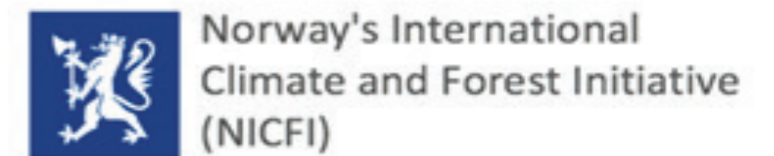
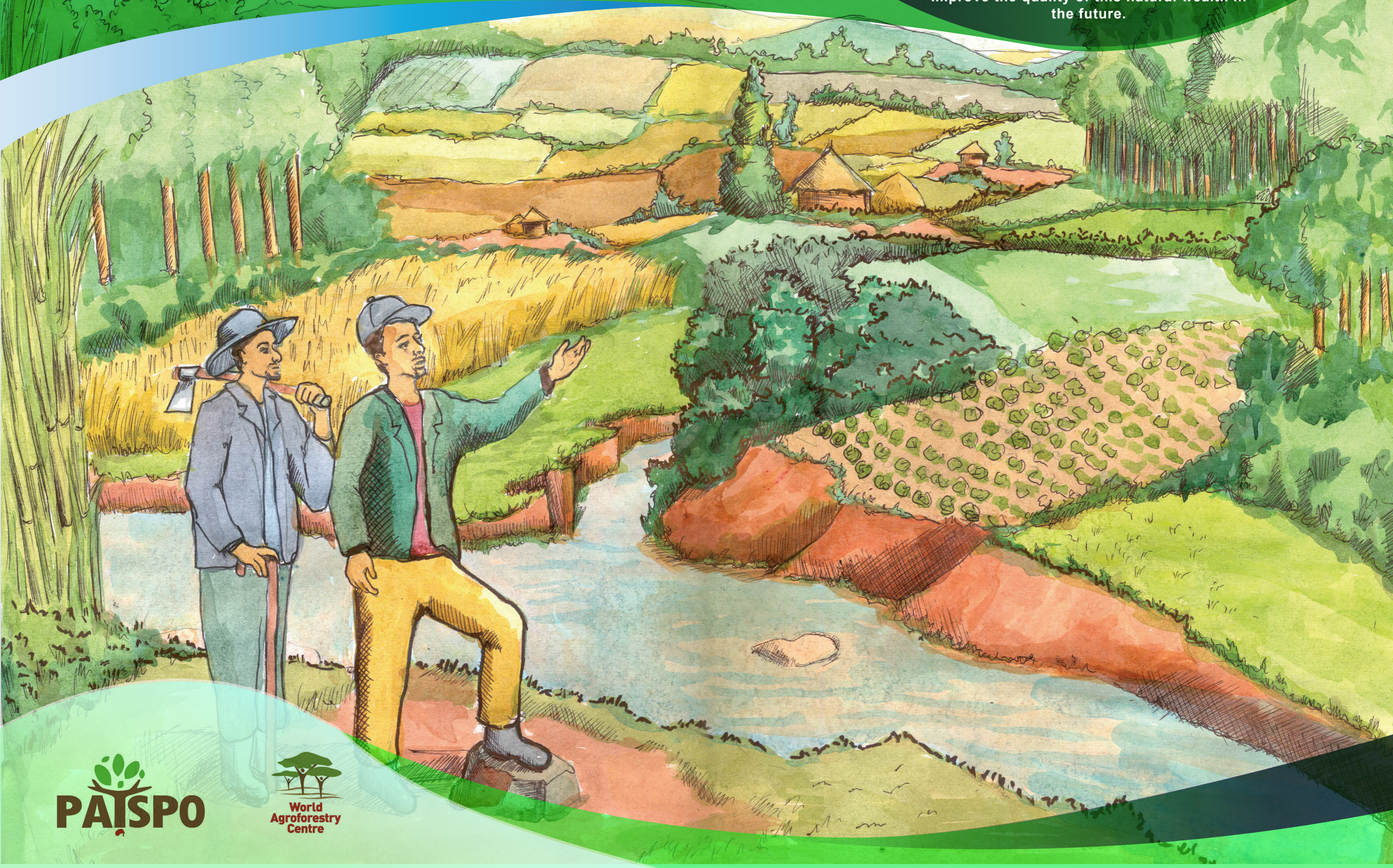


VISUAL PRESENTATION OF EXTENSION MATERIAL ON TREE SEED



The biodiversity of trees in Ethiopia,
is the foundation of our seed sources.

Ethiopia is rich in different varieties of vegetation. The various
types of forests in Ethiopia provide an extraordinary
foundation for seed sources.
We have a great opportunity to preserve and
improve the quality of this natural wealth in
the future.



Uses of the forests

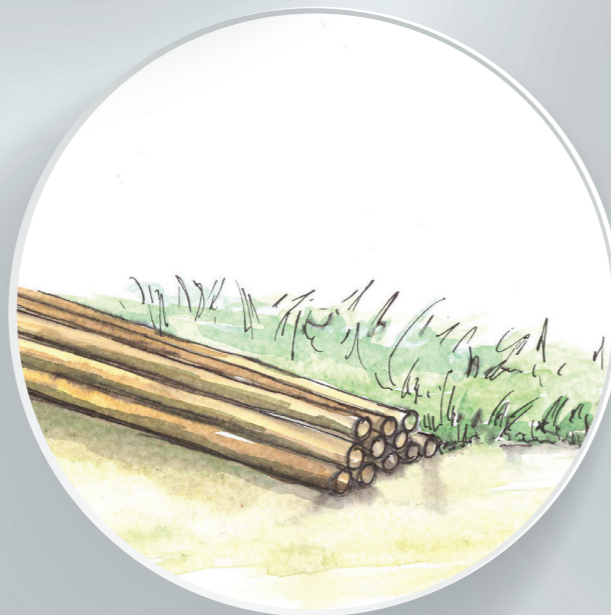
Main function



Timber



Firewood



Poles



Wood for pulp and particle board

Uses of the forests

Conservation functions



As a source of
clean Water



To protect
the biodiversity



To prevent landslides
and flooding



To reduce
impact of pollution

Uses of the forests

Other functions

As a source
of medicines



Fodder for
domestic animals



Ecotourism



Natural rubber



Fruits



Recreation



Natural Honey



Selecting good seed sources, results in high quality seeds

The quality of a tree depends also up on the quality of the seed and from where it originates. High quality seed results in high quality trees.

