

Top tips for tree planting

by Steve Collins

It is an unfortunate reality that a significant proportion of the millions of trees planted around the world each year do not survive long enough to meet the purpose for which they were planted. As a result, people's time and resources are wasted, the problems that the tree planting was supposed to tackle continue, and people often become disappointed and disillusioned.

Here are some simple tips that should help communities and local organisations plan and carry out planting work in a way that will result in higher survival rates of trees, better growth and a real sense of pride and achievement for those involved. Most of these tips are also relevant for individuals and families who wish to plant trees.

Shared purpose and ownership

The views and opinions of everyone with an interest in the trees and the land on which they will be planted should be taken into account when establishing the purpose of the planting scheme and designing it. This includes women and children. They should all have an opportunity to express their views freely, which may mean arranging separate or individual meetings. Spending time to find out what people think at the start of the project will reduce the risk of problems developing later.

'Small and achievable' versus 'large-scale and over-ambitious'

Large-scale tree planting might seem the most exciting option, but it is often best to plant a small area, maintain it well and achieve a small-scale success rather than to attempt something over-ambitious that might not work. Failure can result in demoralisation and a lack of interest in planting trees in the future.

Protect the trees

Think about all the things that could damage the young trees. Cattle? Goats? Wild animals? Children playing? People walking through the area? Flood water? Would a fence help to keep people and animals out? If so, it is best to make a fence before the trees are planted. Putting branches of thorny bushes around the trees will help prevent animals from eating them. If leaf-cutting ants attack the trees, planting jack bean or sesame nearby may help. Fire is often used to control vegetation and stimulate new grass growth for grazing animals, but if it spreads into the area of tree planting it can quickly destroy all your hard work. Inform the community of the consequences of starting uncontrolled fires, and consider clearing and maintaining a firebreak around the planting area so that fire does not spread into it. See Preventing fires, p12, for more information.

Weeding and maintenance

Grass and other plants growing around the small trees will compete for light, water and nutrients. Ideally, any competing growth should be removed up to a distance of 50cm from the tree's main stem. Laying cut weeds and other organic matter around the base of the tree can help stop more weeds growing and reduce evaporation of water from the soil. This may also help protect the trees from termites, as some types prefer to eat dead plant material.

Weeding and regular checks and repairs will be necessary until the trees are big enough to survive and continue growing on their own. This might be as long as three or four years after planting. Natural regeneration often takes less time as it tends to grow faster.

Ensure someone checks the trees regularly and that damage to fences and other forms of protection is repaired as soon as possible. A goat or cow can eat and seriously damage or kill a lot of trees in a short time!

Reflect on and learn from what happens

During the first two to three years after planting, take time as a community occasionally to reflect on what went well, what didn't, and why. Identify the lessons you can learn from this and apply these lessons next time you plant trees.



Select a site that matches your purpose

Consider things such as the adequacy of the soil (fertility and depth), exposure to strong, dry or salty winds and proximity to the community. If you are trying to reduce erosion, the circumstances might give you little choice of site.

Illustrations taken from *A Community Guide to Environmental Health* with thanks to the publishers, Hesperian, for permission.

New planting or natural regeneration?

When the tree species you want to plant exists nearby, and the seeds are spreading into and growing on the chosen site, you might not need to do any planting. Looking after the small, naturally regenerating seedlings might be more effective than planting new seedlings. Or you might choose to have a combination of planting and natural regeneration.

Plant at the right time of year

Tree seedlings will need time and the right conditions to adapt to their new 'home' after planting. Adequate water and protection are essential during this adaptation period, especially for the first year. Planting at the beginning of the rainy season is usually best, as it will give maximum time for good growth, especially of the roots, before drier weather starts. Seedlings may suffer from weather-related damage, for example, damage caused by strong winds or flood waters, so take care to select a planting season that allows the seedlings to grow for as long as possible before damaging weather is likely.

Choose the right tree species

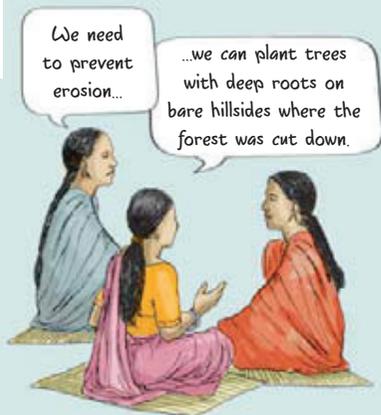
Select types of tree that you know will grow well and achieve your purpose. You will often find that local native species are suitable. If you are trying to reduce erosion, choose trees that grow quickly and will have strong root systems.

Good seedlings

Use healthy seedlings from a local nursery. These will have a better chance of survival. Larger plants will suffer more during the 'transplanting' process. The best size for seedlings is usually between 30 and 90cm tall.

Careful planting

Do not drop, throw or stack the seedlings on top of each other when moving them from the nursery to the planting site. This can damage the plants in a way that you cannot see. Cover them and prevent them getting too hot while moving them. Avoid exposing the tender roots to the air. They must not be allowed to dry out. After planting, press the soil around the seedling firmly with your foot to make sure there are no air pockets around the tiny roots. If possible, water each tree after planting, but do not flood it. Several cups should be enough.



Steve Collins is currently Tearfund's Country Representative for Nepal. Previously he worked as a Forestry Consultant in Scotland and an Environmental Advisor in Honduras.