

# COMMUNITY-BASED MANAGEMENT:

## Trade-offs between sustainability and development



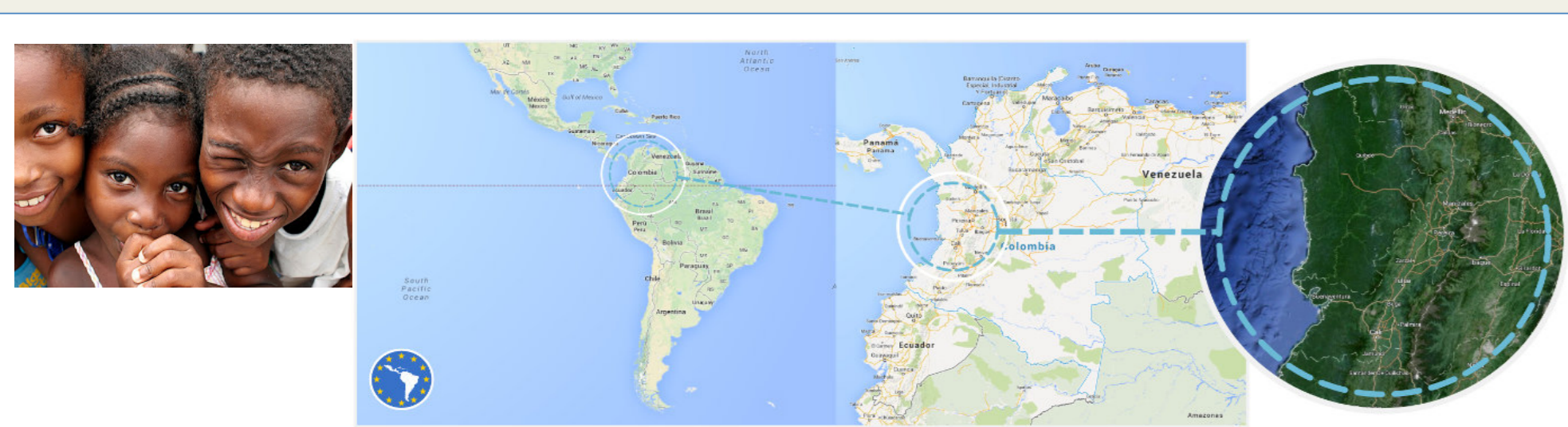
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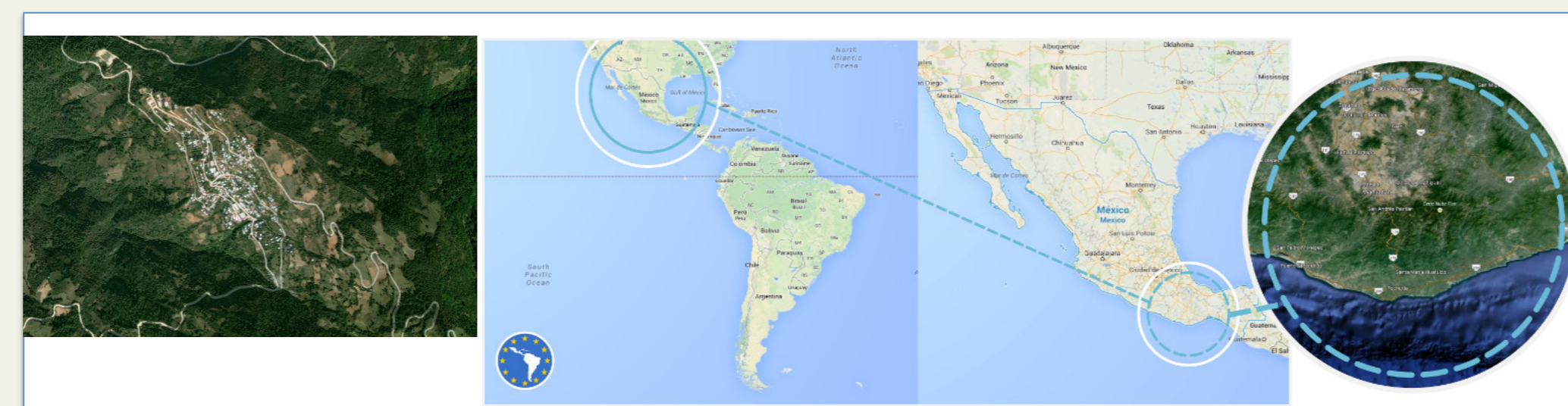
### INTRODUCTION (Some guiding ideas)