The choice of seed is the first important step in tree planting. Pay attention to the age and the shape of the trees when selecting the seed sources.

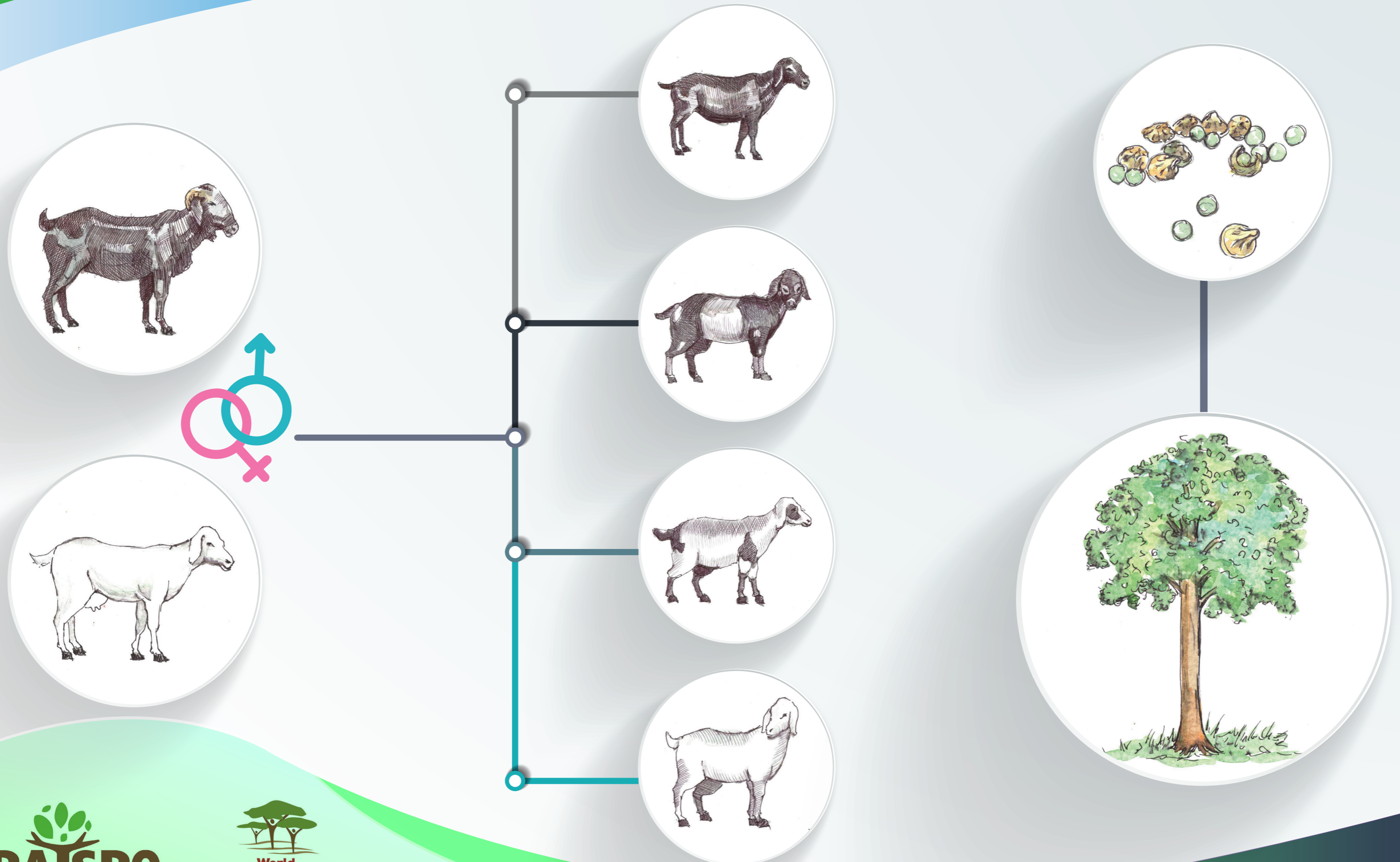


Selecting seed sources

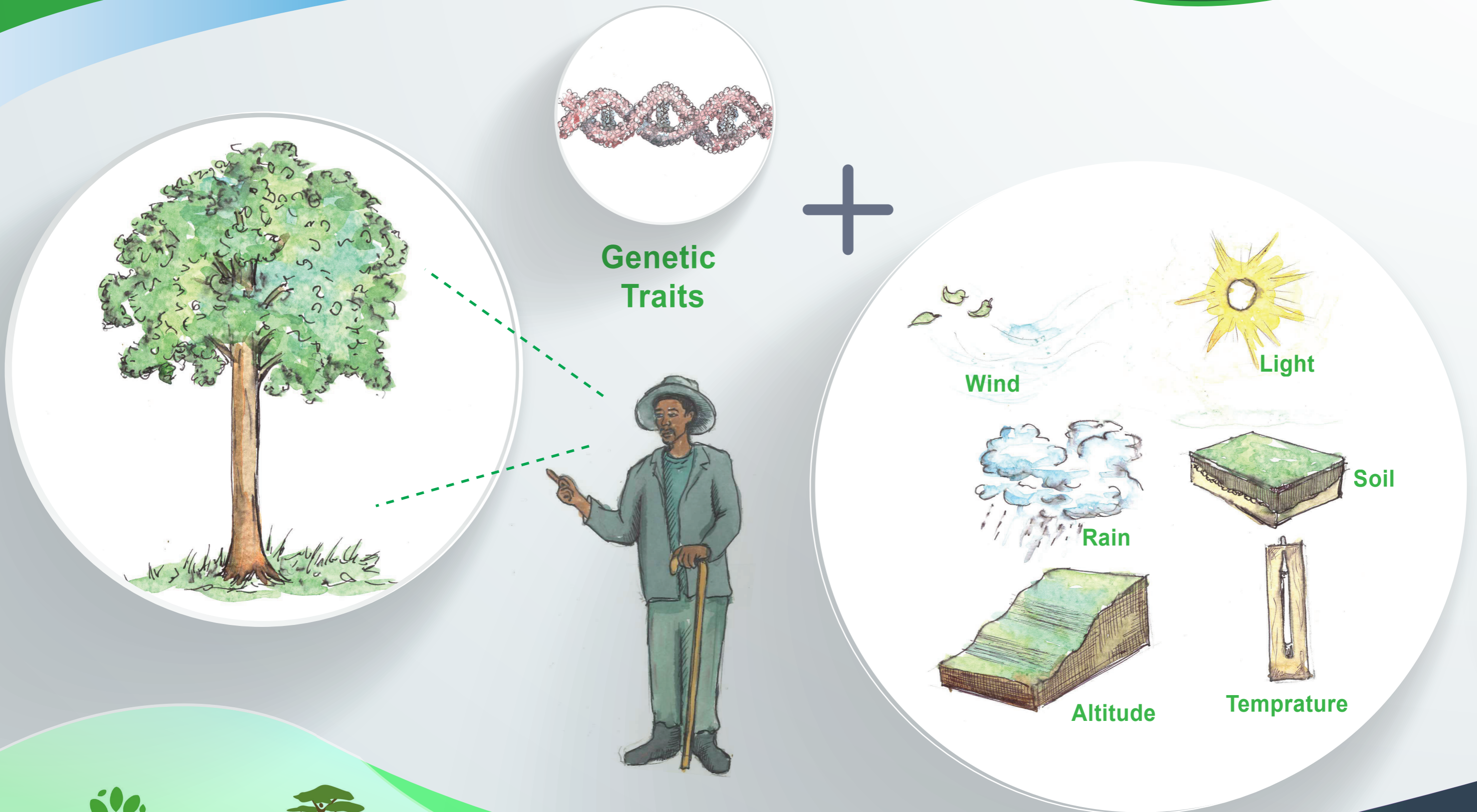


