

## **Principle**

Located within or around croplands, in woodlots or near the homestead, trees provide many products and environmental services. Each species has its own needs and uses so it is important to think about the best location before planting them. Farmers have to consider advantages and constraints of having trees in each spot of the farm to be able to protect them and make the most of their products.

There are still too many cases of uprooting and damages on trees because of a lack of anticipation before plantation. This point is really important in order to improve the survival rate of trees.

### Where should trees be planted?

#### Near the homestead

Advantages	Constraints
Easy access for the collection of firewood	Free grazing of goats
Easy access for watering seedlings in case of drought	High risk of damages by children
Landscaping: windbreak, shade, flowers	
Low risks of theft of firewood and fruits (papaya)	

#### Measures to take

In order to ensure the survival of trees near the homestead:

- Protect trees against livestock (see guidelines for trees protection).
- Teach children to preserve trees integrity.



(c)



(a) (b)



(a) Senna spectabilis, Chiwala VH.(b) Multi-species yard, Chipenya VH.(c) Powpow trees, Mlinga VH.Abadia (2016)

### **Around cultivated plots**

Advantages	Constraints
Compost thanks to leaf fall	Distance for collection of firewood
Natural poles to strenghten fences around cassava fields and vegetable gardens.	Risks of theft of firewood and fruits
Windbreak	Risk of conflicts with neighbours
Boundaries marker	Risk of damaging seedlings during agricultural work
Saving of space for small-scale farmers	Risk of shade if no pruning
Trees are less threatened by livestock and children than trees near the homestead	

#### Measures to take

In order to ensure the survival of trees around cultivated plots:

- Inform the owners of neighbouring fields and reach an agreement with them about fields boundaries before planting trees.
- Inform workers about the presence of young trees around the field.
- Explain to neighbours that trees will be pruned and respect the recommendations to avoid shade on crops.
- Select species suitable for cultivated lands to limit competition with crops (table above).



Hedge, Chakwanila VH. Abadia (2016)



Senna spectabilis, Maluwa VH. Abadia (2016)



Two years old Senna spectabilis, Chiwala VH. Abadia (2016)



Fence with Senna spectabilis. Abadia (2016)

# Scattered in cultivated plots

Advantages	Constraints
Compost thanks to leaf fall	Distance for collection of firewood
Shade is limited on crops, even without pruning	Risks of theft of firewood and fruits
No risks of conflict with neighbours	Risk of damaging seedlings during agricultural work
Trees are less threatened by livestock and children than trees near the homestead	

### Measures to take

In order to ensure the survival of scattered trees in cultivated plots:

- Inform workers about the presence of young trees in the field.
- Prune trees to avoid shade.
- Select species suitable for cultivated lands to limit competition with crops (table above).



Senna spectabilis pollarded in a field. Abadia (2016)



Young and old scattered trees. Abadia (2016)