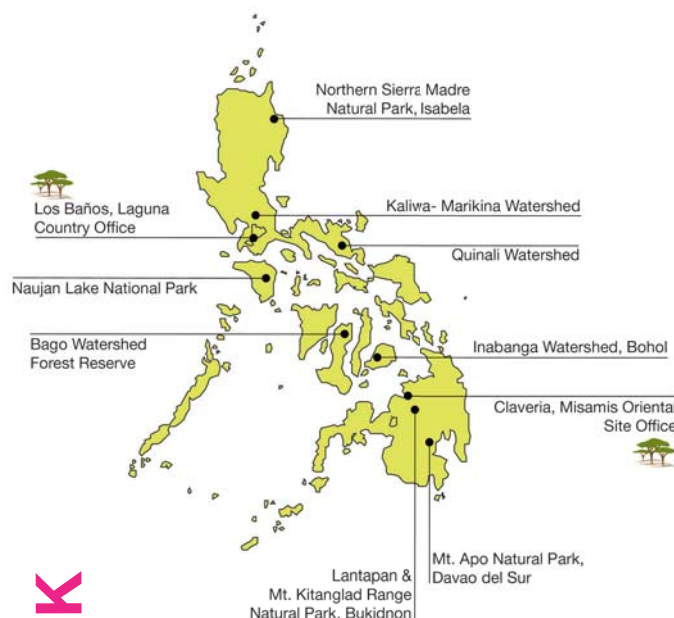


The World Agroforestry Centre (ICRAF)

The World Agroforestry Centre (ICRAF) is a CGIAR Consortium Research Centre. ICRAF's headquarters are in Nairobi, Kenya, with five Regional offices located in Cameroon, India, Indonesia, Kenya and Peru.

Our vision is a rural transformation in the developing world as smallholder households strategically increase their use of trees in agricultural landscapes to improve their food security, nutrition, income, health, shelter, social cohesion, energy resources and environmental sustainability.

The Centre's mission is to generate science-based knowledge about the diverse roles that trees can play in agricultural landscapes, and to use its research to advance the implementation of policies and practices that benefit the poor and the environment.



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Photo Credit: ICRAF/Am y C muz, Tess Beyer



Climate Change & Biodiversity in the Philippines

blog.worldagroforestry.org

www.worldagroforestry.org/regions/southeast_asia/philippines



RESEARCH
PROGRAM ON
Forests, Trees and
Agroforestry





What is Climate Change?

Climate change occurs when long-term weather patterns are altered by natural or human causes.

Some observed changes in climate are:
Increase in temperatures worldwide, extreme climate events, droughts, and strong typhoons.

What are Greenhouse Gases?
The Earth is insulated by a layer of greenhouse gases, including carbon dioxide.

Greenhouse gas emissions are increased through activities such as burning fossil fuels, cutting down trees, population increase and certain farming activities.

This disrupts the atmospheric balance keeping the climate stable, contributing to global warming.



What can we do to help?
Agroforestry is one practice that can help conserve biodiversity and at the same time help communities adapt to climate change.

What is agroforestry?
Deliberately mixing woody perennials (trees, shrubs, palms or bamboo) with crops and / or animals in an arrangement or sequence.

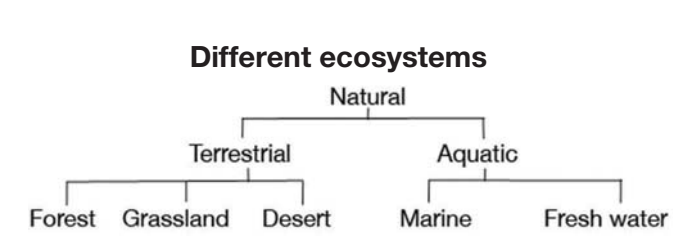
Even the simplest agroforestry system is more complex than a monocropping system.

What is biodiversity?

Biodiversity is the variety of life; the living organisms inhabiting different ecosystems.

Differences between species

Differences within species



Why is biodiversity important?

- It gives us materials and resources like food, water, clean air, timber and medicine for our survival.
- It provides communities with different livelihoods.
- It provides enjoyment. Biodiversity can also have cultural and religious roles for many communities.
- It balances the environment by supporting and regulating processes like climate, pollination and photosynthesis.

There is more biodiversity per hectare in the Philippines than in any other country.

In fact, the Philippines is one of 17 mega-diverse countries in the world.

These 17 countries alone host 70-80% of the world's biodiversity.

However, high numbers of endemic species (species only found in the country) face extreme threats within the Philippines.

Some threats to biodiversity are:

- Cutting trees
- Over-exploitation
- Poaching and illegal trade
- Pollution
- Climate change

Impacts of climate change on biodiversity:

- Altered timing of natural events,
- Changed behaviour of plants and animals,
- Changes in where species are found, as they search for more suitable habitats,
- Increased frequency and intensity of pests and diseases,
- Rising sea levels may flood low-lying areas and affect sources of freshwater.

We are working with farmers to integrate trees on their farms and across the agricultural landscape, strengthening livelihoods, and sustaining environments for the future.