Genetic Characteristics

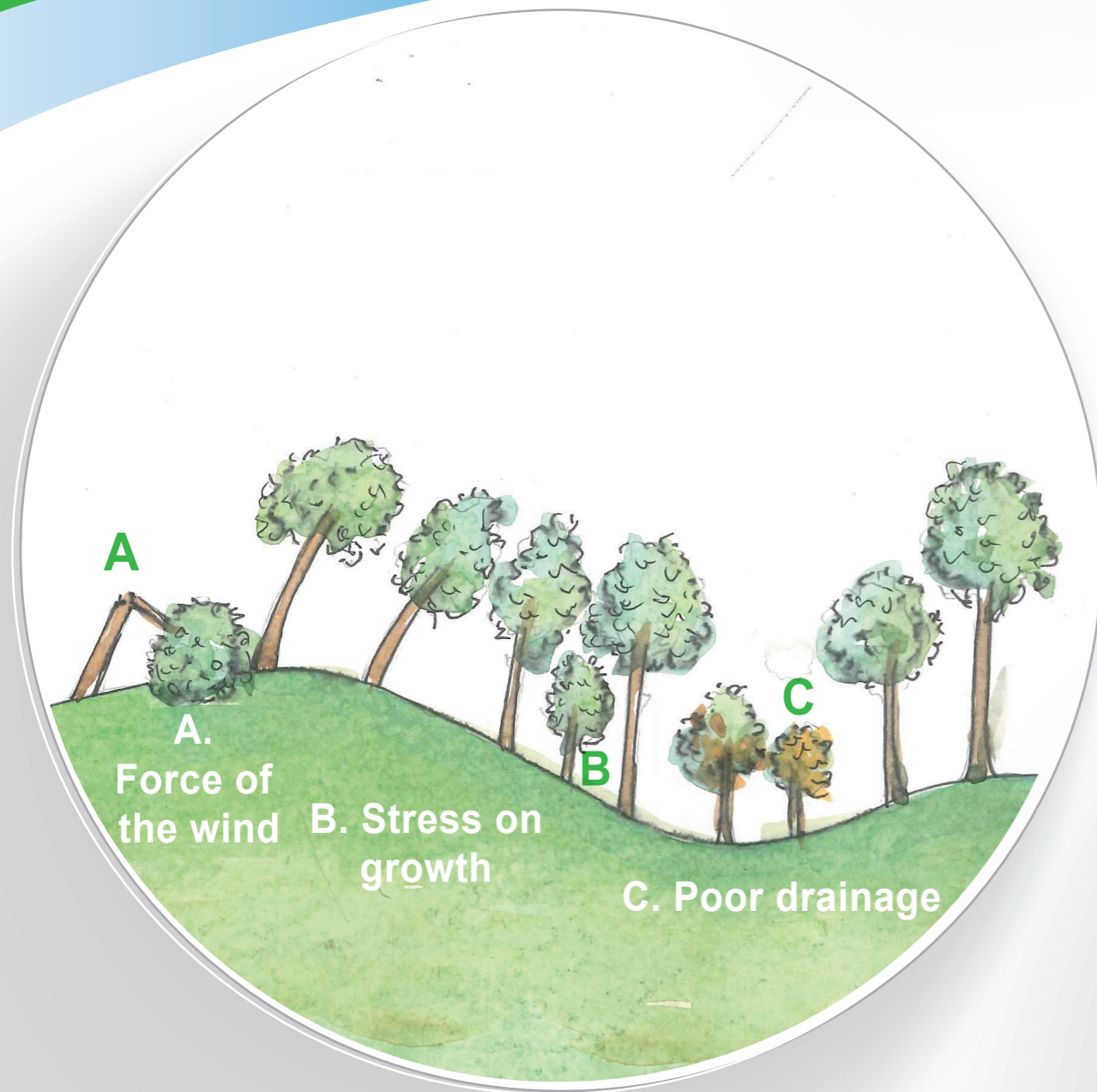
Similar to animals the genetic characteristics of trees provide the variation by careful selection of the source of seed. It is possible to obtain a new generation of trees of higher quality.



