



COMmunity-based Management of EnvironmenTal challenges in Latin America

COMET-LA: A learning arena to share local and scientific knowledge facing environmental challenges

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OUTLINE

- COMET-LA Project
- COMET-LA Case Studies
- COMET-LA Learning Arena
- Developing the Learning Arena
- Lessons learned
- Capacity Building
- Dissemination Activities

COMET-LA. Basic information

- **COmmunity-based Management of EnvironmenTal challenges in Latin America**
- **Objective:** To identify sustainable community-based governance models for the management of natural resources that could be used in different social-ecological systems in a context of climate change and increasing competition in their use
- **Scheme:** Research for the benefit of CSO
- **Total Budget:** 2.473.699,80€
- **EU contribution:** 1.870.973€
- **Date:** 15 Jan 2012- 14 Jan 2015



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COMET-LA Project



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COMET-LA Partnership

- | | | |
|----------|------|--|
| ■ UCO | ■ ES | • European research institution |
| ■ NILU | ■ NO | • European research institution |
| ■ JHI | ■ UK | • European research institution |
| ■ SGM | ■ PT | • European SME |
| ■ PUJ | ■ CO | • Latin American research institution |
| ■ UNAM | ■ MX | • Latin American research institution |
| ■ IADO | ■ AR | • Latin American research institution |
| ■ AQM | ■ AR | • Latin American CSO |
| ■ CCC | ■ CO | • Latin American CSO |
| ■ ERA | ■ MX | • Latin American CSO |
| ■ CEIUCN | ■ ES | • Branch of international CSO |

3 ENVIRONMENTAL PROBLEMS

- Management of Water and Biodiversity
- Management of Forest and Land Use
- Management of Marine and Coastal Areas



3 CASE STUDIES

Colombia: Basins at Pacific Coast
Pontificia Universidad Javeriana
2 Community Councils of Black
Communities

Mexico: Sierra of Oaxaca
UNAM
ERA (a local NGO)

Argentina: Bahia Blanca Estuary
Argentine Institute of
Oceanography
Aquamarina (a local NGO)

COMET-LA Phases

1. Characterization of SES
2. Identification of current and future key variables using Prospective Analysis techniques
3. Building of Scenarios for future changes and challenges.



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COMET-LA Case Studies



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COMET-LA Case Studies

Outstanding natural resources
Big pressures on them



COMET-LA Case Studies

Ocean & Coastal Management in Bahia Blanca Estuary (Argentina)

- High environmental value estuary
- Unique wetland system
- Strong archaeological and paleontological value of beaches
- Dune regeneration disturbed by building and housing
- Artisanal fishermen (disappearing)
- Important economic port (project to increase dredging in the estuary)
- Petrochemical and industrial site
- Incipient collective action and community-based conservation



COMET-LA Case Studies

Water & Biodiversity Management in the Pacific Colombian Coast

- Very high biodiversity and water resources
- Community property of land recognised by CO Constitution
- Community-based management
- Black communities
- 2 Community Councils as partners (even if only one funded by EU)
- Strong conservation attitude
- Empowered actors and strong leaders
- Tradition of working with university partner: mutual trust
- Illegal mining & crops
- COMET-LA as a trigger



COMET-LA Case Studies

Forest Management in the Sierra of Oaxaca (Mexico)

- Extremely well conserved forest (timber & non-timber).
- Regeneration process
- Community property of land recognised by Government
- Small indigenous community
- Customary uses regime
- Strong social capital (leading to positive & negative effects)
- Conservation prevails over development
- Emphasis on 'isolating' community from external influences



Some Results

SUSTAINABILITY	MEXICO	COLOMBIA	ARGENTINA
ENVIRONMENTAL	Very High	High	Low
SOCIAL	Low	High	High
ECONOMIC	Very Low	Weak	High



