

Working trees that keep on giving



Why the UN International Year of Forests 2011?

Forests are vital to the survival and wellbeing of people everywhere,
all seven billion of us

Forests provide shelter to people and habitat for animals and plants

Forests are a source of food, medicine and clean water.

Forests are vitally important to keeping our climate and environment
stable

To raise our awareness of the value of all forests, the United Nations
General Assembly declared 2011 the International Year of Forests

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An exhibition about the power of agroforestry, trees on farms and in the landscape

What has agroforestry got to do with forests?



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During the International Year of Forests we are highlighting the global importance of **agroforestry**

Trees play an important role in farming all over the world, covering large areas and involving millions of people

Planting useful trees makes existing land more productive, restores degraded land, produces fruit, provides firewood and animal feed

Agroforestry helps deal with many of the challenges facing the world today, like poverty, hunger, poor health, declining livelihoods, land degradation and loss of biodiversity

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What is agroforestry?



Everyone knows what a forest is, but what exactly is agroforestry?

- Agroforestry makes trees part of the way we farm
- Agroforestry means growing and using useful, working trees and shrubs on farms and in rural landscapes, combined with crops and livestock
- Agroforestry combines agriculture and forestry to create a profitable, productive, healthy and sustainable land-use system
- Agroforestry benefits humans, animals, plants and the entire environment

What do these agroforestrees do?



Farmers have been using trees on their farms for thousands of years as:

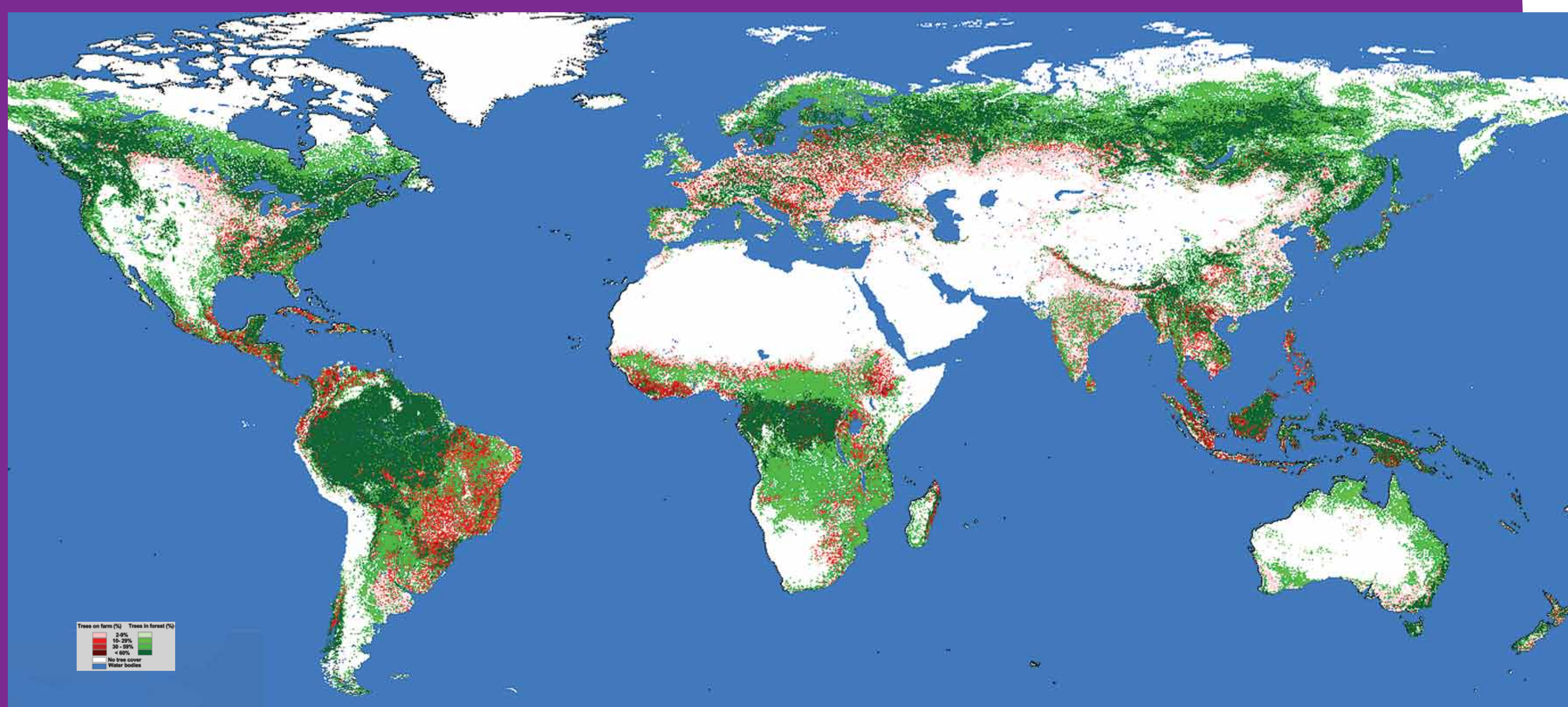
- Fertiliser trees for land regeneration, healthy soil and secure food supplies
- Fruit trees for nutrition
- Fodder trees that provide food for livestock
- Timber trees for wood to build
- Fuelwood trees for cooking fires
- Medicinal trees to cure health problems and fight disease