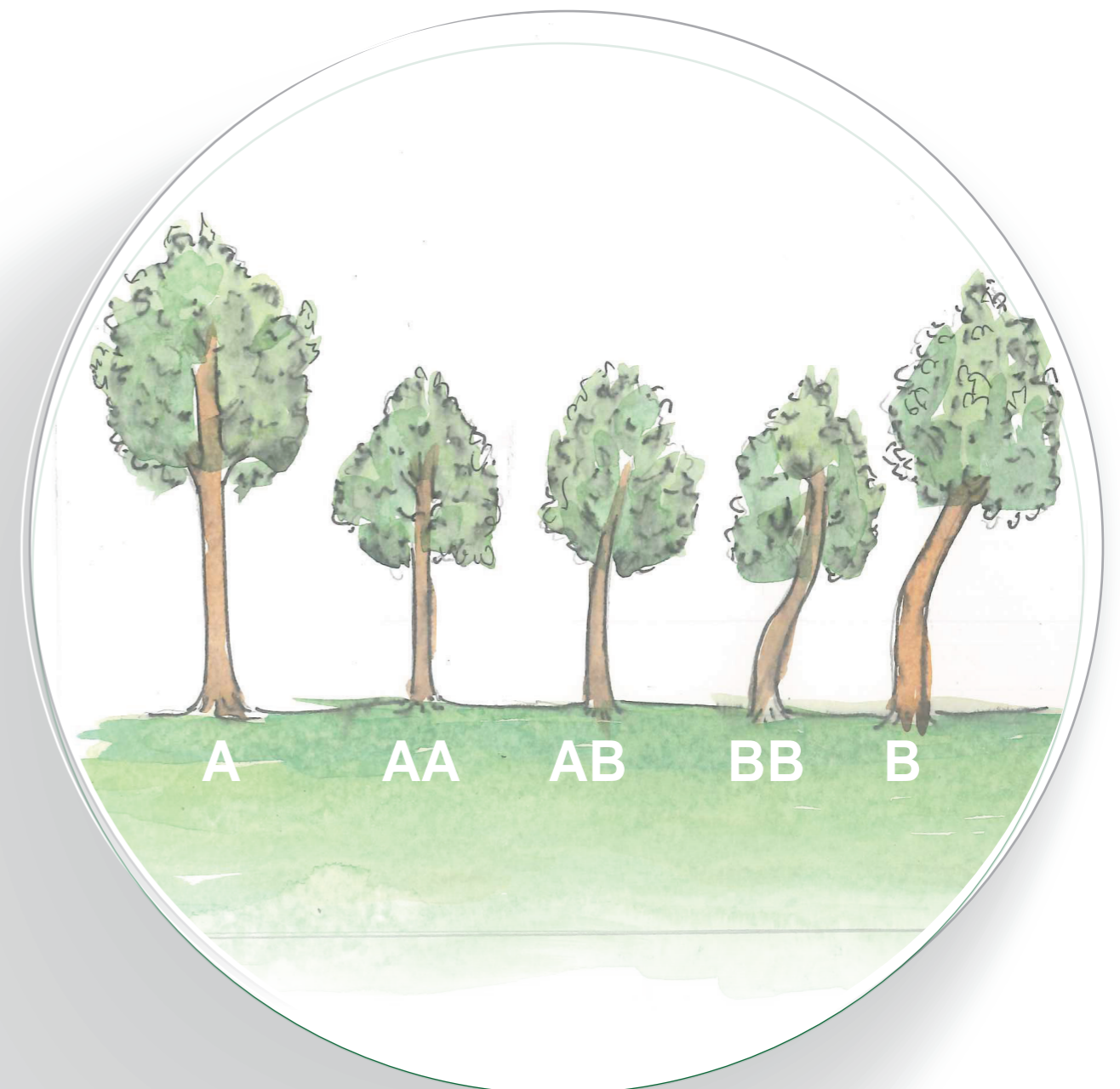
What we see is a result of genetic traits and environmental factors:



