



**CONDESAN**  
Consortio para el Desarrollo Sostenible  
de la Ecorregion Andina



Schweizerische Eidgenossenschaft  
Confédération suisse  
Confederazione Svizzera  
Confederaziun svizra

**Agencia Suiza para el Desarrollo  
y la Cooperación COSUDE**

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## Research Agenda – Workshop 10.02.2016

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Stephan Rist and Zora Urech,  
Berne, 10.02.2016

# Main goals of the research agenda

## **Main goal:**

- Guide the generation and dissemination of scientific knowledge

## **Specific goals:**

1. Promote an interdisciplinary and multi-sectorial **dialogue**
2. Identify main **knowledge gaps** related to the sustainable management of Andean forest landscapes
3. Identify **main challenges** for applied research and approaches

# Design

- **Incorporate experts** working actively in the region and from Swiss institutions
- Balance perspectives from the social and natural sciences with emphasis on **integrative approaches**
- Address priorities at **different scales** and linkages across scales
- Comprehensive but not exhaustive
- Represent **variability** of main Andean forest types

# Thematic foci

Shall be related to the main goal of the Andean Forest Programme:

- Climate change adaptation and mitigation
- Environmental Governance
- Science-policy linkage
- Long-term monitoring of social and environmental dynamics
- Drivers of social and environmental change

# Implementation

- Initial concept for the elaboration of a research agenda
- Methodological input from CDE (conceptual framework)
- Workshop in Lima, October 2015
- Workshop in Berne, February 2016
- Writing of the research agenda (policy brief, scientific article)
- Fund, initiate and implement research activities

# Ciencias de la sostenibilidad y sistemas socio-ecológicos: Un marco conceptual para la investigación sobre bosques andinos

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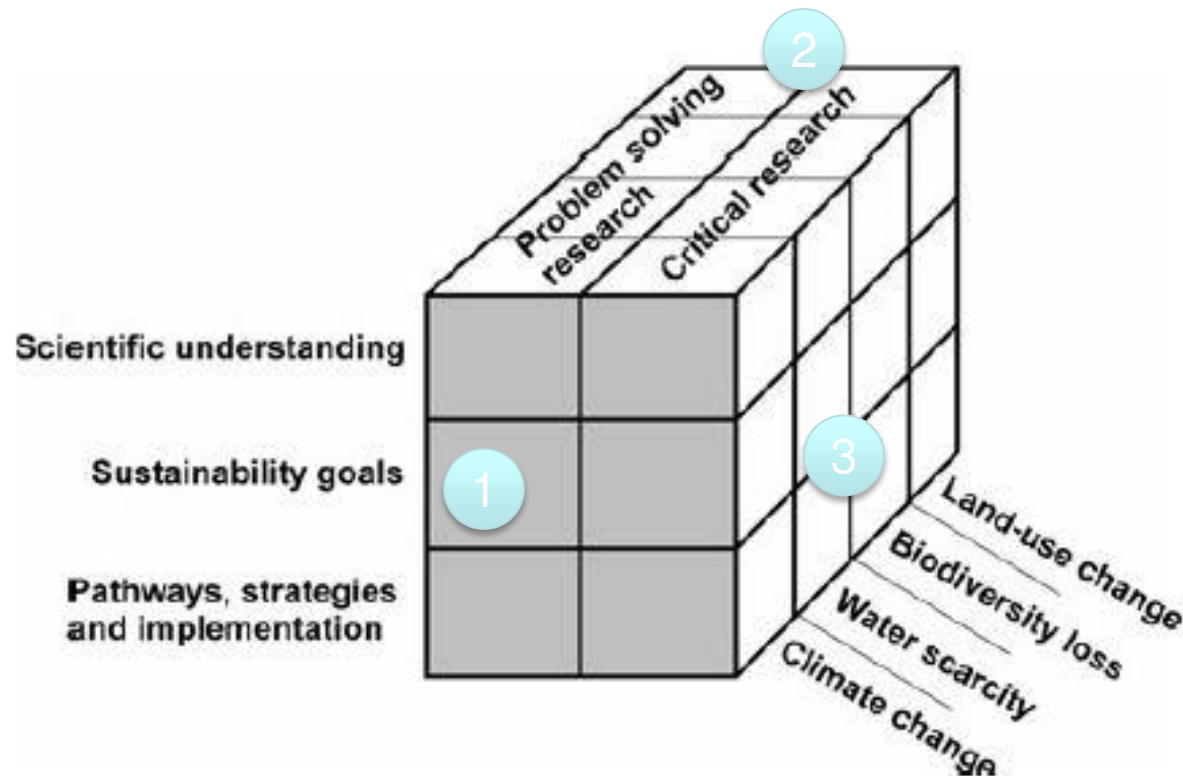
Programa Bosques Andinos:  
Agenda de Investigación  
Lima, 14 de octubre del 2015