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Why is agroforestry important?



Over one billion hectares of agricultural land, almost half of the world's farmland, have more than 10% of their area covered by trees; 160 million hectares have more than 50% tree cover

As the amount of global forests shrinks, growing trees on farms for all kinds of purposes becomes more important

Restoring barren land



Agroforestry can help restore barren land. Some 'fertiliser' trees take nitrogen from the air and fix it in their roots, which nourishes the soil

Planting these trees is a low-cost, ecologically sound way of making infertile ground useful again. It is also much quicker than leaving the land unplanted and unproductive for a long time

Fertiliser trees

'Fertiliser' trees help improve degraded ground because nodules on their roots fix nitrogen in the soil.

Farmers plant these trees among their field crops. They prune them regularly and put the leaves into the soil. This improves the health of the soil.

Crops such as maize can then be grown between the trees on the restored land.

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Repairing soils



In the mid-1990s, soils in the Western Highlands of Cameroon in Africa were so degraded that farmers were abandoning their land. This began to change when 'fertiliser' trees were introduced. The trees boosted soil fertility and doubled or tripled harvests of wheat, potatoes and beans. Farmers then planted local varieties of fruit trees. Today, the land has patches of forest, dense hedges, tree nurseries and fertile fields of crops dotted with fruit and medicine trees

In Asia, large areas of forest margins, grasslands and hilly farmland, suffer from degradation and are unproductive. One agroforestry scheme in rural India reclaimed 85 000 hectare of degraded land. In North Korea, agroforests are repairing thousands of hectares of hilly land that was once almost useless

