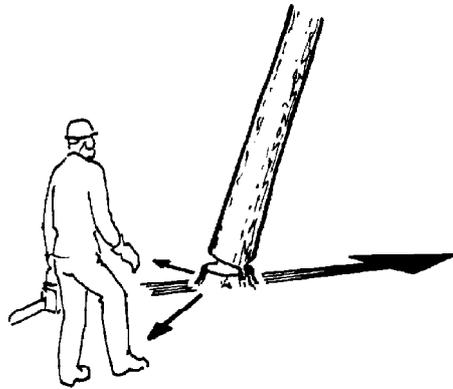


# Felling a tree



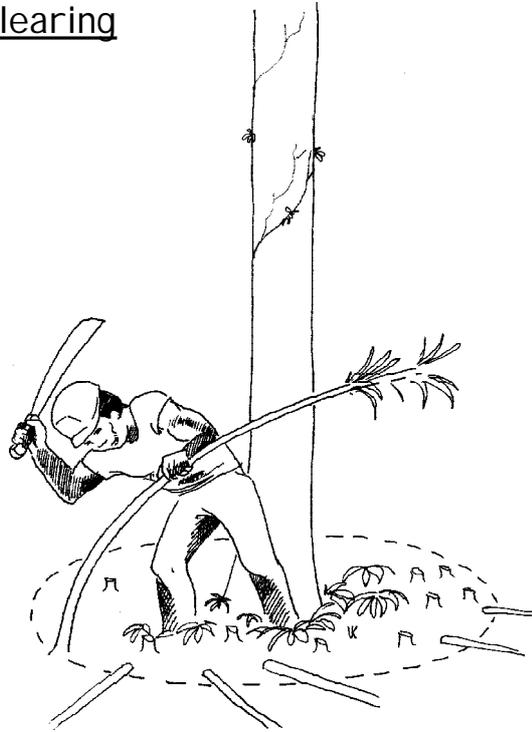
## **SUCOF /ATDC PROJECT**

SPONSORED BY FINLAND'S MINISTRY  
FOR FOREIGN AFFAIRS

Leaflet prepared by Mark Seymour  
FTP International Ltd

3 panel leaflet for training  
course in Philippines

## Clearing



For safety - cut away obstacles which would get in the way during felling or if you need to move quickly away from the tree.



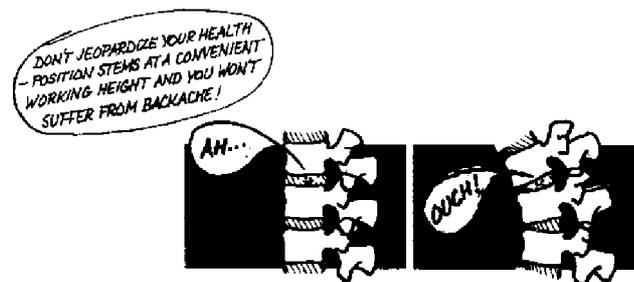
Also, think of your escape route before starting to fell the tree.

## Planning the felling direction

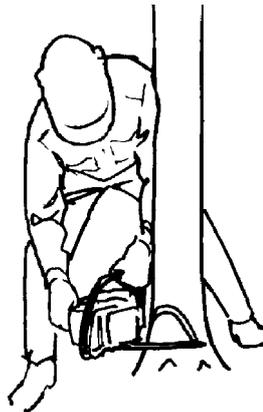
Spend time planning the felling direction:

- To avoid getting a hang-up. As your doctor says, "prevention is better than cure". Hang-ups and falling branches are the most likely causes of accidents in logging
- To minimize risk of injury to yourself and others workers
- To minimize skidding distance

## Working posture and safety clothing



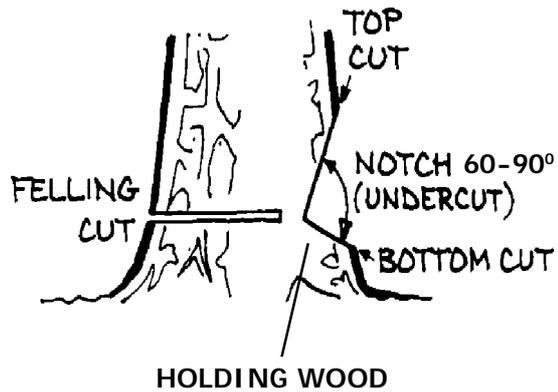
Bend at the knees when you need to work near to the ground. This keeps your back straight and avoids unnecessary strain.