VULNERABILITY



Community-based Management of Environmental challenges in Latin America

Developing the Learning Arena



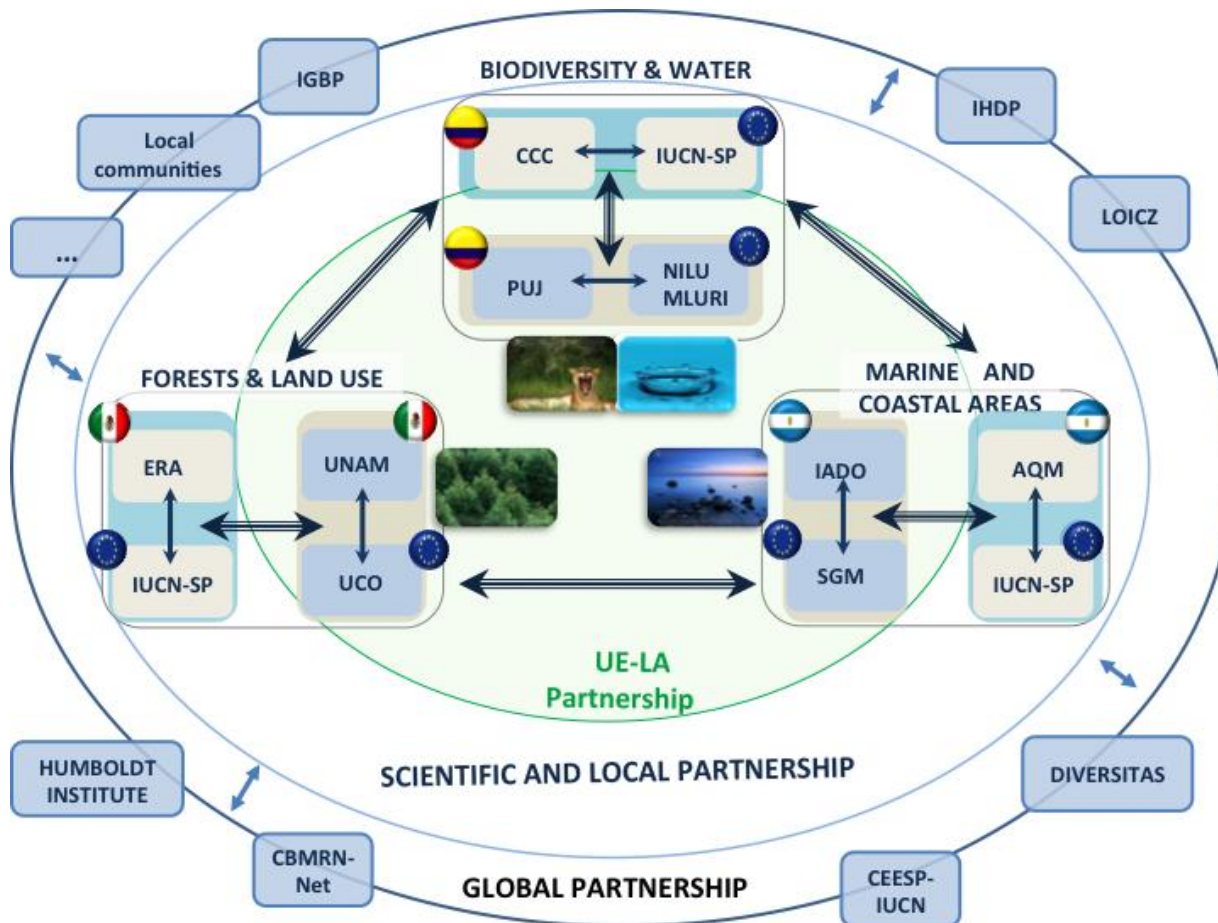
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COMET-LA Learning arena

- A place to integrate **local** and **scientific** knowledge in the management of natural resources.
- **Twin-objectives:**
 - Scientists support local management by targeting their research and provide managers and local communities with **understandable** and **useful** information to take decisions
 - **Local knowledge** and **good practices** on sustainable community-based models are integrated in the management of environmental and climate changes.

