

After your plants leave the nursery

A *good nursery practice* is to maintain close communication with the nursery customers: the farmers and foresters who plant your trees. Their feedback allows you to make adjustments in your nursery practices. The nursery should use these comments to better meet the needs of its customers. Nursery success is not just a matter of producing healthy and vigorous trees **in the nursery**. Overall success must include how those trees grow and survive **in the field**. The number of trees planted really means nothing unless they grow well in the field.

Many reforestation programs evaluate the outplanting success. If they do not, they should, and the information should be passed on to the nursery. Evaluations need to include real data — not just casual observations — which can be used to improve the reforestation program, starting with the seedlings you produce in the nursery. While it is beyond the capacity of the nursery staff to make such detailed studies, it is very important that you visit as many different planting sites as possible.

Visit planting sites, make observations, ask questions, and make suggestions:	
How long after delivery did it take until the trees were planted?	They should be planted immediately.
How were they stored until they were planted?	They should be stored in the shade.
Was the substrate in the container dry before planting?	Trees should be well-watered when they leave the nursery and if stored at the outplanting site, they should be watered again before planting
How many trees did not survive the transport or were damaged?	The nursery should ensure that trees are carefully loaded for transport.
Were damaged trees planted?	It is better to throw damaged trees away, than waste the effort to maintain them.
Were bags removed and plants checked for root deformities at the bottom of the bag?	NEVER plant the trees with their bags. Remove coiled roots with a machete.
How were they planted? Are roots exposed above the soil line?	Holes should be deep
Was the site rocky, difficult to dig large enough holes?	Smaller bags may be more appropriate.
Are weeds or cattle a problem?	Larger plants may be more appropriate.
What time of year were the trees planted?	Plant at the beginning of the rainy season whenever possible.

Maintain close communication with the nursery customers: the farmers and foresters who plant your trees.

Nursery managers should return to the outplanting sites after 3, 6, and 12 months, and even for up to five years to observe the growth and condition of the trees. The effects of nursery practices can still be seen after many years.

For trees that have already been established:

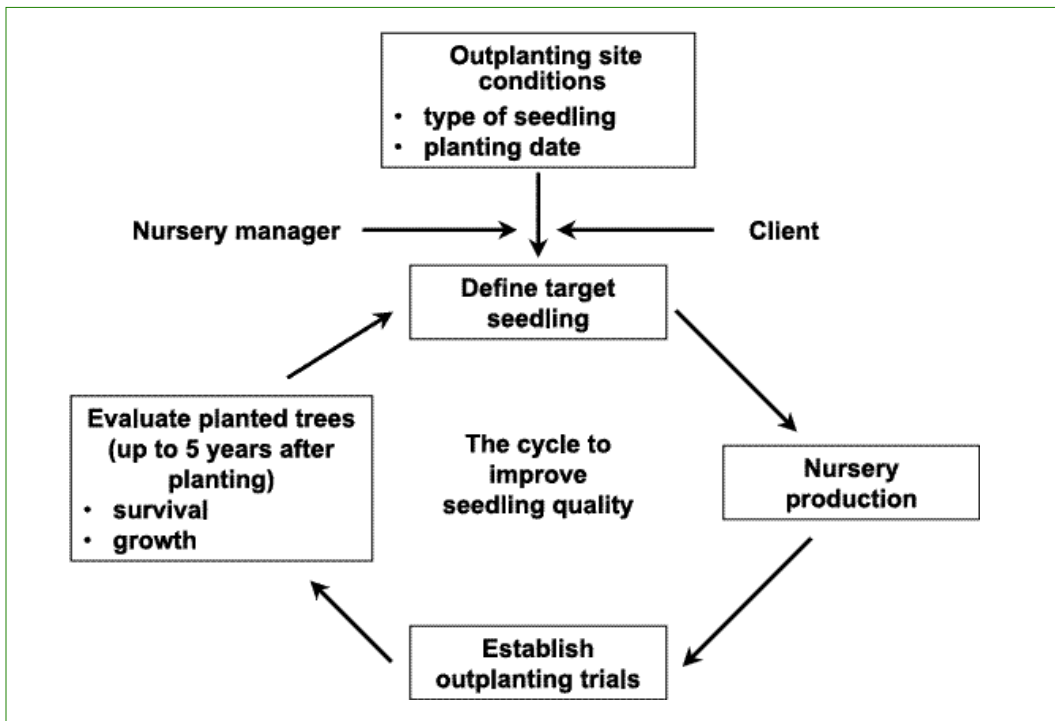
Are many trees leaning?

Many people think the cause is a strange new disease, but in fact, this often indicates root deformities that started in the nursery. Remove dead trees carefully from the ground with their roots. Are root deformities present?

How many trees have survived?

If less than half of those planted have survived, the tree planting program needs to be evaluated. This will include other factors such as the reforestation policies. However, tree quality in the nursery and at the time of planting will ALWAYS play a major role in the survival and growth of trees in the field.

Consider what you can change in the nursery. This book is dedicated to enabling you to decide what needs to be changed and how. Defining the target seedling, or best seedling for each situation, requires input from the nursery and the client, producing the seedling under different nursery conditions, and evaluating growth in the field. This process takes several nursery seasons and most importantly requires that the nursery has close contact with the people who plant the trees and that the nursery manager visits the outplanting sites.



The target seedling cycle shows the steps necessary to evaluate and improve seedling quality.