Growth factors



Environmental factors

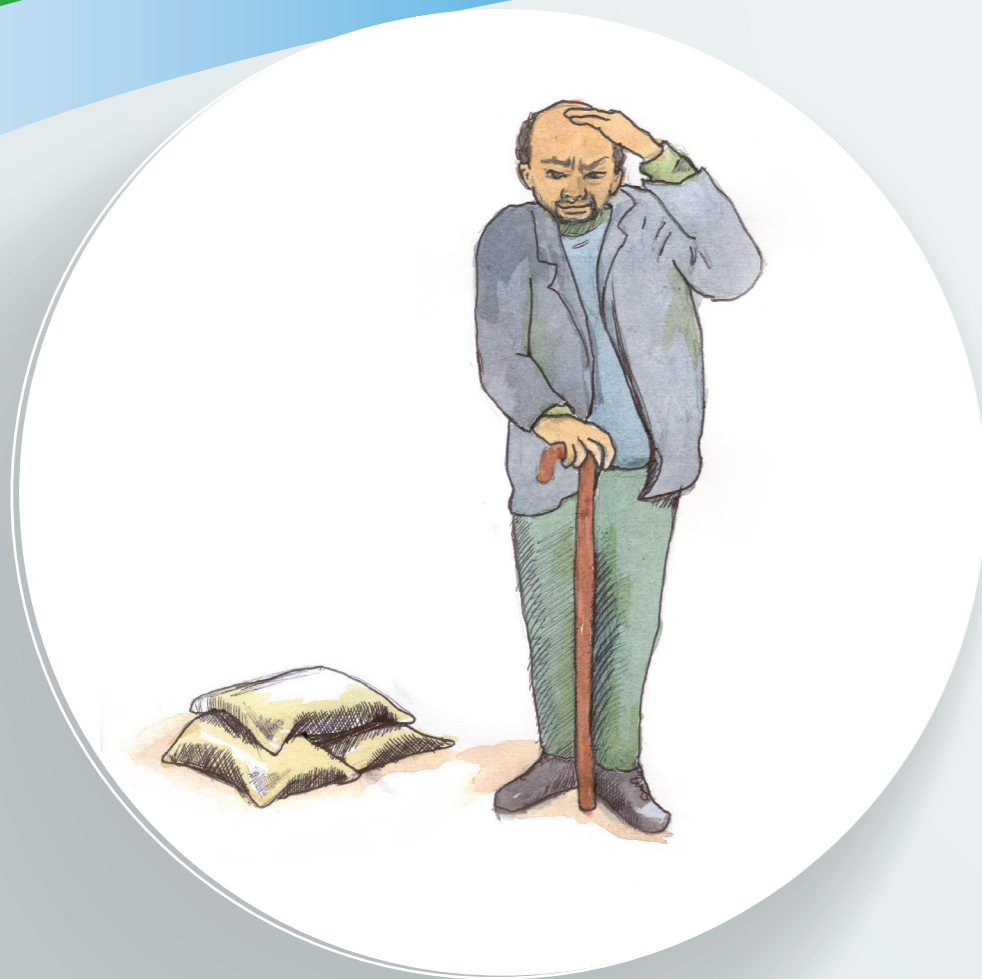


Genetic factors

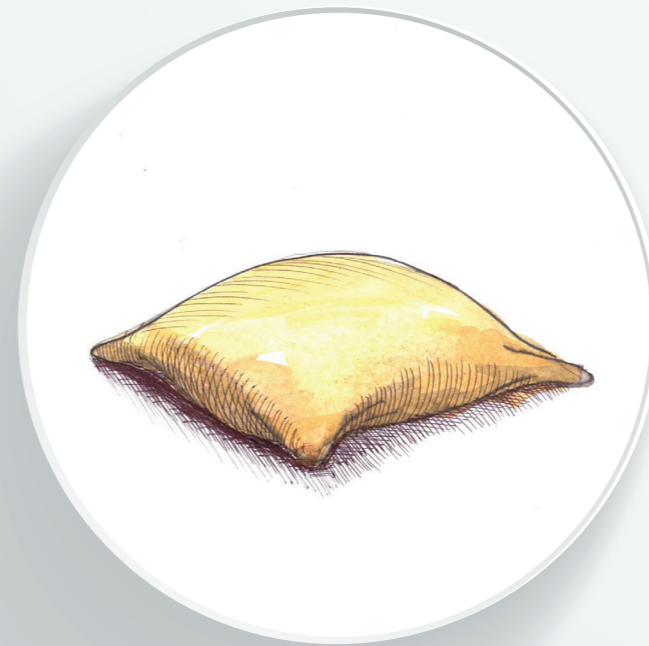
There is life inside the seed,
give it the appropriate protection

Like all living beings, seed needs protection. Quality seed must be treated well: give it enough air, shelter from the sun and protect it against rain and humidity.

By treating the seed well the quality is maintained.