Joining locally-owned knowledge with scientifically-supported methods to facilitate progress toward sustainable management of natural resources

COMET-LA Learning arena



Inner ring: UE-LA partners

- **Multidisciplinary team:** sociologists, economists, engineers, oceanographers, geologists, ecologists, meteorologists, teachers...
- **Kick-off meeting:** Sharing methodological approaches
- **Case Study Fieldwork:** A month of intensive interactions and exchanges
- **Methodological Workshops** to analyse working methods (February 2013, June 2013)

Inner ring: UE-LA scientific partners

- **Fruitful results**

- Exchange of working methods
- Learning from other experiences
- Methodological discussions
- Broader understanding of problems and solutions

- **But... difficulties:**

- Crossing disciplinary boundaries
- Different countries and different idiosyncrasy
- To create a common vocabulary & understanding needs time

Middle ring: Scientists-CSOs-locals

- **Cross-cultural setting**
- **Stakeholders** identification and engagement.
Different levels
- Different **Participatory Methods**: Workshops,
Mixed research teams, Focus groups, Transects,
Site visits, Surveys & interviews...

Middle ring: Scientists-CSOs-locals

- **Integrating local & scientific knowledge**
 - From “**exploitation visions**” to “**collaboration visions**”
 - Identify **views** and perceptions
 - Awareness of philosophical and epistemological positions of each group (**Avoid scientific predominance!**)
 - **Bi-directional** exchange
 - No **knowledge privileged**
 - Is not an **act**, but a **process**

Middle ring: Scientists-CSOs-locals

- Integrating local & scientific knowledge
 - **Knowledge** must be **accurate** and **trusted** for both
 - Factors affecting Knowledge integration:
 - Differences in **vision**
 - Differences in **power**
 - Perceptions on the **benefits** of the project
 - Avoid **intellectual theft** (locals don't benefit from knowledge integration)

Outer ring: Global Partnership

- Project presented to different stakeholder and initiatives:
 - Other communities in the area
 - Universities and research centres
 - Policymakers
 - FAO-RLC
 - ISSC
 - ...
- Open and ongoing process



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COMET-LA Capacity Building



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Capacity Building PhD thesis

Researcher	Title	Funding organism
Pepa Ambrosio Albalá (Spain)	Identifying factors influencing individual and collective perception of climate change and their potential as drivers of change	COMET-LA Project
Pablo Andrés Ramos (Colombia)	Social-Environmental Conflict and Institutional Change: Understanding Institutional Nesting via Social Networks analysis in Social-Ecological Systems in Afro-Colombian Common Property Lands.	The German Academic Exchange Service (DAAD)
Vera Semeoshenkova (Russia)	Integrated Framework for beach management	Erasmus Mundus PhD in Marine and Coastal Management (MACOMA)
Sirak Robele (Ethiopia)	Testing the application of Ostrom's framework in Catchment-Coast Social-Ecological Systems in Colombia	Erasmus Mundus PhD in Marine and Coastal Management (MACOMA)

Capacity Building

Researcher	Title	Funding organism
Saul Basurto (Mexico)	Economic valuation of forest environmental services. A case study	CONACYT (National Council of Science and Technology)
Leo Berninsone (Argentina)	MSc Scholarship in Water and Coastal Management	ERASMUS MUNDUS PROGRAMME
Dennis Junio Esteves Vieira (Brasil)	Land Use/ Land Cover Change Analysis : A Study Case in SANTIAGO COMALTEPEC COMMUNITY IN OAXACA.	Scholarship of Science Without Borders program, Brasil

Capacity Building

Researcher	Title	Funding organism
Helena Guimaraes (Portugal)	SharePath “Trans-disciplinarity as a shared path to handle socio-ecological challenges: How far can we go?”	Application to Marie Curie PostDoc
Raquel Fagoaga (Spain)	Practicum MSc in Forest and Nature Conservation Wageningen University	Dutch research funding
Martina Nystrom Cselenyi (Sweden)	Policy and management of water as a common-pool resource in Spain - The case of the aquifer 'Carbonatado de la Loma de Ubeda'	Sweden



