Biodiversity Module

General Notes and Introduction
Structure of Module

• A brief introduction (this one)
• One case study
• Three exercises:
  1. Community Conservation
  2. Determining payments
  3. Sustainable finance

• Issues to look for and Wrap Up
What do we need to understand?

1. Meaning of biological diversity
2. How can it be measured
3. Importance of biodiversity to people
4. The role of market instruments
Biological Diversity

• According to the UN Convention on Biological Diversity:

“the variability among living organisms of all sources and the ecological complexes of they are part. This includes diversity within species, between species and of ecosystems”.
Measure and Indicators

• Number of species per area
  – Genes
  – Species
  – Ecosystems

• Benefits in form of goods and environmental services
Why is biodiversity important?

- Regulation of climate and biogeochemical cycles,
- Hydrological functions,
- Soil protection,
- Crop pollination,
- Pest control,
- Recreation and ecotourism
- Ecological resilience
- Wildlife habitat and diversity

➢ Traditionally free benefits to society or “public goods”
➢ Scale is variable from local to global benefits
Importance to People

- Basic requirement for sustainable development
- Loss of biodiversity endangers the livelihoods of poor people
- Estimate of 30% loss of biological resources since 1970
- Impacts could be astounding, remember:
  - Potato Famine in Ireland (1846-49) around 500,000 – 2 M dead
  - Loss of Cod in Newfoundland – now down to 1% of pre-industrial level
Role Market Instruments

Attempt to provide an economic indicator (price) that can internalize the value of biodiversity and make its conservation possible.

- Taxes and charges for species (fish, trees, etc.)
- Payments for access to genetic material or habitat
- Biodiversity-friendly products
- Payment for conservation management
- Tradeable permits
- Eco tourism
Now…

How can we conserve biodiversity in The Bantu Inra area of Martina?
Country of Martina

Population: 11 mill
Great Geographical, ecological and ethnic diversity
Turbulent political history (fragmented society, conflicts)
New constitutional reform assembly
Indigenous Rights
Increase deforestation, soil and water degradation
Ministry of the Environment (weak enforcement of law)
National Parkt System (22 %) of the country area
The Inra in Bantu

- Inra are forest-dwelling Indigenous people
- 8000 inhabitants, organized in communities
- Northern Highlands of Martina
- Extreme biological and cultural Diversity
- The land belongs traditionally to the communities
- Main source of income: Timber and cocoa (most subsistence)

But what is going on there and what are the problems?