# Integrated Landscape Approaches to Forest Landscape Restoration

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International Conference on Forest Landscape Restoration under Global Change

Puerto Rico, June 6-9 2017

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## Key messages

- Landscapes are **complex** & **unique social constructs**
- ILA and FLR are about **processes** & outcomes
- Restoration is a long term process that demands: **shared vision**, **negotiated interventions** & **adaptive management**
- **Collaboration** is needed to work across social, political & scientific disciplinary boundaries. **GLF** aims to create a global community of practice
- **Collective action** & **governance** are key factors for large scale effective restoration
- Participatory & inclusive negotiation/planning are key to manage **trade-offs** & **synergies**
- There are key principles & interventions; however, **harmonization/integration** & **flexibility** are critical

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**Time for restoration is now**

- Human wellbeing depend on **ecosystem services** from a wide range of land uses (MEA 2005)
- Extent of world's **forest continues to decline** as human population and demand for food and land increases
- Land and ecosystem degradation is the **major impact of humans** on the natural environment (Dobson, Bradshaw and Baker, 1997)
- Degraded lands **range widely** from less than 1 billion ha (< 7%) to over 6 billion ha (> 40%) (Gibbs and Salmon, 2015)
- Need to **restore value** to the World´s degraded lands (Daily, 1995)

Landscapes are **social constructs**

- Degradation, management, protection, restoration are outcomes of **social processes**
- **Technology** has been key in human evolution:
  - Domestication -> pastoralism & horticulture
  - Ploughing, irrigation -> agriculture
  - Steam engine -> industrial
  - Social media -> today
- **Collective impact:** different sectors agree to solve a specific social problem using a common agenda, aligning their efforts, and using common measures of success
- **System approach** that integrates diverse actors, sectors, spatial/temporal scales to make the most of existing assets and capacities = **collective intelligence**

Landscapes
=
socio
x
ecological

systems

Three key conditions:

Complexity

Evolution

Uncertainty

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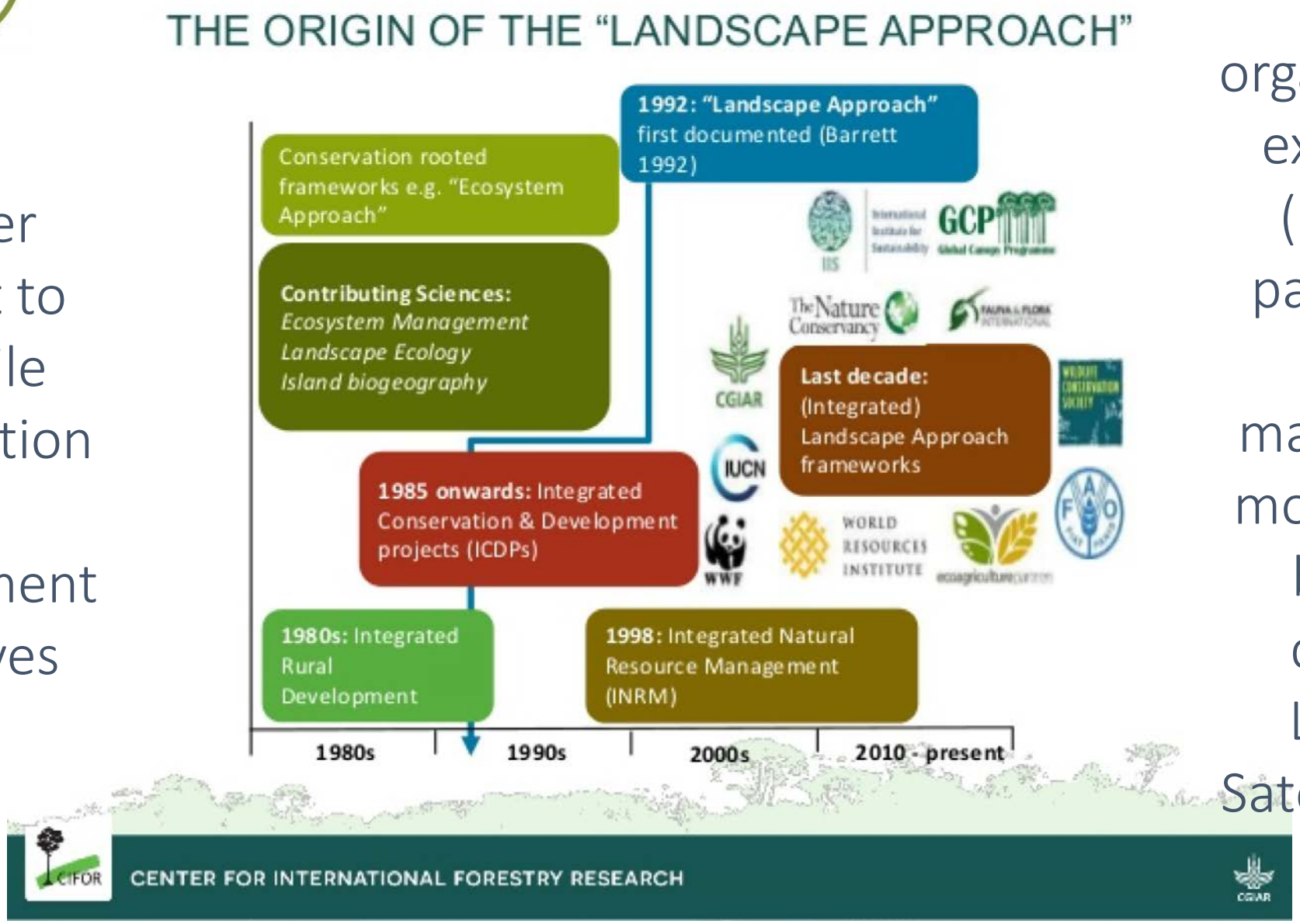
# Integrated landscape approach

