



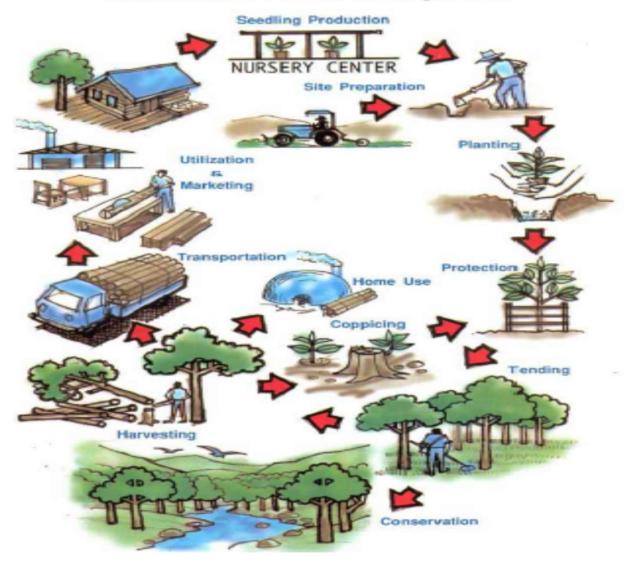
Forestry Guidance

October 2018





"Sustainable Forest Management"







Afforestation

Even if you leave your land, the land does not make job and money...