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Tripling yields



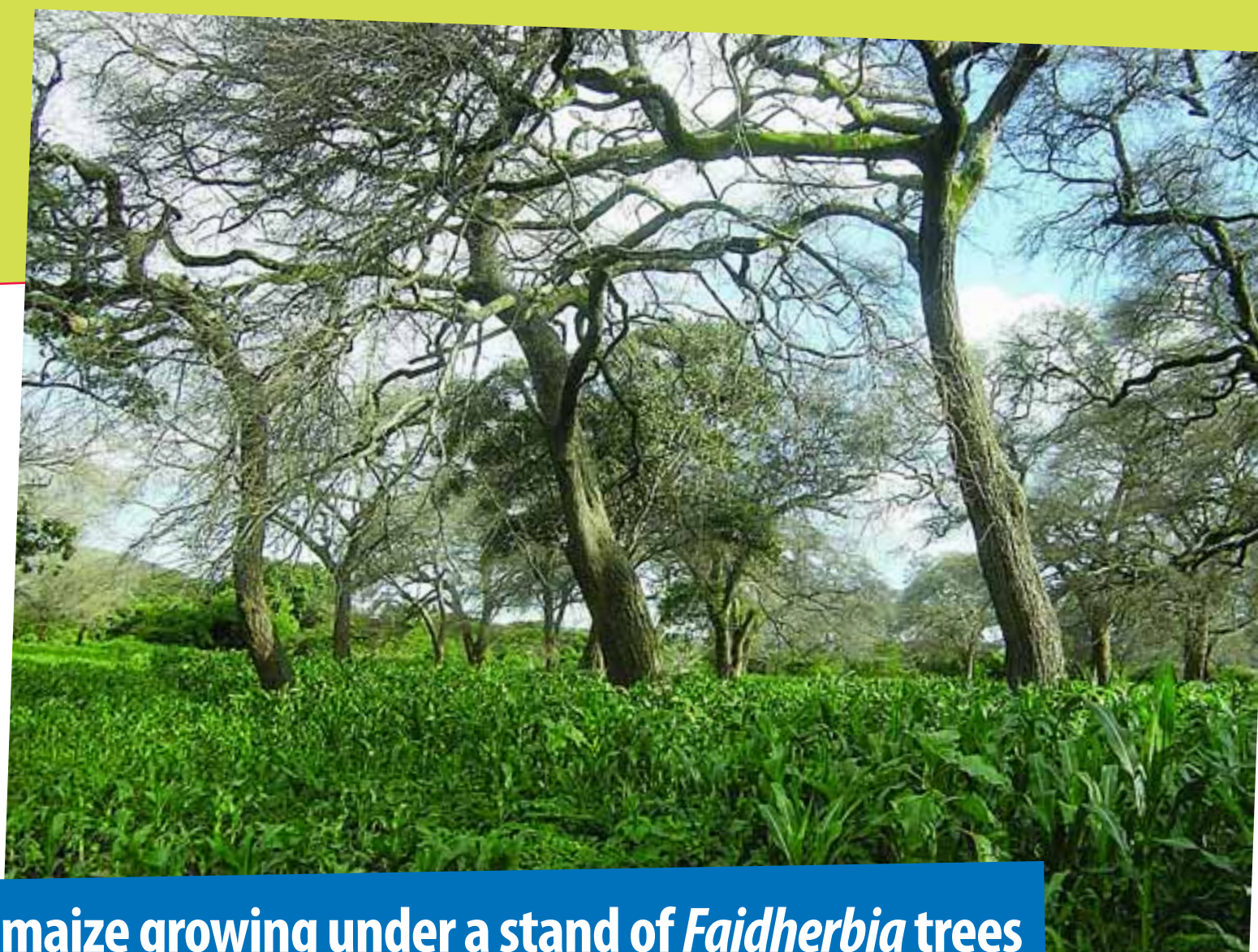
Agroforestry can increase harvests from agricultural crops. In Malawi, Zambia, Kenya, Tanzania, Niger, Burkina Faso and other countries in sub-Saharan Africa, fertiliser trees are doubling and tripling average maize yields

Boosting harvests



One particularly useful tree is *Faidherbia*. This tree sheds its leaves at the beginning of the rains when crops are planted and remains dormant while crops are growing. This means it does not compete with crops for water, nutrients or light.

During the growing season the branches are bare, which lets crops such as maize, sorghum and millet grow and mature below. Zambian farmers who have planted *Faidherbia* have increased their harvests by four times.



A healthy crop of maize growing under a stand of *Faidherbia* trees

Evergreening agriculture



Evergreen Agriculture is environmentally sound farming where food crops and trees grow harmoniously together. Modern, intensive agriculture exploits the environment

Evergreen Agriculture combines agroforestry and farming to sustain the environment. Evergreen agricultural systems are already restoring exhausted soils and increasing yields, helping to feed us while protecting the natural resources we all depend on

Relieving poverty



Few poor households have any capital except their land. Planting trees can build up their capital and be a first step on the pathway out of poverty. Trees are an investment because they become more valuable as they mature

Growing trees works well with growing crops and raising livestock in poor, rural households. Trees improve soils, boost harvests and provide feed for their animals. Many of the tree products can also be sold locally and internationally



Growing prosperity



Christophe Missé has a small farm 40 km north of Yaoundé, the capital of Cameroon. Christophe's life has changed dramatically. Ten years ago he lived in hardship and poverty. Then he learnt how to cultivate native fruit trees. Now he is a fruit grower, he has built a new house and he sends his two children to private school

He set up a nursery with his neighbours and sells over 7000 trees a year. He has also planted hundreds of bush mango, African plum and African nut trees among his main crop, cocoa. The best African plum trees earn five times as much as a cocoa bush

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Bridging the hungry gaps



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In some African countries, up to 80% of rural households go hungry for 3 months of the year because they cannot grow enough food from their poor soils

Native trees have always been an important fallback for the rural poor when food is scarce. By including trees in their farms, farmers can improve their soils and break the cycle of hunger

Reducing hunger



Back in 1997, Nelson Mkwaila, a farmer in Chiradzulu district in Malawi, was having trouble feeding his family. His soil was poor and he couldn't afford to buy fertilisers. Nelson began to use fertiliser trees in his maize fields. His yields increased. That was just the start.

Today almost every corner of the farm that isn't devoted to annual crops is planted with fruit trees. He has guava, peach, banana, apple, paw paw and several other species. He has plenty of food for his family throughout the year and a surplus to sell.