- Landscape approach:
  - **framework** to integrate policy and practice to manage competing land uses and ecosystems to achieve social, economic and environmental objectives (Sayer et al., 2013; Reed et al. 2015)
  - A **social organization** process
- Enhance the **total economic value** of the landscape
- Help address **interlinked** and **conflicting challenges**
- Key elements: **multiple objectives**, **stakeholder engagement and dialogue** and **adaptive management** (synergies & trade offs)
- Main **obstacles** are institutional and governance

Another attempt to reconcile conservation and development objectives



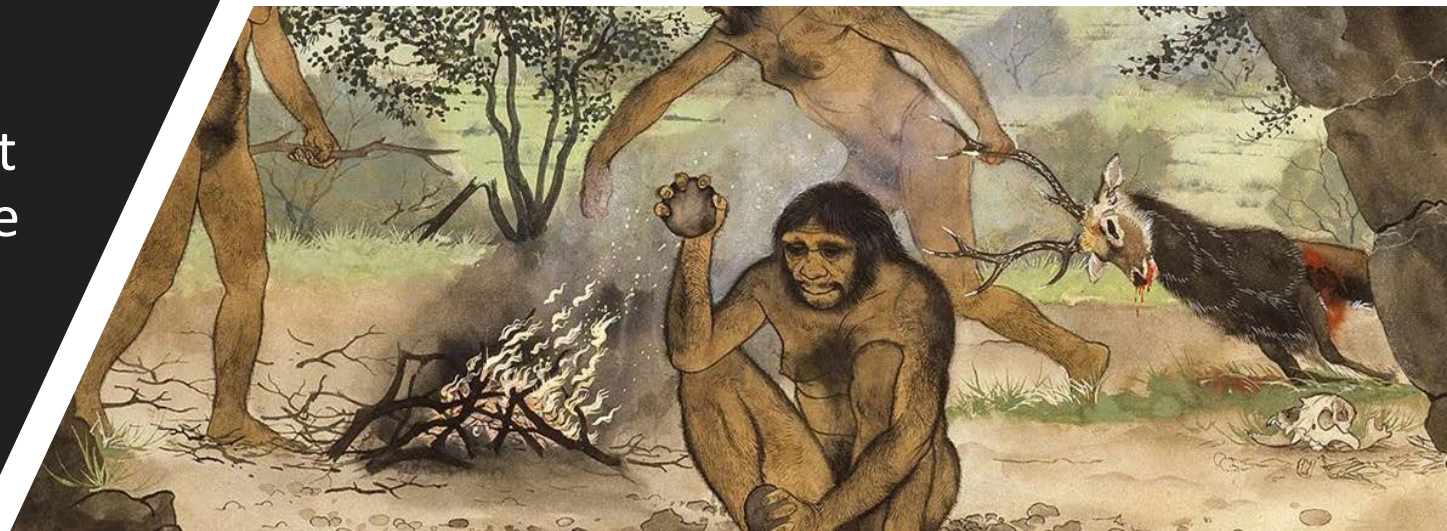

