

Ecosystem Accounting in Costa Rica

Environmental Statistical Unit

June, 2018

Why Ecosystem accounting?

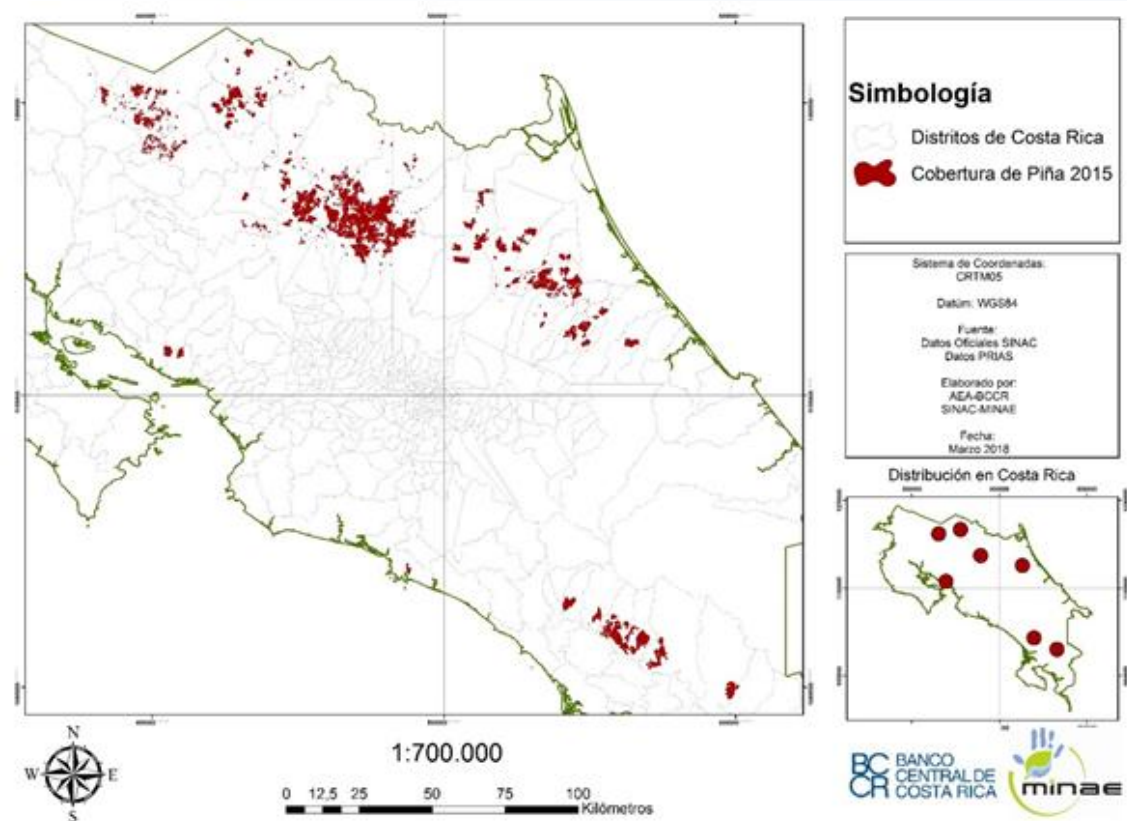
- Relevant issues in the country:
 - First country to stop and revert deforestation
 - Significant investments in two decades: US\$300 million for Payments for Environmental Services (PES)
 - The country still looking for a comprehensive (total) accounting of the natural capital
 - Pressures: agriculture, urbanization, land degradation
- Role of Ecosystems for Development:
 - PES and Climate Change mitigation (52.4% forest) vs Forestry (0.07% of GDP)
 - Relevance of Hydro-Power (80% of national electricity supply)
 - Tourism (4% of GDP)