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COMET-LA Dissemination Activities



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Dissemination activities at local level

- 6-months Newsletter
- Local people involvement
- Calendars



Dissemination activities at local level

- Drawing competition



Dissemination activities at local level

- Continuous presence of COMET-LA in the local media:
 - More than 50 press release, videos, broadcast from last year fieldwork
 - Radio Guelatao (Sierra de Oaxaca)
 - Hola Pehuen (Bahia Blanca)
- Universities webpages and newsletters

Dissemination activities at national levels

- "Los retos del cambio climático, una visión local: COMET-LA". El Financiero (México)
- Communication in the seminar "Visión Latinoamericana". Universidad de la Costa (Colombia)
- Two brief descriptions in "Hoy en la Javeriana" (electronic and paper magazine of PUJ)
- "Hablemos de Ecología" (Talks on Ecology) at Javeriana broadcast, on COMET-LA
- COMET-LA stand at Projects Fair at Javeriana University (May 2012).
- CEUICN newsletter (Spain)
- X Biodiversity Forum of the Spanish Committee of IUCN: Designing sustainable models of governance and natural resources management to face environmental challenges (Sept 2013)

Dissemination activities at international level

- **International Innovation:** COMET-LA Seeking for sustainability
- 3 motions based on COMET-LA environmental issues approved at the **V World Congress of Conservation:**
 - **Res 053.** Strengthening the participatory and equitable governance of the indigenous communities and peoples of México
 - Rec 165.** Integrated Water Resource Management (IWRM) in the Bahía Blanca estuary in Argentina
 - Rec 175.** Strengthening the autonomy of Colombia's black communities for sustainable natural resource management in their areas
- **COMET-LA Learning Arena** applied to be one of the lighthouse activities in "**Momentum for Change: Women for Results**" (United Nations Climate Change Secretariat)
- **FAO-RLC Bulletin on Family Farm**

Conferences

- XIII World Congress of Rural Sociology Lisbon, Portugal July 29 2012.
- 2012 Berlin Conference on the Human Dimensions of Global Environmental Change
- V World Congress of Conservation, held in Jeju, South Korea, Sept. 2012.
- Future conferences
 - ECSA Conference 13–17 October, 2013, Shanghai, China
 - Science for Environment. Aarhus, October 2013. Denmark
 - 14th meeting of GLEON (Global Lake Ecological Observatory Network) Mulranny (Ireland)
 - VI Eurolag Conference 16-19 December, 2013, Lecce, Italy

Scientific Publications

- Mariana I. Zilio, Silvia London, Gerardo M.E. Perillo, M. Cintia Piccolo (2013). *The social cost of dredging: The Bahia Blanca Estuary case*. Ocean & Coastal Management 71 p. 195-202.
- Silvia London, Marina Recalde, Mara Rojas, Mariana Zilio (2012). *Climate change perception and potential for adaptation in Bahía Blanca Estuary*. Poster
- Newton, A., (2012) *A Systems approach for sustainable development in coastal zones*. Ecology and Society 17, n. 3, 41. doi: 10.5751/ES-04711-170341
- Gari, S., Newton, A., Icely, J., Lowe, C.D., (2013). *Testing the application of the Systems Approach Framework (SAF) for the management of eutrophication in the Ria Formosa*. Marine Policy, *In Press*. doi:10.1016/j.marpol.2013.03.017
- Stewart, A., Fragoso, B., Clímaco, R., Icely, J. (2013), *Evaluation of stakeholder perspectives on the management of the stalked barnacles (*Pollicipes pollicipes*) resource*. Marine Policy <http://dx.doi.org/10.1016/j.marpol.2013.03.016i>

THANKS FOR YOUR ATTENTION

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