Other organizations & experiences (e.g. IWM, participatory forest management, model forests, biological corridors, Landcare, Satoyama, etc.)

# Mutual benefits enhances collaboration

"Humans' ability to collaborate to obtain otherwise inaccessible goals may be one main cause for our success as a species." (Melis, 2013)

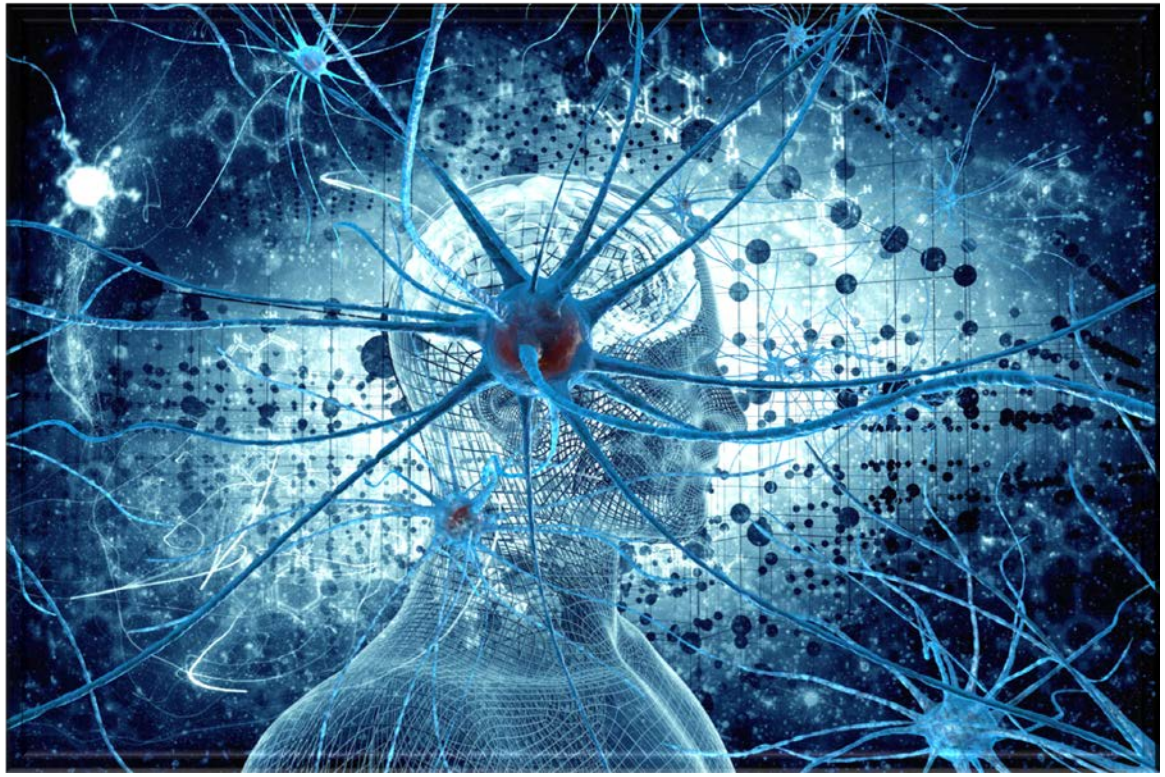
Mutually beneficial collaboration need:

- Cognitive mechanisms to coordinate actions with partners
- Mechanisms to distribute the acquired resources in ways that incentivize partners to continue collaborating



# Collaborative intelligence

Recent concept (1990s) supported by the potential of technological development and society´s demand for higher participation