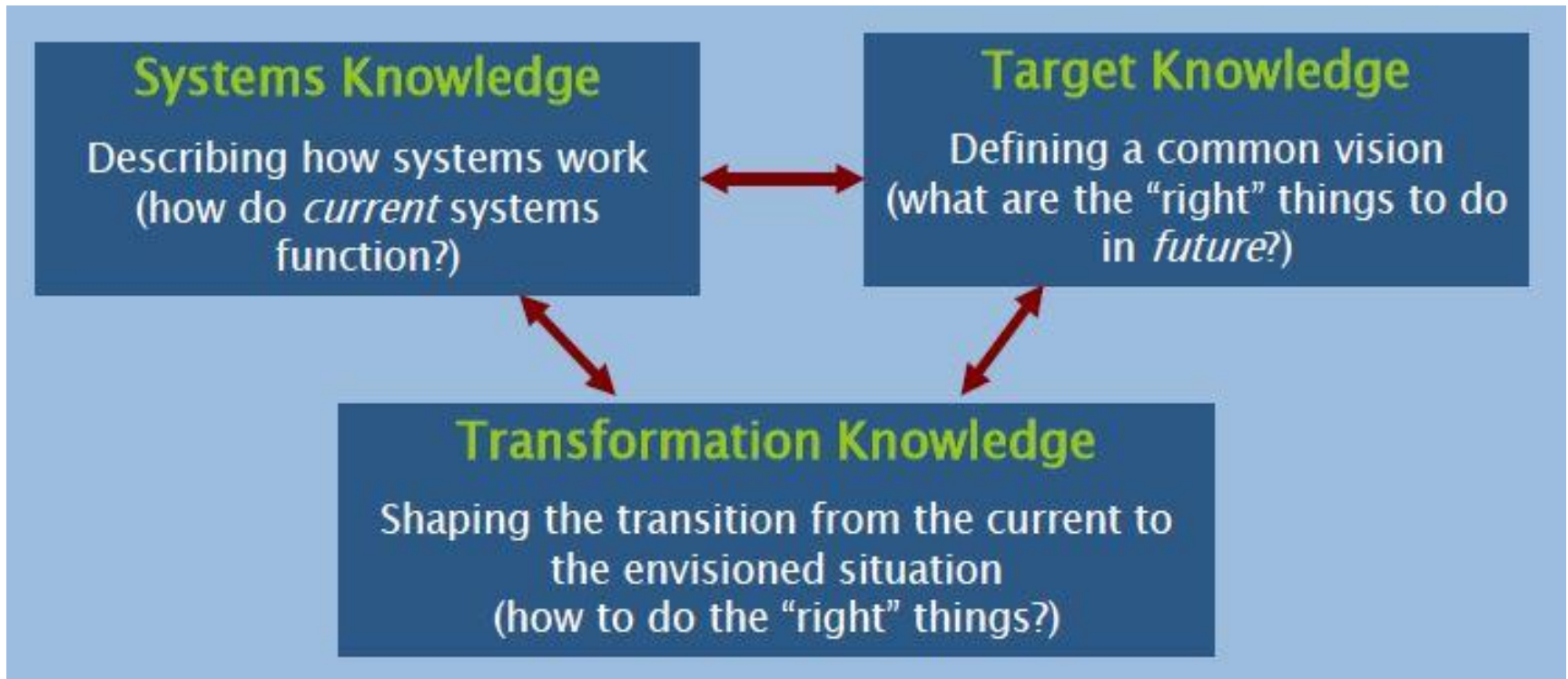
# Philosophical Basis: Sustainability Sciences

3 dimensions:

