

## Costa Rica

# Forest Accounting for Policy Decision Making

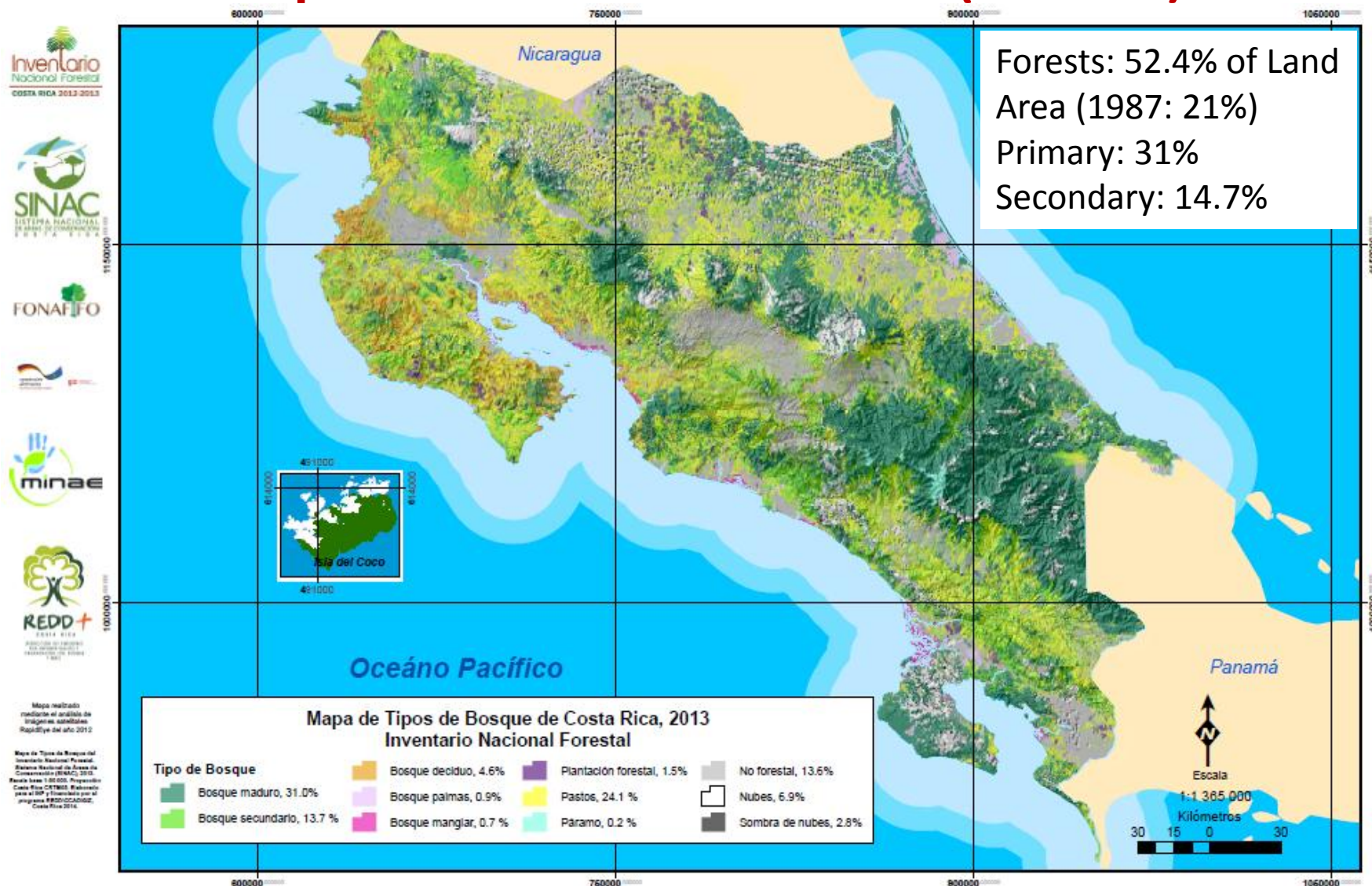
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# Why a Forest Account?

- 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)
  - No comprehensive accounting of natural wealth
  - Pressures: agriculture, urbanization, land degradation
- Role of Forests for Development:
  - PES and climate change mitigation
  - Tourism (4% of GDP)
  - Relevance of Hydro-Power (80% of national electricity supply)
  - Impact in the rural economy (income, poverty, employment)

# Map of Forest Cover (2013)



# Policy Questions

- Return on natural capital investments:
  - Forests conservation and national wealth: contribution to GDP, employment, poverty
  - Impact on key industries: Hydropower, Sustainable Tourism, Agriculture (multiplier effect)
- Fiscal policy for environmental externalities (fossil fuels tax for PES financing)
- Land use changes and resource management:
  - Water resources protection: watersheds, reservoirs, etc.
  - Environmental services: biodiversity and its economic value
  - Public vs. Private investments (value and opportunity cost)

# Contribution of a Forest Account for Policy Implementation

- Payments for Environmental Services (PES) and the National Climate Change Strategy (ENCC)
- REDD+ Strategy
- National Plan for Forest Development (PNDF) 2011-2020

# Forest Carbon Dynamics

Carbon Value: 1 – 1.2% of GDP; Forestry Industry: 0.4% of GDP

	<b>2005</b>	<b>2010</b>	<b>2015</b>	<b>2020</b>	<b>2025</b>	<b>2030</b>
Forests (% of Total Land Area)	48%	50%	56%	59%	62%	64%
Stock 000 Tons CO2	752,245	783,761	869,381	929,262	977,212	1,015,684
Five-Year Flows 000 Tons CO2	51,558	31,516	85,620	59,881	47,950	38,472
Current Value @US\$5/TonCo2 000 US\$	257,790	157,580	428,100	299,405	239,750	192,360
Present Value @US\$5/TonCo2 and 5% Discount Rate 000 US\$	n.a.	627,014	457,327	n.a.	n.a.	n.a.

Source: Own estimation with data from Pratt, Rivera and Sancho (2010), and BCCR

# Challenges

- Consolidation of technical working group:
  - Capacity building
  - Integration of information and data sources
  - Staff from relevant stakeholders
  - Skills and statistical capacity development
- Better dimensioning of Forest Accounting for policy decisions:
  - Institutionalization (long term commitment)
  - Interagency work and policy coherence
  - Cross-sectional approach for economic valuation: water resources, biodiversity, agriculture, industry, etc.



# Next Steps

- Meetings with new Government authorities:
  - Information
  - Discussion
  - Institutional Support
- Coordination with key stakeholders:
  - SINAC: National Forestry Inventory (Assets account); Biodiversity Strategy (Ecosystem Services); Forest Information System (Industry)
  - FONAFIFO: Carbon Balance (Stocks and Flows account); Economic Valuation (Environmental Services)
  - OTHERS: Water and Electricity Utilities; NGOs, Universities





**Thank You**