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# Building smarter FLR

**Social organization** for the sustainable management of lands

**Integration of interests** from diverse actors and sectors under a shared vision and action plan

**Integration of scales**: national, local, farm/management unit ...

top down

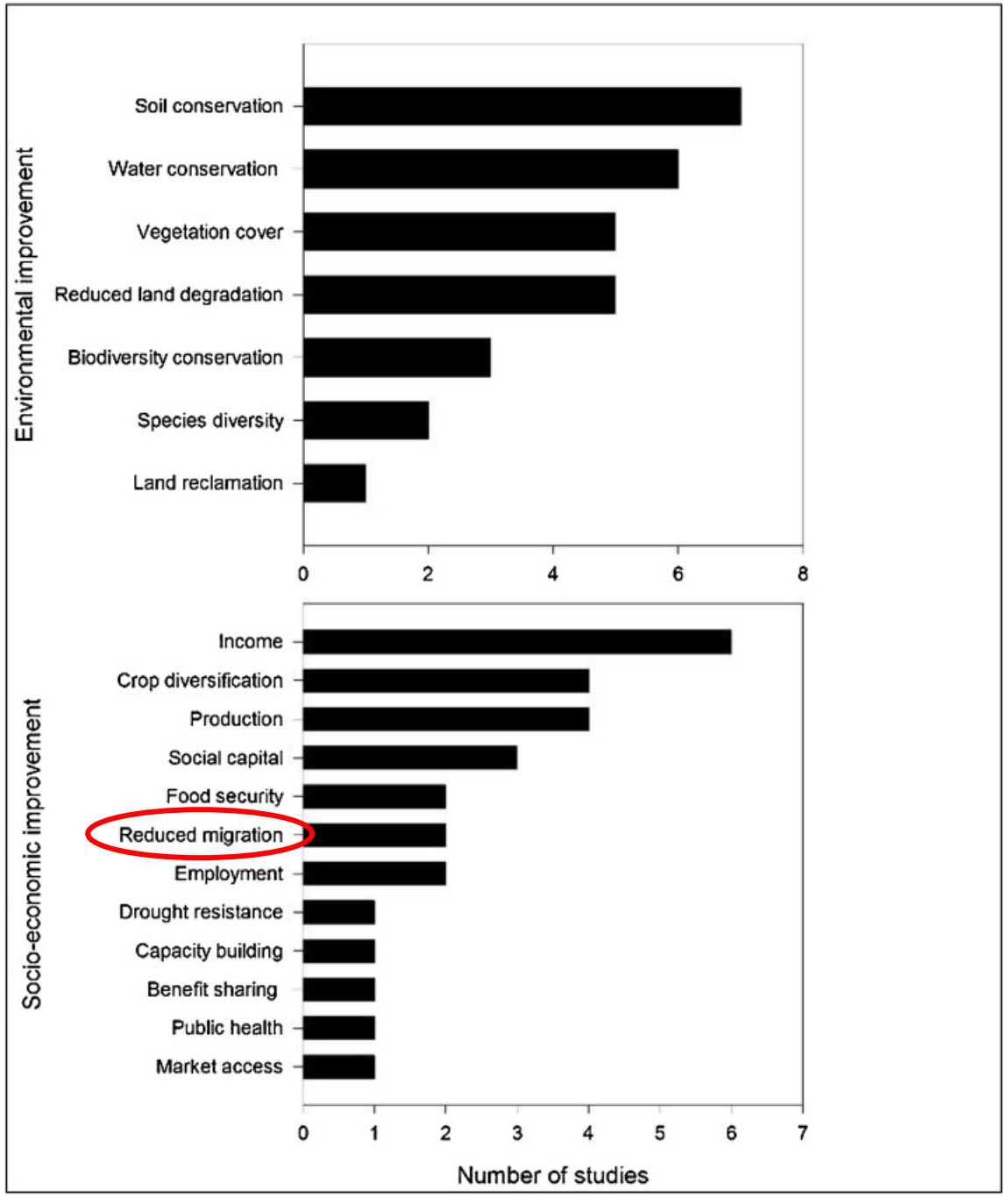
bottom up

# Pillars of smarter FLR

## Collective action

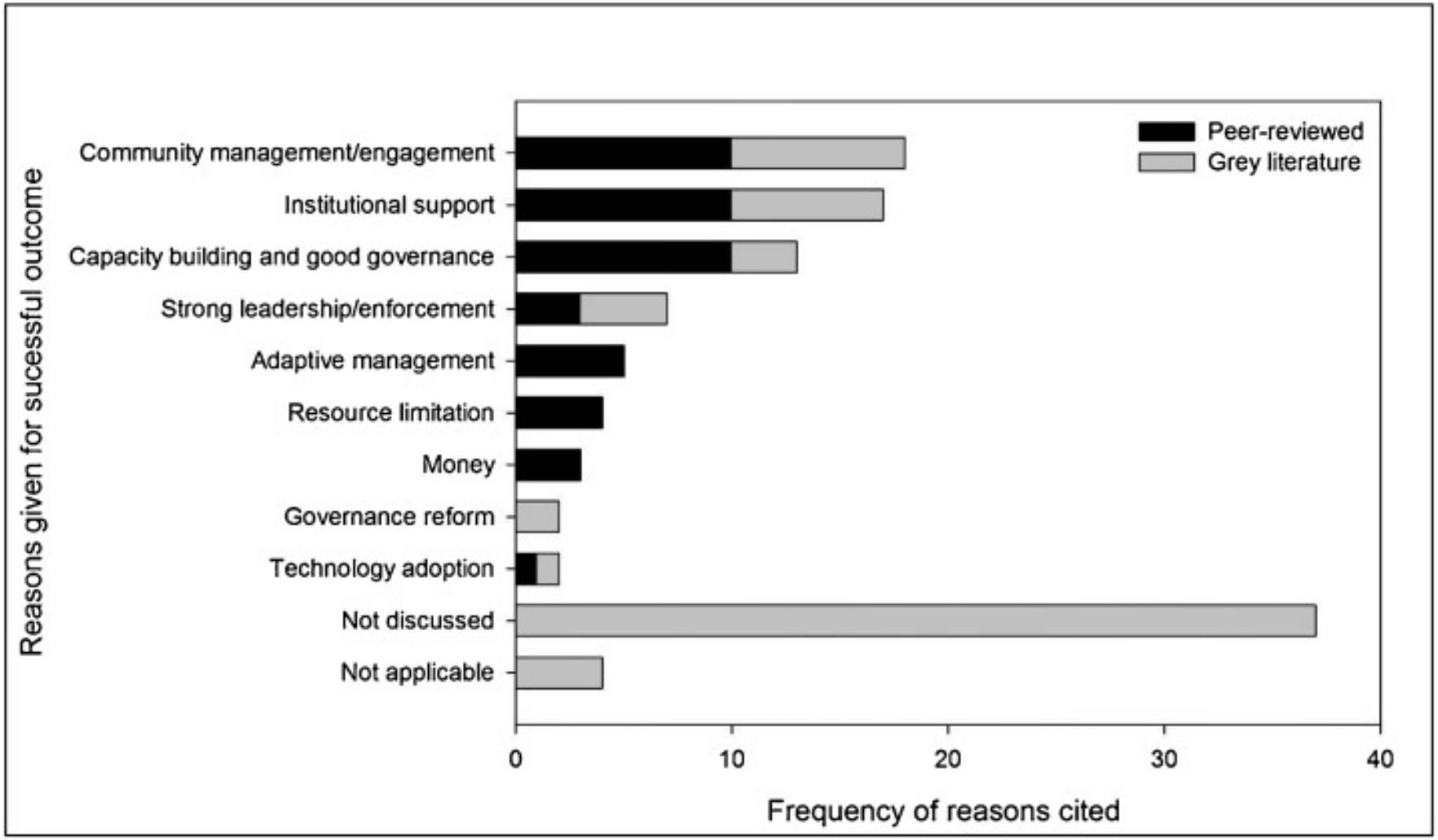
## Inclusive and participatory governance