(1) Type of knowledge (2) Approaches (3) Issues of sustainability



# Types of knowledge in sustainability sciences



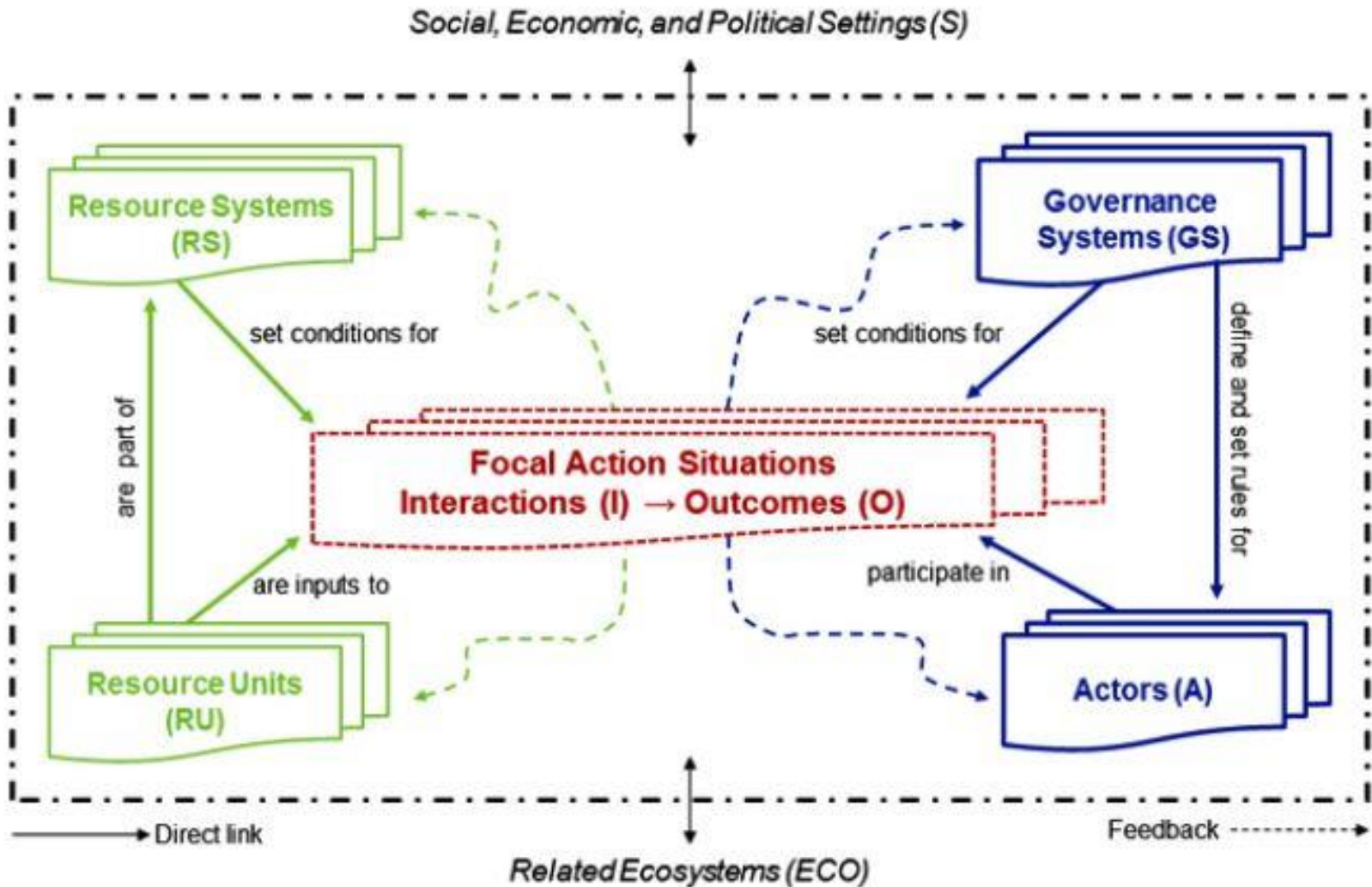
(Hirsch Hadorn et al. 2006)