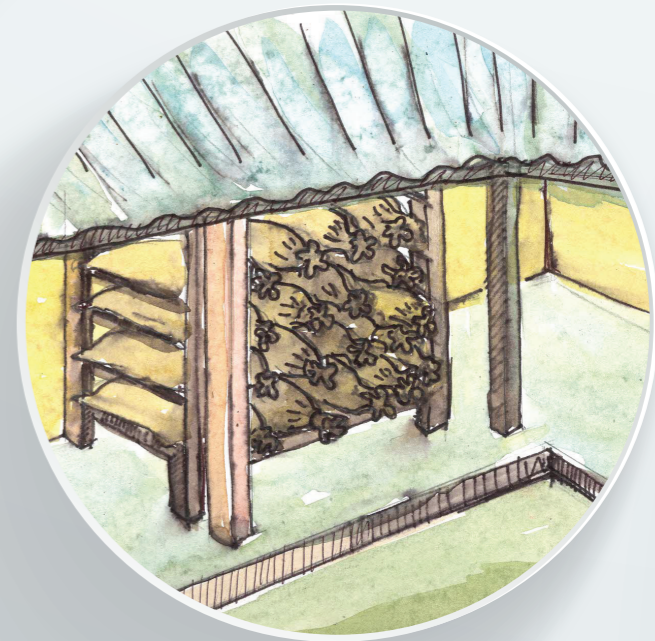


Protection of seed



**Seed must always
be kept in dry,
well ventilated places**

**Quality of seed is seriously
affected by rain and heat**



Examples of appropriate places for temporary storage

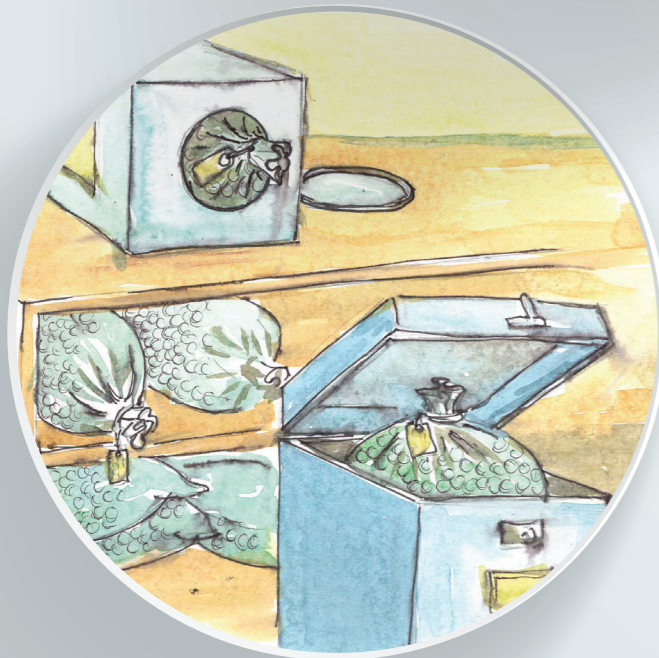
Seed Procurement



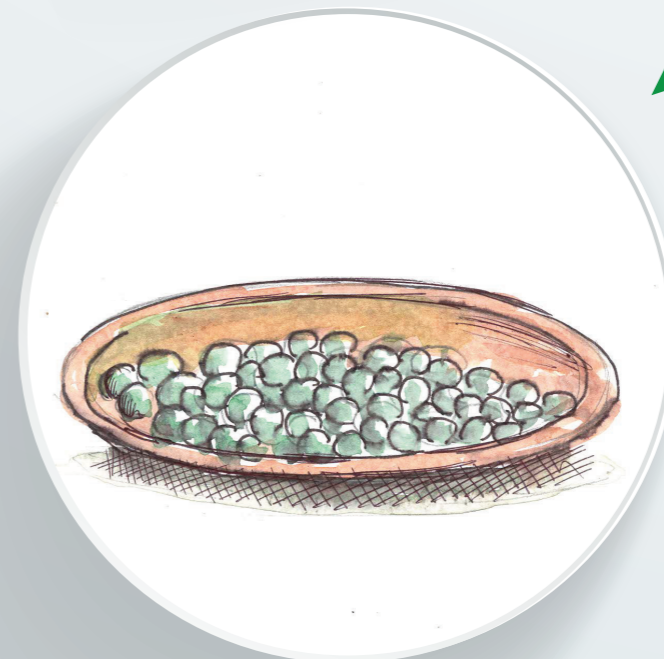
Seed collection



Temporary storage



Storage



Drying



Labelling

Accurate data on the seed bag and inside the seed bag show the quality of the seed inside. Seed documentation is important throughout the whole seed procurement “chain”, from collection to distribution.



Species; seed source; data of collection;
owner of the seed source; collector.

To ensure optimal growth of trees, the growth conditions of the planting site should match the growth conditions at the seed collection site - altitude, temperature, rainfall and soil characteristics.



Suitability of the land to be planted



Most trees have specific agro- ecological requirements for optimal growth.