# Evidence of improvements




12 peer reviewed studies. Reed et al. 2017

# Contributing factors




13 peer reviewed studies; 66 grey literature. Reed et al. 2017

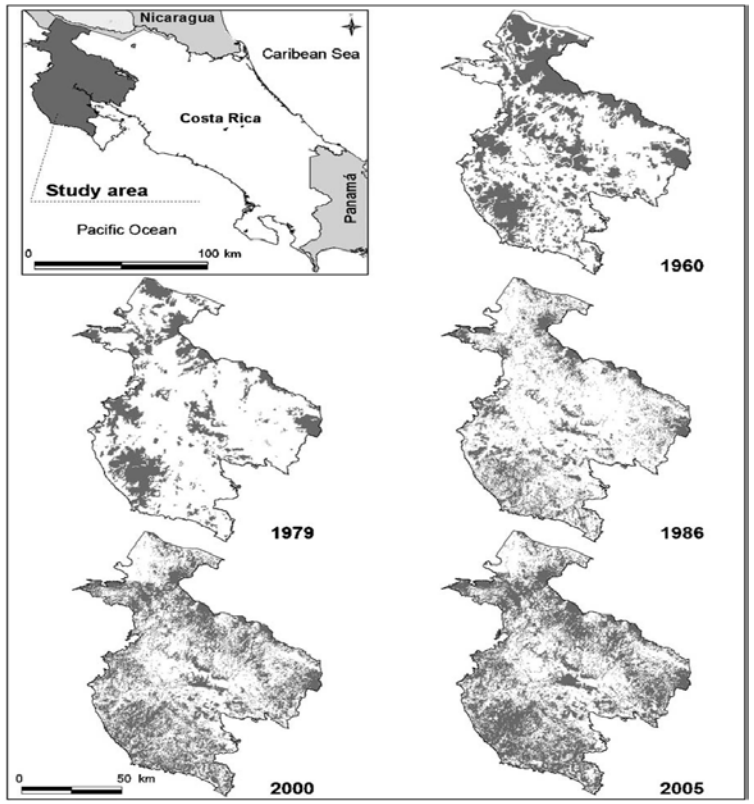
# Hojancha, Costa Rica: a success story

Land use in the 70´s

# Hojancha: 40 years later

# Forest cover dynamics in the Nicoya Peninsula (1960-2005)





# Drivers of change

**Common sense of crisis**

- Beef price drop
- Land and watershed degradation
- Significant emigration

**Restoration efforts**

- Reforestation, AFS, protection, diversification and added value

**Enabling conditions**

- Willingness of landowners
- Policies and institutions (local & national)
- Local values: locally rooted people, collaboration, tolerance, etc.
- Local collaborative leadership
- Technical and financial cooperation

Critical interventions

## 1. Sustainable production systems and value chains

- Emphasis on management of ecosystems (agriculture, AFS, forests and wild)
- Reconcile production and conservation targets (soils, water, biodiversity, etc.)
- Enhance livelihoods assets (human, social, natural, physical and financial)
- Integrate scientific and local knowledge (e.g. farmer field schools)
- Development of value chains to integrate farmers to markets

# Forest community concessions in Peten, Guatemala

- From sawn timber to FSC parts for guitars in USA (mahogany)
- Sell of lesser known species for garden furniture in Spain:
  - +52% harvesting (less mahogany dependent)
  - +23% revenue
- Use of tree branches and log tops:
  - +19% volume
  - +11% revenue
- Small local enterprise and service provider negotiate directly with buyers
- Monitoring impact of harvesting

## 2. Ecosystem-based mitigation

- Restoration of degraded lands: Bonn Challenge, GPFLR, Initiative 20x20 and AFR100
- Sustainable forest management and protection
- Future scenarios of forest cover and land use to support strategies such as REDD+
- Trees in agricultural lands through AFS and SPS
- Agroecological practices to increase biomass and carbon (vegetation and soil)
- Fertilizer and livestock management to reduce emissions
- Support to national policies and strategies towards low emission development

# 3. Ecosystem -based adaptation

- Enhance socio-ecological resilience at household, farm and landscape scales (assets, strategies)
- Priority to zones, ecosystems and crops key for the provision of ES, food and forest products
- Diversification, germplasm, crop management, pests & diseases, water harvesting, etc.
- Support to landscape governance platforms for participatory decision making and enhance collaborative leadership
- Learning through monitoring and knowledge management

