080 (RCP 2.6)



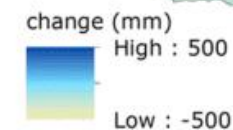
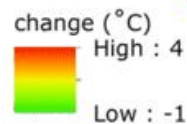
Rainfall change by 2080 (RCP 2.6)



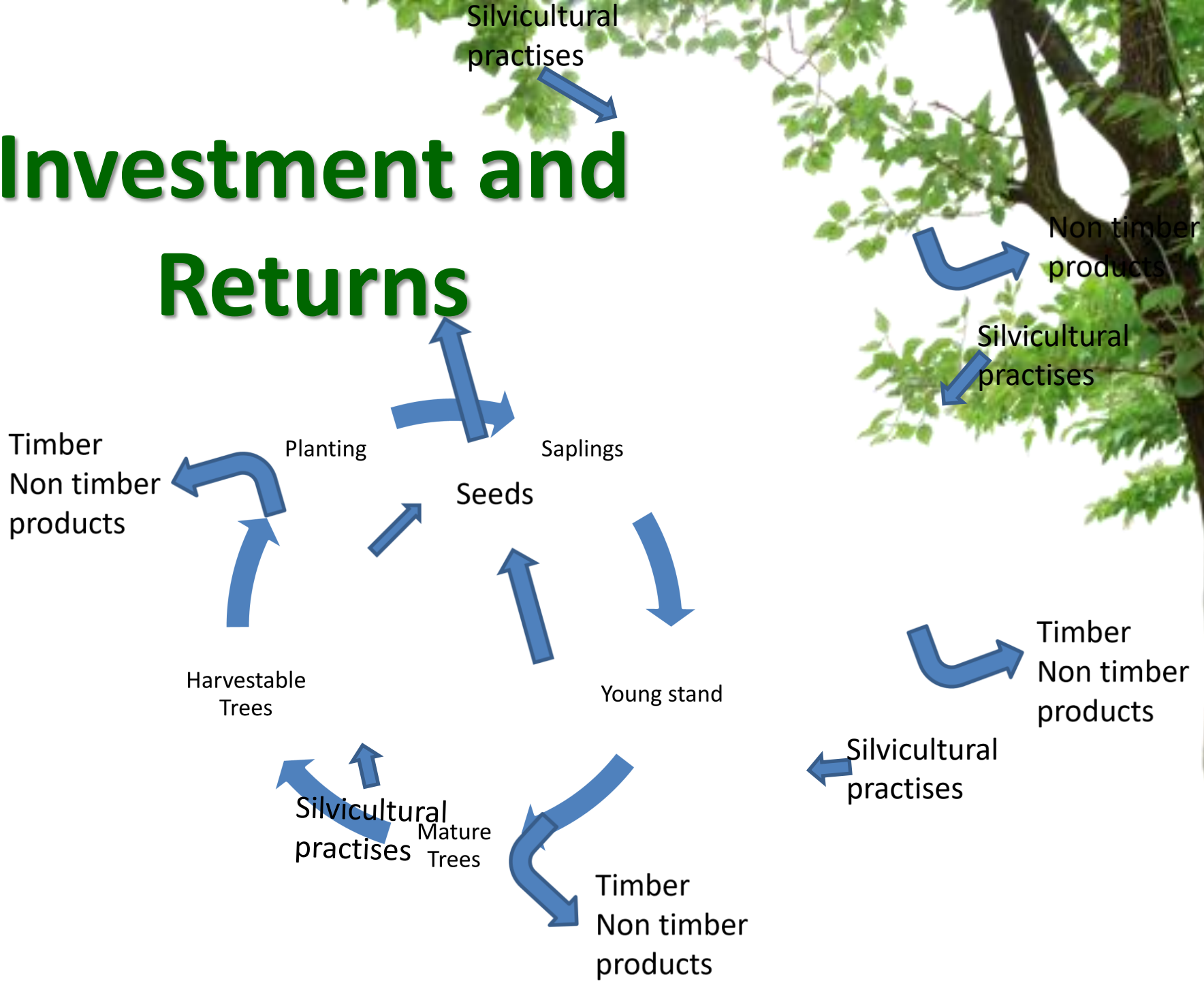
Temperature change by 2080 (RCP 8.5)



Rainfall change by 2080 (RCP 8.5)



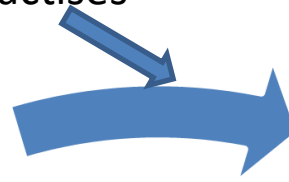
Investment and Returns



Assuming

We have a Jamaican Mahogany tree
The age is 30 years old
The DBH is 48.5 cm
The Height is 18 m
Cubic meter to board foot conversion factor 5.5
Inflation which has been an average of 5.56
over the last 10 years remains constant
\$1,657.79 per board foot

Silvicultural practises



Planting

Saplings

Non timber products



Silvicultural practises



Basal area = 0.1847 sq. m per tree

Volume = 1.76 cub. m per tree

Cub. foot = 62.128 per tree

Board foot = 341.704 per tree

Return = \$ 566,473 per tree

100 trees gives a return of \$56.6 Mil

Timber
Non timber products



Harvestable Trees

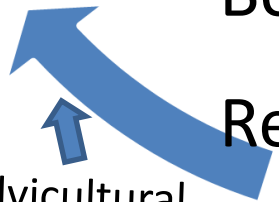
seeds



Timber
Non timber products

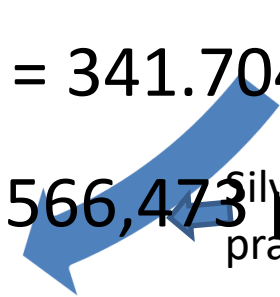


Silvicultural practises



Mature Trees

Silvicultural practises



Timber
Non timber products



Summary

The Forestry sector has great potential to be utilized as a business. With the tool of Yield models, our stakeholders will be availed the knowledge of when to expect their return and more importantly, what to expect. This is expected to encourage and improve the decision making of potential planters to venture into the forest sector.



Contact us

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Find us on Social Media @ForestrvDent





Thank you