- Worldwide expectations ask for natural resource conservation but maintaining high consumption levels.
- Local communities in developing countries face the dilemma between preserving natural resources for “others”, while economic models and market dynamics push them to increase natural resource extraction, specially CPR's.
- Community-Based Natural Resource Management approach has been often considered as a suitable approach to govern commons. It seeks to establish a direct linkage between conservation and local benefits
- The application of CBNRM principles does not lead to harmonize development and conservation.
- This poster presents the trade-offs conditions in two case studies of the project COMET-LA in Colombia and Mexico.



#### Pacific Colombian Coast

- Afro-Colombian communities
- High biodiversity levels and water availability
- Communitarian land ownership
- High willingness to protect natural resources
- Empowered actor and strong leaders
- Illegal mining and crops
- Very large territories
- Recent and ongoing organizational processes



#### Sierra of Oaxaca (Mexico)

- Indigenous communities
- Well preserved primary forests
- Communitarian land ownership
- Strong social capital levels and community empowerment
- Emphasis in autonomy and own traditions
- Small territory
- Ancient and traditional communitarian organization
- Strong organizational tradition

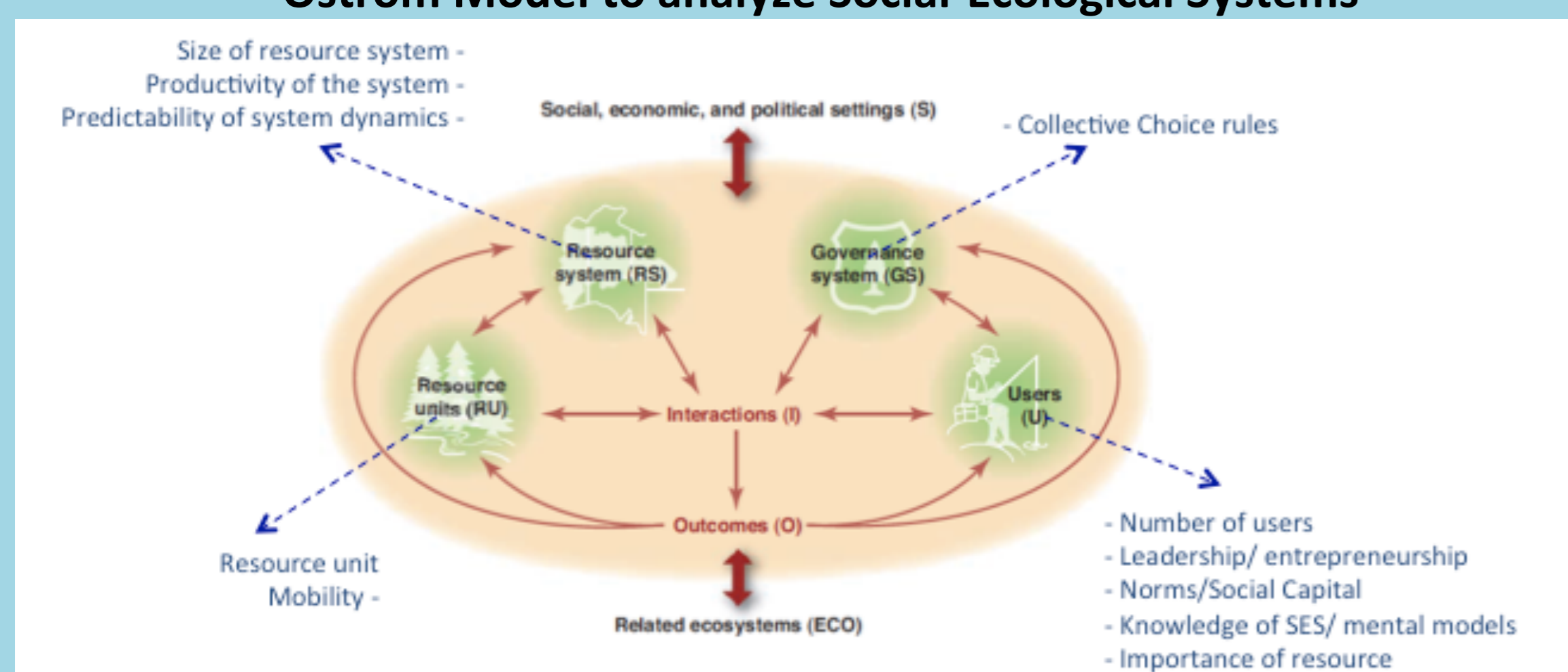
### WHY THIS CASE STUDIES?