# Stregthening resilience of vulnerable populations in Nicaragua

- Organization and planning of charcoal producers allowed legal timber harvesting
- Technological innovation in kilns (earth to brick): +240% revenue (yield and quality)
- Community revolving fund ($15,000) for kiln construction and operating capital
- Improved commercialization and partnerships with intermediaries improved quality & price: +135% in the value chain

# 4. Social inclusion and and gender equity

- Collective action for wellbeing and inclusive green growth at household, farm and landscape
- Mechanisms and incentives for inclusion and participation of women + minorities + marginalized:
  - ✓ From planning phase to access to benefits
  - ✓ In households, farms, value chains and governance platforms
- Enhance landscape´s “collaborative intelligence” (learn to think and act together)

# 5. Knowledge management

- Seek better impact through decision making supported with evidence
- Collaboration to enhance better access to information and knowledge
- Integrate diverse sources of knowledge: farmers field schools, workshops, future scenarios, MRV, governance platforms, observatories
- Enhance landscape´s “collaborative intelligence”

# 6. Inclusive and participatory governance

- Improved collaboration and networking among actors for decision making
- Platforms could be formal or informal
- Joint and collaborative planning based on a joint vision
- Collaborative leadership styles are necessary
- Harmonize interventions to optimize the capacity of the landscape to provide public and private goods
- Optimize use of assets and capacities (intelligence)
- Effective links with governance structures and processes at higher levels

# The GLF Scales Up

Global Landscapes Forum

**The Global Landscapes Forum 2017-2022:**
Landscapes for a new climate and development agenda

# From Warsaw to Lima, Paris, London, Jakarta… .

- 2013 Warsaw: **Defining the landscape approach**
  - 1,200 at venue, 1,684 webcast views, 1.9 million through Twitter
- 2014 Lima: **Transforming the landscape approach into practice**
  - 1,700 at venue, 2,074 webcast views, 6.7 million through Twitter
- 2015 Paris: **Launching, scaling and monitoring landscape action**
  - 3,200 at venue, 4,290 webcast views, 15.9 million through Twitter
- 2015, 2016 The Investment Case, London ***Connecting global funds with local farms and forests***
- 2017 Peatlands, Jakarta ***Communities first***

# GLF Marrakesh: Climate thematic event

5,500 participants from 95 countries

60 % of respondents say they will apply knowledge learned at the GLF

***German Government announces support for GLF 2017-2022 and Global Secretariat in Bonn***

# GLF vision: *Community of Landscapes*

**The Global Landscapes Forum**
**enhances well-being and environment for all**
**by putting people first**

- **communities (people acting together) drive change**
- **landscapes are complex and require flexible solutions**
- **local collective consciousness and solutions can fulfil global goals**

# GLF aspirations: Restoration

***Current estimates of potential production on degraded lands are greatly hindered by missing and often unreliable information***

*Mapping the World's Degraded Lands*, H.K. Gibbs & J.M Salmon

Connecting all restoration initiatives to accelerate action

## Summary

- Healthy landscapes are (social constructs) fundamental for our future
- ILA/FLR do not seek to replace existing institutions or processes, but to connect them
- Key elements: multiple objectives, stakeholder involvement and dialogue and adaptive management
- It is about negotiation and collaboration that embraces diversity of solutions
- It is a smarter social organization process for collaborative management of natural resources

*"In the course of history, there comes a time when humanity is called upon to shift to a new level of consciousnees, to reach a higher moral ground'*

Wangari Maathai

# Thank you

# The 5 Conditions of Collective Impact

1. **Common Agenda**
   - **Common understanding** of the problem
   - **Shared vision** for change

2. **Shared Measurement**
   - **Collecting data** and **measuring results**
   - Focus on **performance management**
   - **Shared accountability**

3. **Mutually Reinforcing Activities**
   - **Differentiated approaches**
   - **Coordination** through joint plan of action

4. **Continuous Communication**
   - **Consistent** and **open communication**
   - Focus on **building trust**

5. **Backbone Support**
   - Separate organization(s) with **staff**
   - Resources and skills to **convene** and **coordinate** participating organizations