## Discover Newssheet for colleagues in Africa November 2020



## Trees - agroforestry and conservation

## Dear Friends

A story: A Jewish Rabbi was once passing through a field where he saw a very old man planting a tree. "Why are you planting that tree?" he asked, "You surely do not expect to live long enough to see that tiny seed growing into a high tree?"

"Ah" replied the old man, my ancestors planted trees not for themselves, but for us, in order that we might enjoy their shade and fruit. I am doing likewise for those who will come after me."

It is widely accepted today that there is an urgent need to plant trees in Africa. This is partly because in many places almost all the trees have been cut, resulting in hot, infertile areas. In mountainous regions, tree cutting has resulted in landslides and flooding. Many people today recognise the contribution trees make to keeping the atmosphere cool and to enabling heavy

rainfall to soak into the ground instead of running off and taking the fertile soil with it. They also provide firewood, timber, fruits, medicines and shade.

## Agroforestry

I would like you to think about how to integrate trees into the total production system of your farm.

Some trees are particularly good for maintaining and increasing soil fertility. The roots of leguminous trees put nitrogen into the soil. Deep rooted trees bring nutrients up from deep in the earth and into the leaves, which subsequently fall onto the ground. Three leguminous trees are sesbania, calliandra and leucena. Sesbania sesban is indigenous to Africa. Although it is relatively short lived it is useful for revitalising exhausted land. All three can be used for fodder for livestock. Sesbania and calliandra provide firewood. The wood of leucena is harder and is good for timber and charcoal production.

Indigenous trees which are good for timber include markhamia, Cordia africana and croton. Grevillea is a fast-growing timber tree, often grown around the edges of the farm, but it is exotic.



The soil here was infertile, but now under this sesbania tree, the vegetation is bountiful. I took this picture in the Eden project garden of David Sharland in Arua, Uganda.

"Wildlings", i.e. the trees that grow all over the place from seeds that larger trees shed onto the ground, may be a nuisance. At first, they cause no problems, but when they do get in the way, remove them and use as firewood. One can also collect firewood by trimming the lower side branches of the larger trees in the field.

Thanks to Roger Sharland of REAP, Kenya, for sharing his experience of agroforestry with me.

"We're wiping out the rest of life on Earth a thousand times faster than the natural extinction rate. We're replacing biodiversity with food production and concrete. Half of the inhabitable surface of Earth has been made into farmland. Gone are the former forests and grasslands that used to enrich those soils. If you were to weigh all the land mammals globally today, only 4% would be wild; the rest would be livestock and humans.

If we continue like this, soon the only large animals left on the planet will be us, our domesticated food animals and our pets. The largest plant communities won't be forests, wetlands or grasslands but monocultures.

There is growing consensus among scientists and conservation groups on the need to protect 30% of the planet for nature by 2030, before we lose it."

Adapted from: https://www.weforum.org/agenda/2019/01/why-should-you-care-about-wild-places/ and https://www.campaignfornature.org/protecting-30-of-the-planet-for-nature-economic-analysis

Let me tell you why I think it is very important to protect nature reserves and wild areas:

- 1. In the natural world there is ecological balance between all species; insects, birds, animals and plants. All are very precious. Once they disappear, they are gone for ever.
- 2. These areas contain our natural capital. They generate oxygen. They strongly influence the climate. They contain species which can be an endless source of medicines and foods.
- 3. Visits to such natural areas are a joy to the soul, one feels connected with creation, stress levels fall away, and one feels at peace.
- 4. African wildlife is unique, beautiful and precious. It is important for the whole world. Children's story books in Europe feature lions, elephant and giraffe. Through tourism safari parks are also an important source of income for the surrounding communities. They must be protected!
- 5. Natural ecological systems are healthy. In degraded regions the ecological balance has been destroyed. Those insects and animals



Giraffe in a natural forest in Zimbabwe.

that survive, such as mosquitoes and rats, cause health problems. Obviously!

6. Wild animals kept in captivity have been shown to be the source of viruses in those animals transferring to humans, as in COVID. In our globalised world, as we have seen, such infections can become worldwide pandemics.

Do you agree with me? Could you imagine that 30% of your country could be made a wild, conservation area with no human activity?

Please support conservation areas where you live. By planting indigenous plants and trees on your farms, you provide habitat for insects, including bees and butterflies, and birds. Indigenous plants provide habitat for far more species than do non-native species.

With my best wishes

Keith Lindsey