- Outstanding natural resource availability facing big social and economic pressures
- Strongly influenced by external forces (market, political, economic) without local reaction capacity.
- Local development perceptions different from the surrounding development model prompting frequent clashes with negative impacts on natural resources.
- Income generation relies mainly on natural resource (preservation – extraction)
- Lack of opportunities for income generation and increasing youth migration
- Permanent dilemma between private incomes and communitarian welfare

### WHAT WAS OUR METHODOLOGICAL STRATEGY?

- Analyzing the Socio-Ecological Systems at the case studies by adapting the Ostrom's Framework for analyzing sustainability in SES (Ostrom, 2009) to the case studies characteristics, engaging local communities within the whole research process.
- Application of a broad set of research instruments (data bases analysis, interviews, communitarian workshops, surveys) to characterize the social-ecological systems.
- Analysis of the local trade-offs between development and sustainability using the subset of variables (10) proposed by Ostrom to be associated with self-organization.

#### Ostrom Model to analyze Social-Ecological Systems



(Ostrom, 2009)

- Comparison of the situations in each case study and definition of possible policy interventions

### TRADE-OFF CONTEXTS

Variable	Mexico (Forest)	Colombia (Water and Biodiversity)
Size of resource system	Medium 19.000 Has.	High 75.528 Has.
Productivity of the System	High (natural renovation)	High (natural renovation)
Predictability of system dynamics	High (management and extraction plans)	Medium (system highly complex and fragile)
Resource unit mobility	Medium (market terms) Low (biological terms)	Low (market terms) Medium – High (biological terms)
Collective-choice rules	High (existing and enforced)	Medium (existing but not totally enforced)
Number of users	High Direct: 362 Potential: 1.115	Medium Direct: 1.064 Potential: 5.660
Leadership	High	High
Norms/social capital	High (long term institutions)	Medium (new institutional arrangements)
Knowledge of SES	Medium - High	Medium - Low
Shared mental models	High	Low
Importance of resources	High	High

### SOME RESULTS

- The general welfare depends mainly from common pool resources extraction vs. conservation. This situation generates options to provide services to the communities (health, transportation, education, etc.) but does not generate direct economic incomes.
- The communities and their representatives shift continuously from generating incomes to protect their resources and culture.
- Local communities at the case studies are not natural resources predators, but the surrounding economic model and the lack of other options pushes them to use natural resource as principal income generation option.

SUSTAINABILITY	MEXICO	COLOMBIA
ENVIRONMENTAL	Very High	Medium-High
SOCIAL	Weak	High
ECONOMIC	Weak	Weak

VULNERABILITY