



# Thinning: You decide which good trees grow FAT FAST

THINNING = more space for your good trees to get

LIGHT, WATER & FOOD

THINNING = even tree growth to produce high

quality wood

THINNING = shorter time before a profitable harvest



Thinning & Tree Growth: Even growth makes good wood



Dense plantings: For good form and income generation

## Why do you plant more trees than you are going to sell?

- To make the trees grow tall and straight
- To keep the branches small
- To get income from thinnings for home and commercial use
- To reduce you maintenance costs (time)
- So you have lots of trees to choose your best trees from

#### What is the Difference Between a Thinned and Un-thinned Plantation?

#### **UN-THINNED FOREST**



- -Little \$\$\$
- -Skinny
- -Bent
- -Dead & dving
- -Poor Quality
- -Longer Rotation
- -Stacka Sapwood
- -Tapered logs
- -Low Volume

# THINNING

#### THINNED FOREST



- -Stacka \$\$\$
- -Fat
- -Straight
- -Fast Growing
- -Healthy Trees
- -Short Rotation
- -Truewood
- More Volume
- -Good quality

#### Why do you have to wait 20-25 years?

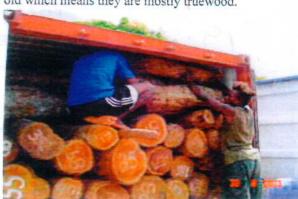
- To get your trees large enough to be useful and highly profitable
- To have a lot of "truewood" (see next page). This is the high value part of your tree; it
  has good colour and wood properties. This takes time.

#### TRUEWOOD: The high value part of your tree



Left: TRUEWOOD, AN AGING PROCESS, the high value part of your tree is the "truewood." This is the part that has the desirable colour and wood properties.

Below: HIGH-VALUE LOGS, these logs are 25 years old which means they are mostly truewood.



#### How do you know when to thin?

- If your trees <u>crowns are touching</u> (canopy closure)
- If you have more trees than outlined in the table below.
- When the lower leaves are yellow or brown.
- When the undergrowth starts to die

### Which trees do you remove & which do you leave? REMOVE, BURN OR RING BARK THE RUBBISH TREES:

- Small, slow growing trees
- Trees that are bent or leaning
- Trees that have two leaders (forked) or large branches
- Trees that are competing with your best trees

#### LEAVE THE GOOD TREES:

- Straight, fast growing trees
- Trees that are not competing with any others



Above: RUBBISH TREES, need to remove small and competing trees.

Below: GOOD TREES, keep the straight good trees growing with no direct competition



#### How many trees to thin? What products will you get? When to do it?

It is important to thin correctly and on time. This table is only a guide. It is an example for Teak planted 4m by 3m, therefore 833 trees per hectare (1 hectare = 100 \* 100 m or 2 soccer fields in significantly).

Operation	Number of Trees (ha)	Trees Removed	Trees Remaining	Approx. Age	Approx Size of Truewood (cm)	Products produced (approx SBD)
Planting	833	-	833	0	-	
Thinning 1	833	333 (3 in 8)	500	2-4	2-8	Poles, firewood, compost
Thinning 2	500	200 (2 in 5)	300	8-12	12-20	Small logs (\$700-1000m³)
Thinning 3	300	100 (1 in 3)	200	15-20	25-35	Medium logs (\$1200-1600m³)
Clearfall	200	200	0	25-30	50-60	Large logs (\$1800-2400+ m³)

NB: Prices are from 2005. They are likely to increase in value, as world-wide high-quality wood supplies diminish

REMEMBER: THIN FIRST AND PRUNE THE REMAINING TREES!!!