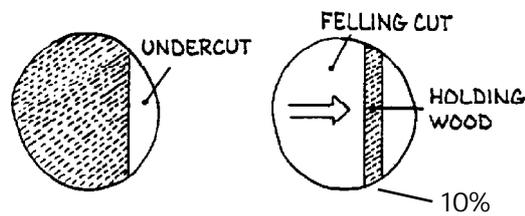
Safety clothing should include at least: strong boots, helmet, gloves, strong trousers and jacket. Think safety - prevent accidents before they happen!

## Felling theory

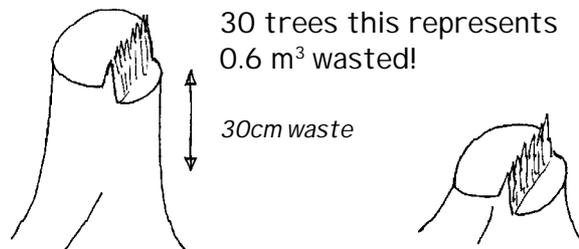
Directional felling is achieved by using the "holding wood" technique.



The notch (or undercut) is made first, followed by the felling cut (or backcut), leaving holding wood (or hinge) of about 10% tree diameter.



Stump height Begin the notch low down and keep stumps as low as possible. The butt of the log is valuable wood. A 30cm high stump of 30cm diameter is 0.02 m<sup>3</sup>. Over 30 trees this represents 0.6 m<sup>3</sup> wasted!

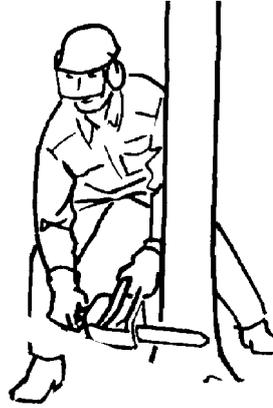


## Step 1 - Making the notch

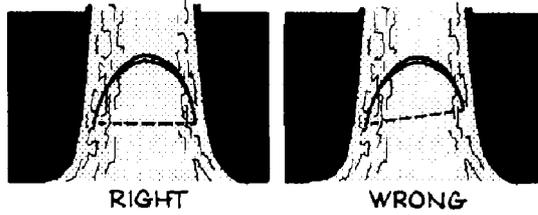
Begin the notch perpendicular to the direction of fall.



direction of fall



Bend at the knees when making the cut, keep a low position



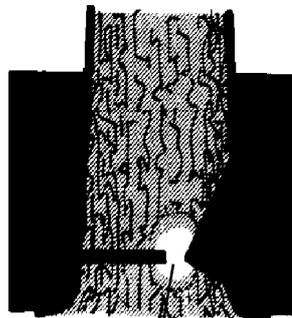
RIGHT

WRONG

Make sure the notch is straight

## Ears

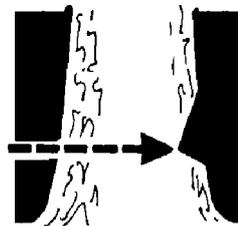
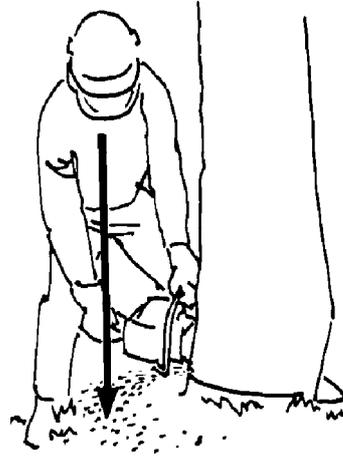
With trees like Falcata it is necessary to cut "ears" on either side of the sink. This prevents ripping of the butt log as the tree falls.



Ears on each side of the notch

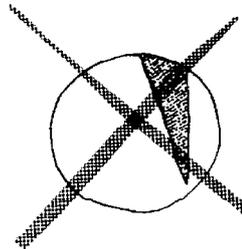
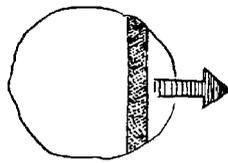
## Step 2 - Making the felling cut

Make the felling cut about 1 cm above the level of the notch corner. Do not cut below the notch, the tree may fall backwards!



1 cm above this line

Make the felling cut parallel with the notch. Leave at least 10% of the tree diameter for the hinge.



Smaller guide bars are safer!

For trees thicker than the length of the guide bar, follow steps 1-4. But beware of kick-back on step 1!