Forested land would be returned to artificial forest

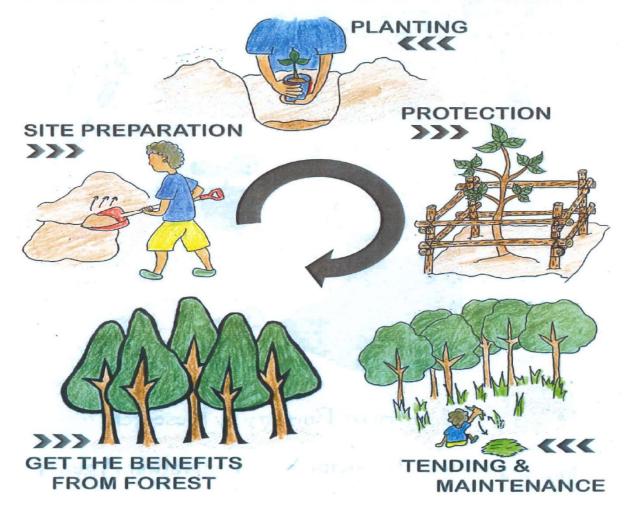






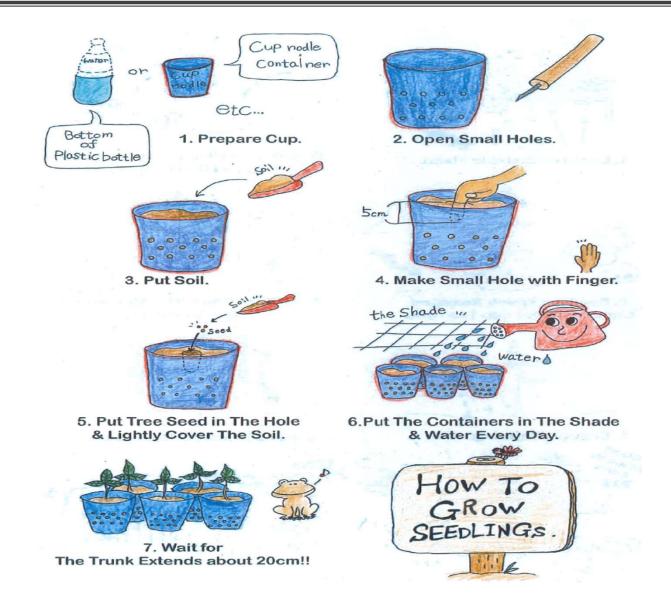


NURSERY CENTER SEEDLING PRODUCTION



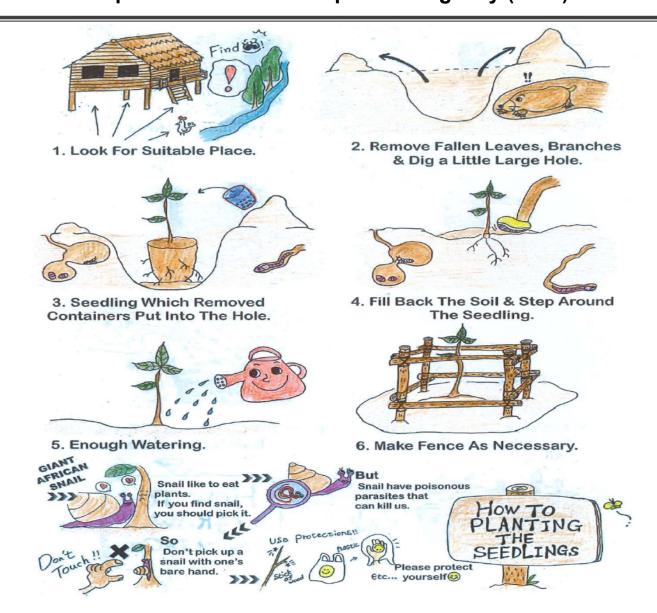








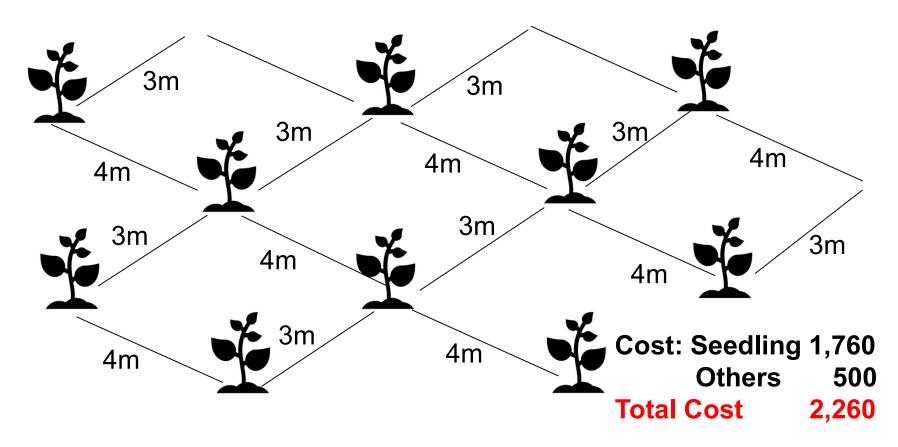








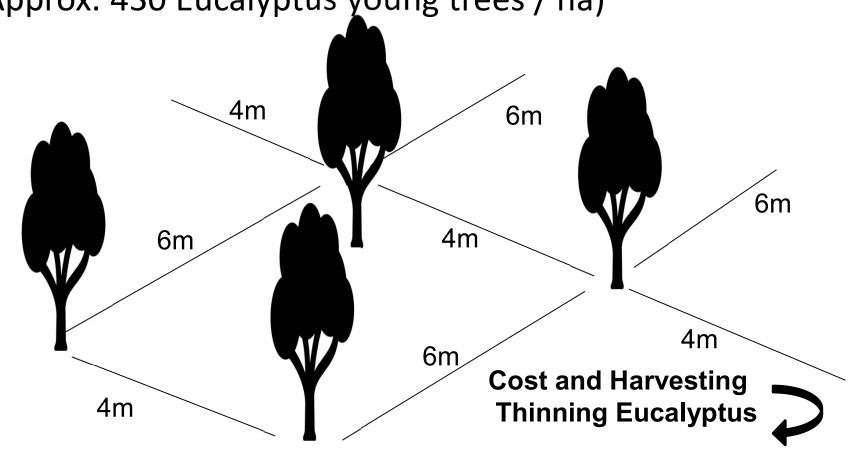
Exemplary Income Predicted as an Example Planting Trees as Eucalyptus Forestation; Eucalyptus (fast growing tree) is Planted at 3x4m Interval (Approx. 880 seedling / ha)







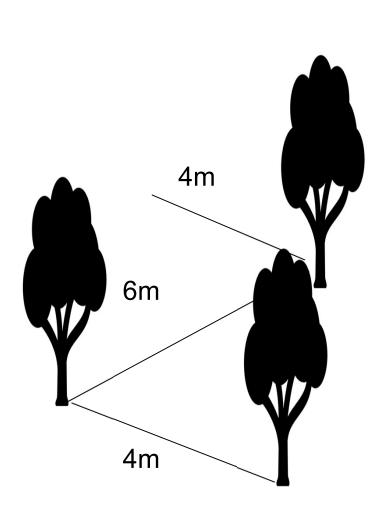
Thinning: 8-12 years after plant Eucalyptus
Thinning young trees and left trees at 4x6m interval.
(Approx. 430 Eucalyptus young trees / ha)







Thinning: 8-12 years after plant Eucalyptus



Revenue of Thinning Eucalyptus 8 years:

DBH 25cm Hight 12 (5) m = 2.015m3 2.015m3 x 50USD/m3 = USD 100.75 100.75USD x 450trees/ha = 45,337.5USD/ha 12 years:

DBH 29cm Hight 18 (6)m = 2.867m3 2.867m3 x 50USDm3 = USD 143.35 143.35USD x 450trees/ha = 64,507.5USD/ha

Cost:

8 years: Reforestation Program: 4,533USD Harvesting Company: 24,482USD Tax: 10,813 12 years: Reforestation Program: 6,451USD Harvesting Company: 34,833USD Tax: 15,385