ES of carbon stock and pineapple crop and objectives of the Forum

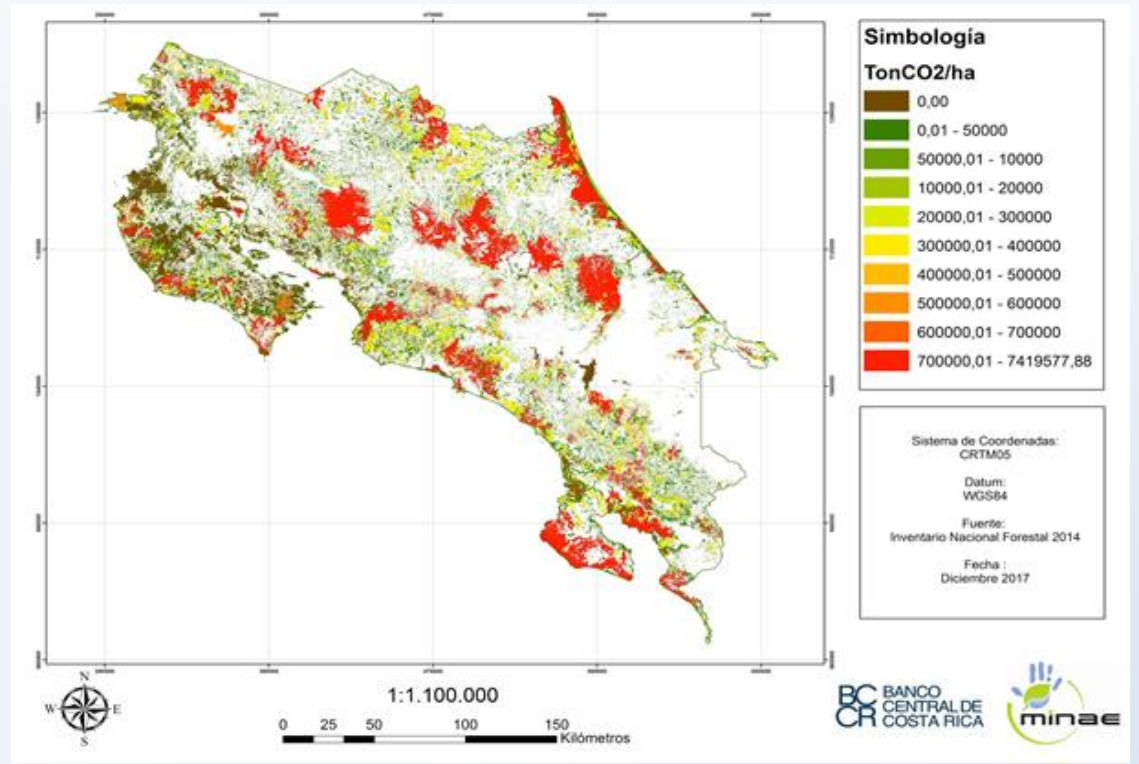
- **Spatial areas:**
 - Mapping ES for the **whole country**
 - Layers for **carbon stock** (2013-2014) and **pineapple crop** (2012-2015)
- **Ecosystem asset condition:**
 - The databases and figures provide possibility to show **gains and losses**, crop/forest cover, distribution projection, impact in others crops/forest
- **Ecosystem services:**
 - Pineapple crop: **three scenarios** of productivity following the SEEA-EEA Manual: provisioning services for *crop production* (fig. A3.1)
 - Carbon Stock: total carbon stored **by forest type** following the SEEA-EEA Manual: regulating services, *carbon storage* (fig. A3.4)
- **Valuation**
 - Pineapple: **Resource Rent** with National Accounts data
 - Carbon: **four scenarios**: \$7.5 per ton (FONAFIFO) and \$11, \$36 and \$56 per ton (Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis, US Government)

Maps for Ecosystem Services

Spatial distribution of pineapple plantations in Costa Rica

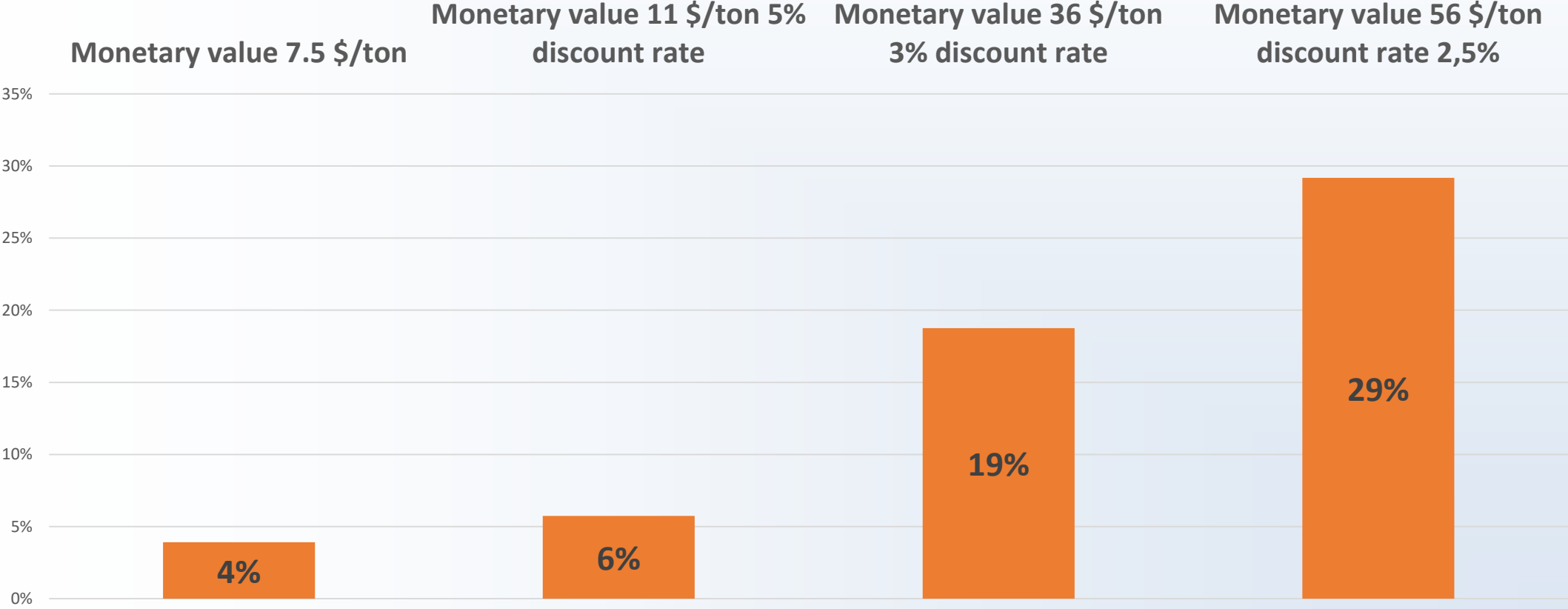


Location of the Carbon Stock for the forests in Costa Rica



Source: BCCR

Carbon stock valuation scenarios as a percentage of GDP



Source: BCCR

Why Ecosystem accounting?

- Helps to understand the dynamic between environment and economy
- Create policies that lead to an sustainable development
- Balance between economic growth (monetary terms) and conservation of the environment

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Thank you

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