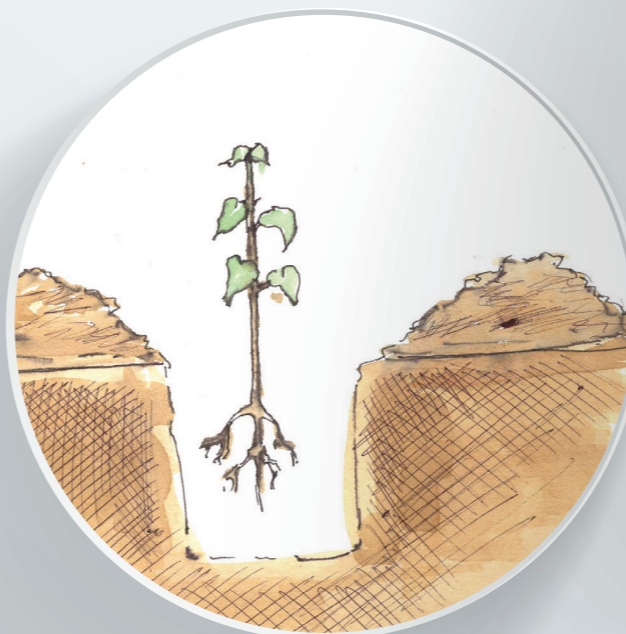
Pre-treatment of seed



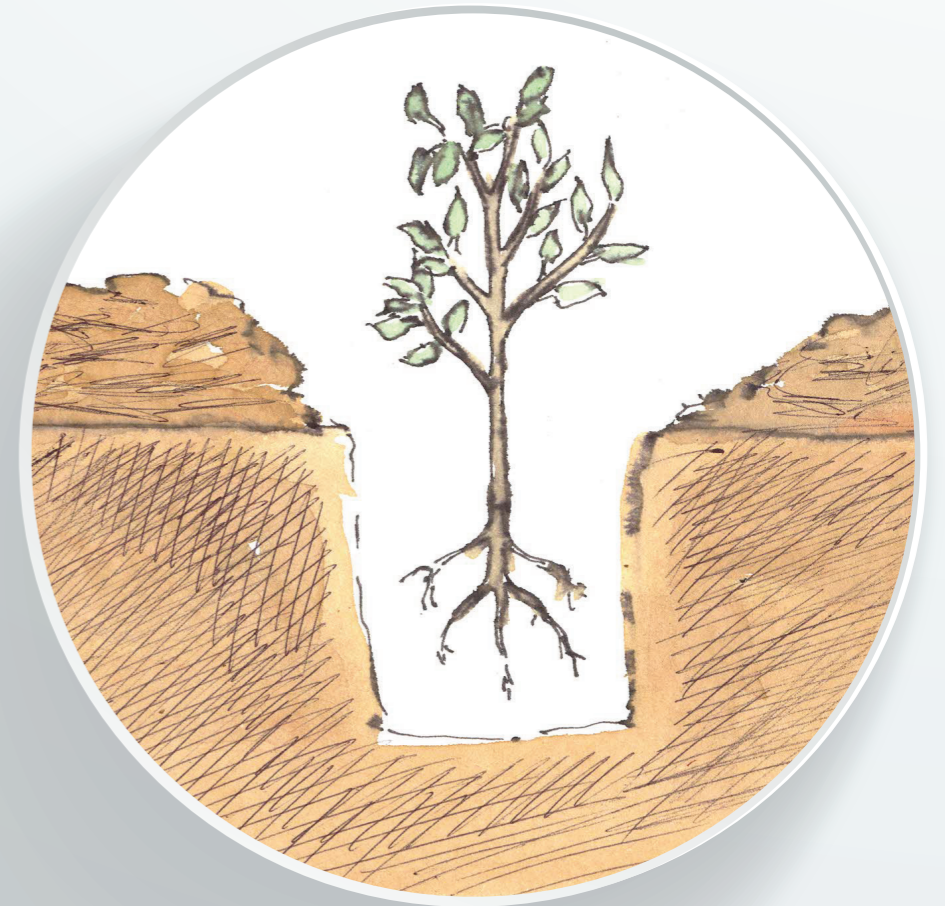
Planting techniques



20-40 cm deep hole for seedling from a container

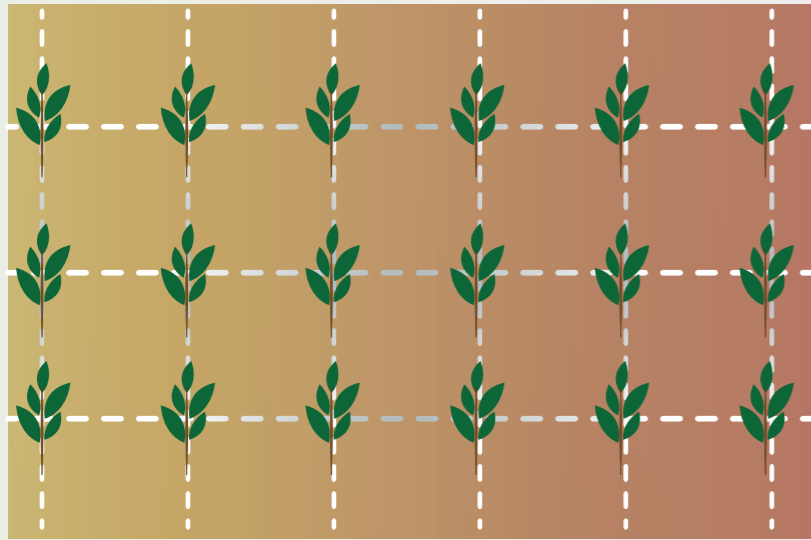


20-40cm hole for bare root seedlings

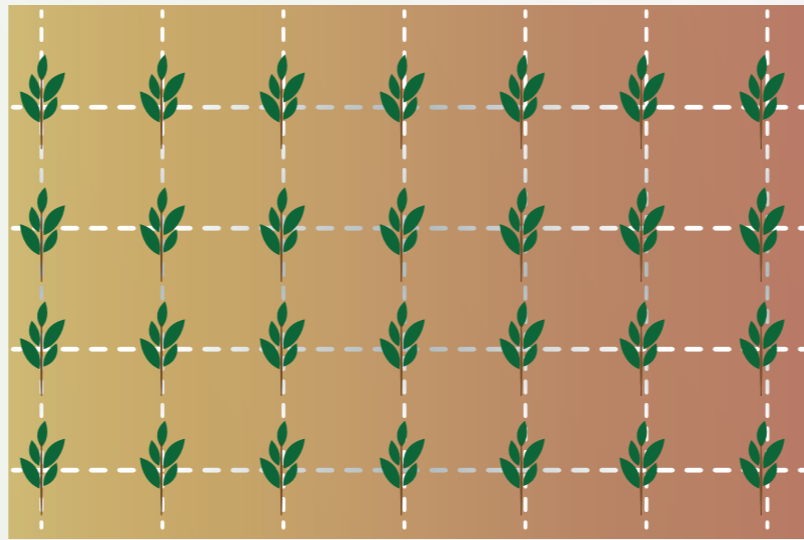


60cm hole for fruit trees

Spacing in the planting



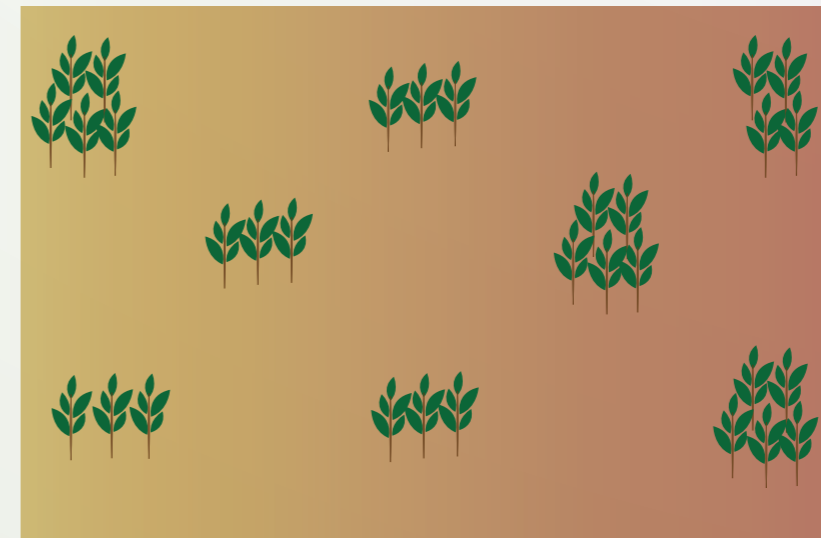
A spacing of 3X3 m



A spacing of 3X2 m



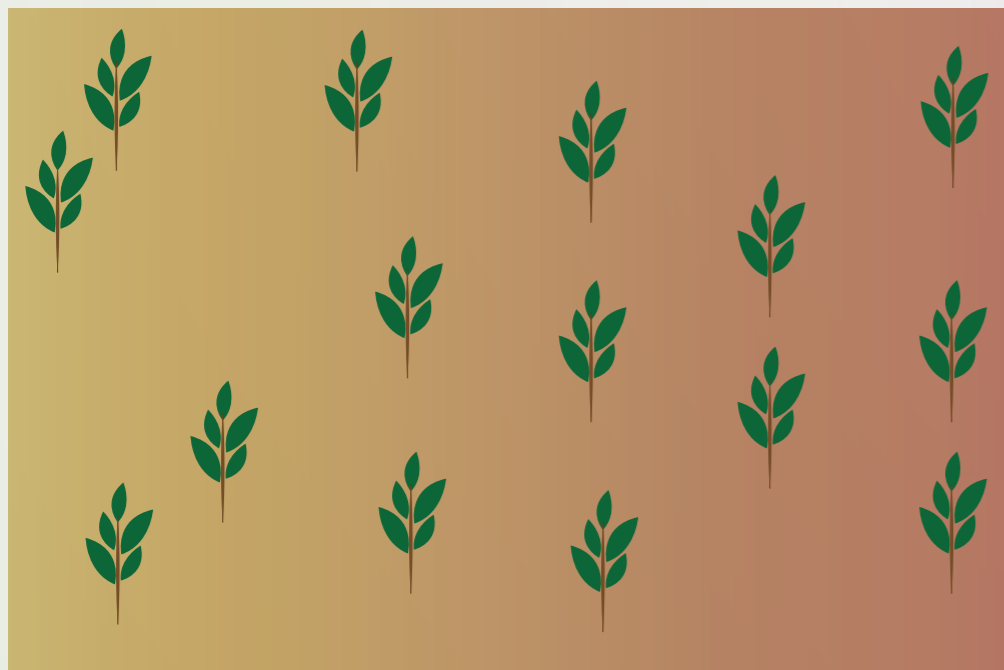
A triangular Planting orientation



Planting in groups

Replacement of seedlings

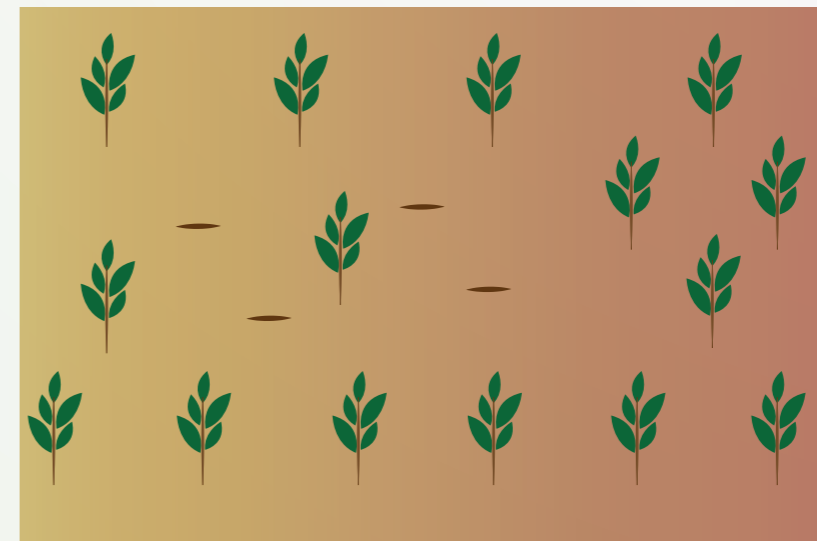
This is not necessary when:



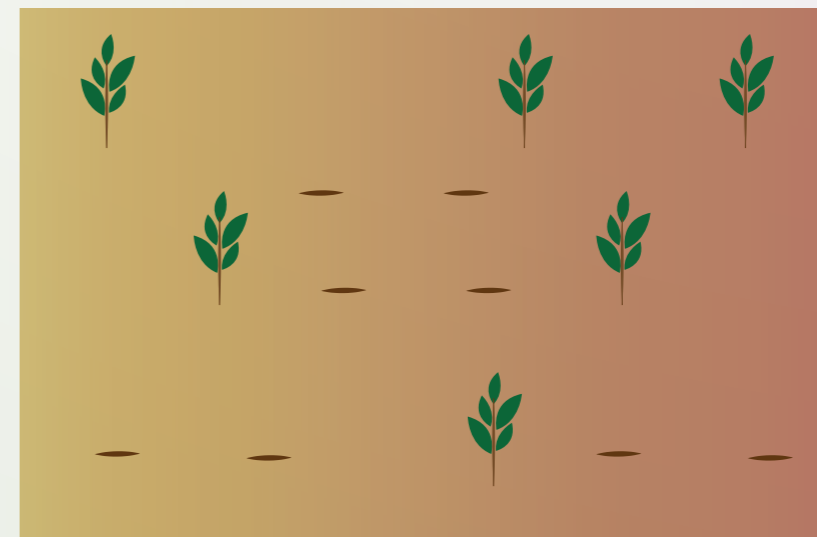
Survival is more than 80%



It must be done when:



Survival is more than 80%,
and there are big bare spots with no surviving trees



Survival is less than 80%

From seed collection to tree planting operation

Ethiopia is rich in different varieties of vegetation. The various types of forests in Ethiopia provide an extraordinary foundation for seed sources.
We have a great opportunity to preserve and improve the quality of this natural wealth in the future.



The quality of the forests in the future depends up on the quality of seedling planted today

Quality seed is obtained through appropriate seed procurement, including choice of seed sources, seed collection, seed shortage, seed distribution and seed documentation.

Appropriate seed procurement leads to better forests the future.