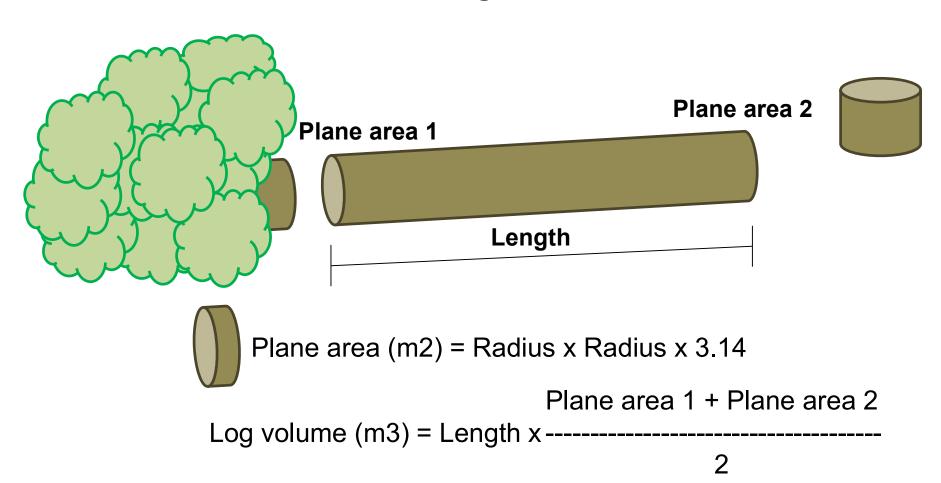
Profit:

8 years: 5,509USD/ha 12 years: 7,838USD/ha





Measurement method of logs



Please attention the unit, usually m, m2, and m3





Example of Selling Price of Log (Based on ITTO Price)

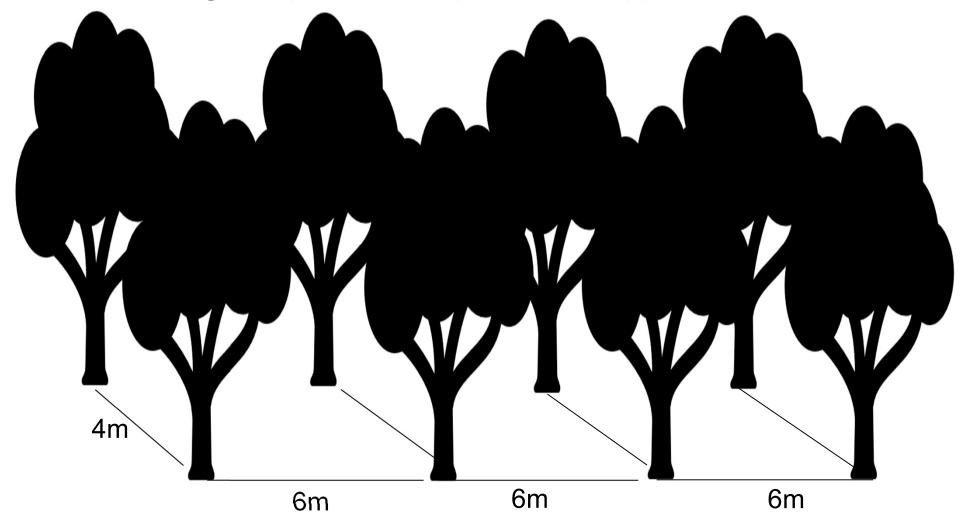
Eucalyptus deglute

SIZE	Price Free on Board (USD/m3)
20 - 29 cm	50
30 - 39 cm	80
40 - 49cm	100
50 - 59 cm	120
Above 60 cm	140





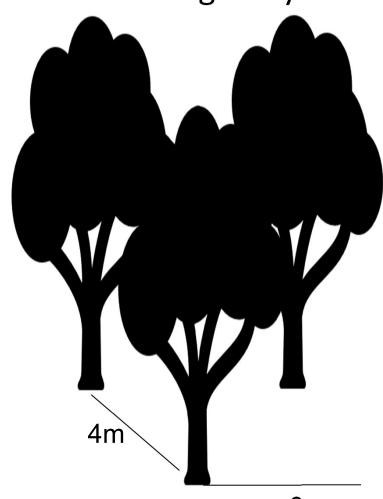
Harvesting: 16 years after plant Eucalyptus







Harvesting: 16 years after plant Eucalyptus



Revenue of Harvesting Eucalyptus

DBH 40cm Hight 24 (9) m = 11.46m3

DBH 31cm Hight 24 (9) m = 6.88m3

DBH 24cm Hight 24 (3) m = 1.37m3

 $11.46m3 \times 100USD/m3 = USD 1,146$

 $6.88m3 \times 90USD/m3 = USD 619$

 $1.37m3 \times 50USD/m3 = USD 68$

 $1,283USD \times 430 \text{trees/ha} = 551,690 USD/ha$

Cost:

