Programa Regional de Cambio Climático





# Implementation of blue forests science

#### **Miguel Cifuentes-Jara**

#### CATIE

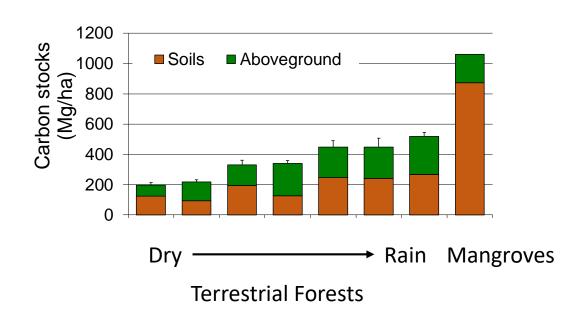
#### **Blue Forests Cross-Training Workshop**

23 – 26 January 2017, Panama City, Panama



## Why Blue Carbon?

- Provision of ecosystem services
- High carbon accumulation rates and storage
- Heavily threatened ecosystems
- Sources of considerable GHG emissions



#### International Blue Carbon Initiative



- Recognizes value of coastal-marine ecosystems in climate change
- Guiding principles for mitigation, adaptation & policy work in the region





### CATIE's "building blocks"

## A cohesive package of scientific research & policy promotion

- 1. Carbon inventories in mangrove & associated ecosystems
- 2. LULUC geospatial and emissions modeling
- 3. Social and ecological vulnerability
- 4. Valuation of ecosystem services
- 5. Promoting capacities & disseminating knowledge
- 6. Development of national policy frameworks
- 7. Promoting regional networks of practice

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#### **Regional actions**

Action	GT	HN	ES	CR	PA	DR
C inventories	Х	Х	Х	Х	Х	Х
LULUC dynamics	Х	Х	Х	Х	Х	Х
Ecosystem services			Х	Х		
Valuation			Х	Х		
Vulnerability				Х		
Policy facilitation		Х	Х	Х	Х	Х
Management/ restoration			Х		Х	Х















## **Impacts in Central America**

- Technical Regional
  - Methods development
  - Capacity building
  - Basic science & data
  - Collaborations (PA, ES, HN)



Manual Centroamericano para la Medición de Carbono Azul en Manglares

Describe los métodos y buenas prácticas para el diseño de inventarios forestales de carbono azul para manglares de Centroamérica.









## **Impacts in Central America**

- **Social –** *Costa Rica, Panama, El Salvador, Honduras* 
  - Strengthened national capacities
  - Local communities empowered to conserve mangroves
- Economic Costa Rica
  - Preliminary estimate of loss of mangroves natural capital
  - Valuation studies elsewhere
  - Foundation for PES schemes



## **Impacts in Central America**

- Conservation El Salvador, Costa Rica
  - Mangroves under sustainable management doubled
  - Strengthened management & restoration projects
- Strategic Regional
  - Blue Carbon notions increasingly recognized
  - Technical assistance requests increasing
  - Growing number of partners/actors



#### **Growing number of actors**



Solutions for environment and development Soluciones para el ambiente y desarrollo





PROYECTO Bodiversidad Narine Cestera en Costa Rica, Desarvello de Capacidades y Adaptacide al Cambie Climático.

Implementada por

**Giz** Deutsche Gesellschaft Nir Internationale Zusammenarbeit (GIZ) OmbH



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**blue**forests

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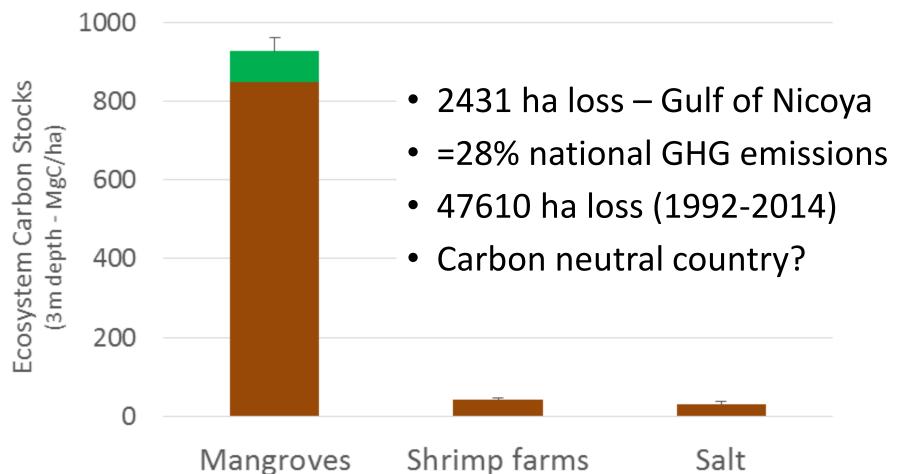






#### Lessons learned

• The power of data – Costa Rica example



Cifuentes et al. (2014)

#### Lessons learned

- The power of data
- "Champions" are needed
- Need to develop basic knowledge and "shared language"
- Emphasis on mitigation is limiting
  - Local needs at odds with global/regional priorities
- Need to promote collaborations to broaden impacts



## Specific needs

#### Science

- Methods
  - Long-term stocks vs. fluxes
  - Local capacity
- MRV systems (REDD+)
  - AD & EF
- GHG inventories
- Restoration know-how

#### **Policy & finance**

- Decision makers understand and internalize topic
- Policy instruments & financial mechanisms
  - NAMA, REDD+?
- Options & cost analyses



#### **Challenges and way forward**

- Continue enhancing technical capacities
- Projects need to be designed and implemented
  - Mitigation & Adaptation goals + Restoration
  - Strengthen local livelihoods & development
  - Financial mechanisms
- Promoting political understanding and buy-in
- Policy frameworks are lacking to facilitate implementation



# iThe future is **blue**!

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