Reforestation Program: 55,169USD Harvesting Company: 297,912USD

Tax: 131,508USD

Total Cost: 484,589USD/ha

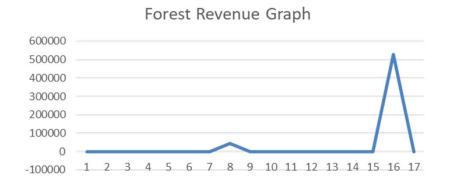
Profit: 67,101USD/ha

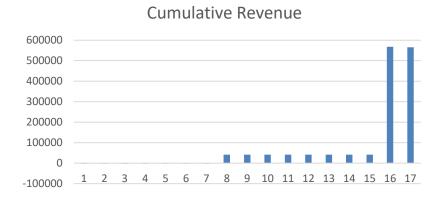
6m





Revenue for 16 years of Eucalyptus afforestation





According the Standard Logging Agreement of the Forest Resources and Timber (Prescribed Forms) Regulations (section 44) in the Forest Resources and Timber Utilization Act, logging companies should plant trees after harvesting, but most companies do not plant trees. Let them plant luxury tree species.





To make more profitable in forestry

20% of harvested logs must be sawn timbers, and up to 80% can be exported as logs.

To create wood products from the timbers and sale them. For example, woodworking products that can be easily made are as follows;















































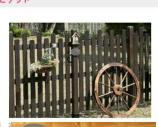


















































Trees are harvested after a local company and a foreignaffiliated harvesting company sign a contract and obtaining approval for logging.



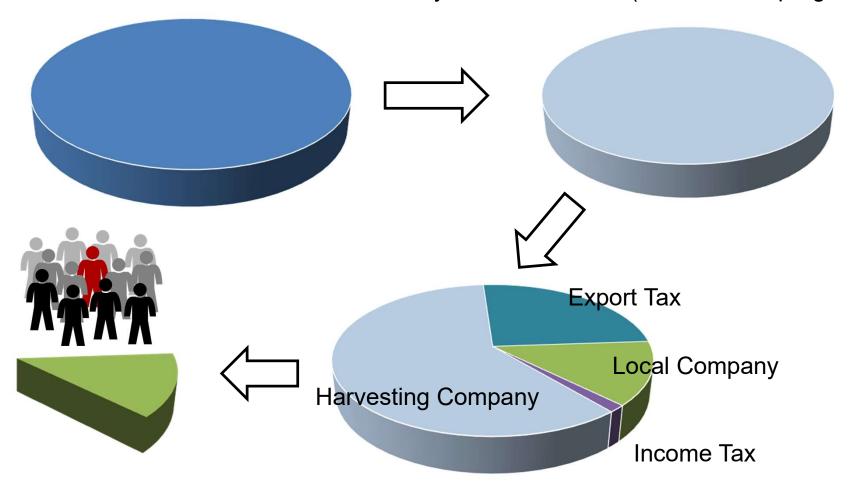






In that case the revenue

10% of the total revenue is missioned by the central bank (reforestation program)

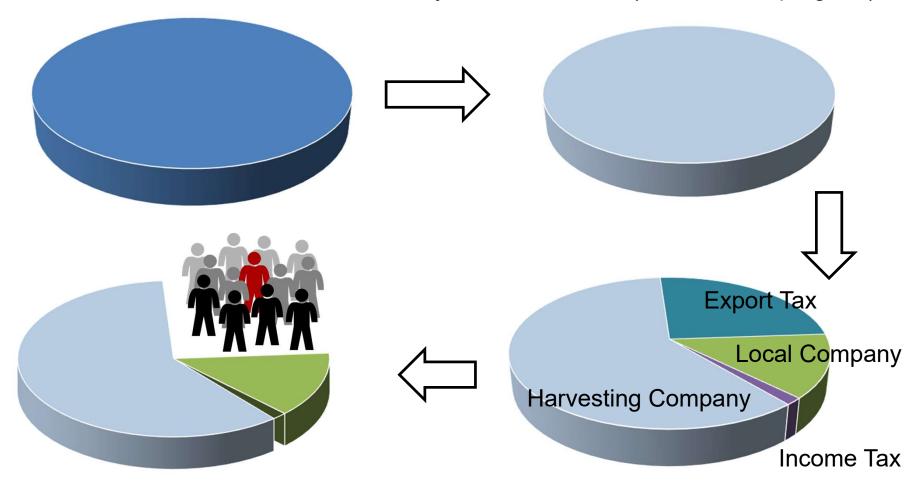






If your community export logs and timbers...

10% of the total revenue is missioned by the central bank (reforestation program)







Ministry of Forest and Research support

Provide the sale price information of logs and timbers



Assist the down streaming process and wood utilization







Thank you