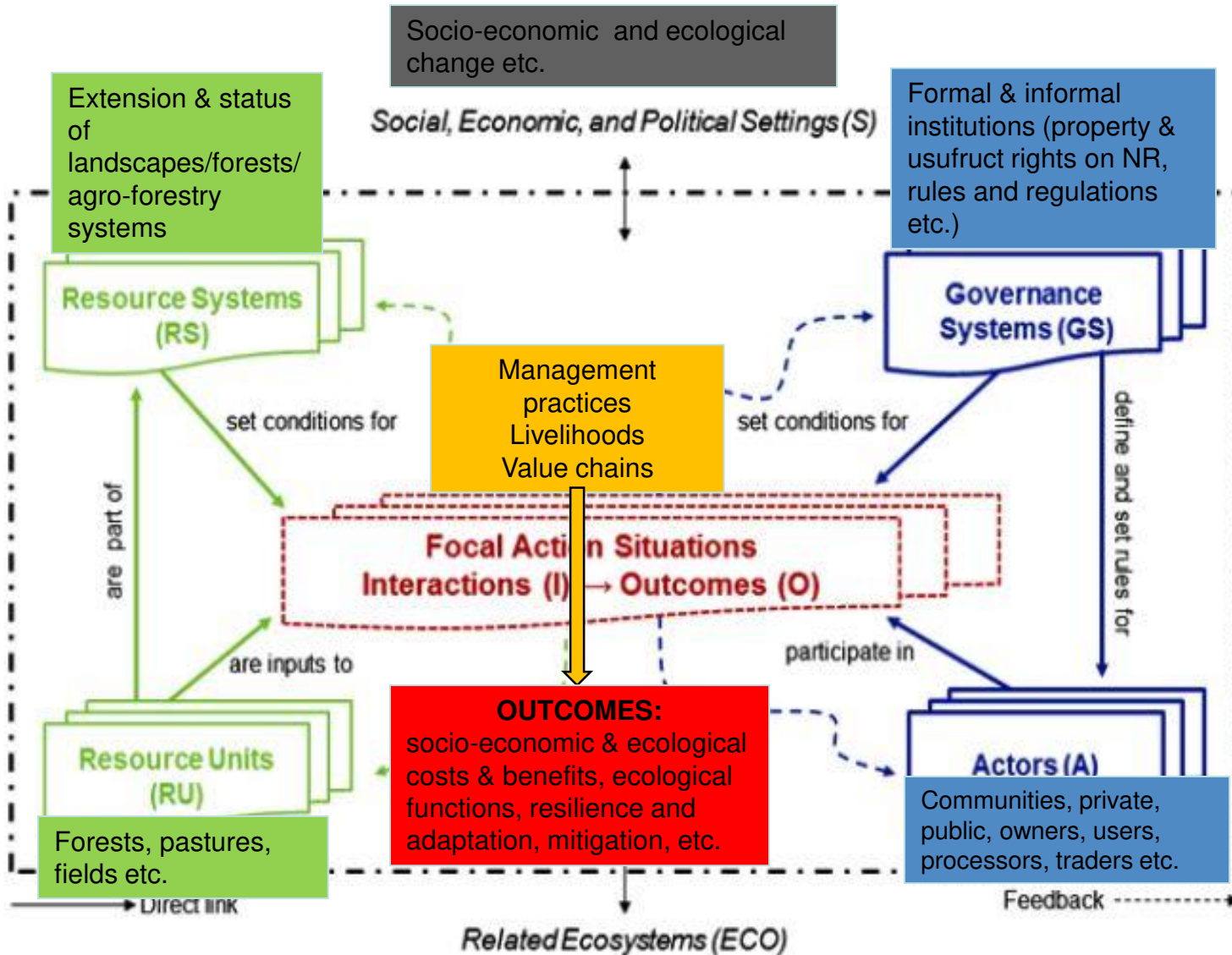
# Knowlege gaps - Anden Forests

- Truly interdisciplinary research in SES perspective
- Social-ecological resilience: Interactions , trade-offs for different types of intervention and utilization
- Controvert valuations of forest governance outcomes (socio-cultural values and their transformations: local-internal vs. national-external perceptions, values, identities etc.
- Environmental justice and intersections with gender, generations, age, ethnical identities etc.

# Socio-ecological systems (SSE)



# Conceptual Framework for PBA



# Results of the Lima Workshop (SES)

- **Dynamics**  
→ make it more visible, consider landscape transformation
- **Actors and resource units:** → include values, perceptions, knowledge
- **Actors and Governance:** → Must be a two-way relationship
- **Resource units and resource systems:** → must be a two-way relationship
- **Subsystems:** → take into account subsystems and their interactions
- **Simplify** the framework

# Systems knowledge

- Improve basic knowledge of **GCC and its relation to biological diversity, ecology, ecosystem functioning, ecosystem responses** to changes in biogeochemical processes (e.g., nitrogen cycling, phosphorus atmospheric deposition), rates of recovery and resilience of natural and human communities.
- Andean forests in the context of **regional development dynamics**, that is representative and comparable at appropriate spatial and temporal scales
- Responses of Andean ecosystems to **anthropogenic pressures**: large spatial scales and over the long term (e.g., **land use cover change in the last centuries and decades** linked to socio-economic pressures)
- Understanding the **socio-cultural dynamics** related to socio-ecological systems in Andean forests (transdisciplinarity, political, anthropological and ethnobiological studies)
- **Impacts** of factors driving socio-ecological change at regional scales in Andean forests (e.g. **urbanization, migration** from rural to urban areas)
- Role of **land tenure, land planning, land use**, and use and effectiveness of protected areas for sustainable governance of Andean forests

# Target knowledge

- Elaborate in participatory ways concepts and indicators for defining what sustainable Andean forest governance means, taking account of existing definitions and the corresponding diversity of main actors implied in governing Andean forests.
- Identify and propose treatment of possible normative conflicts emerging among different actors related to sustainable governance of Andean forests.

# Transformation knowledge

- Improve communication and dissemination of **knowledge about Andean forests'** value for:
  1. biodiversity conservation
  2. socio-economic dynamics
  3. role in livelihoods
  4. socio-ecologic dynamics, and
  5. projected responses associated to GCC to relevant players in the society, including NGO's, resource managers, decision makers, private sector, rural communities, etc.
- Support mechanisms for feedback between **top-down (national and regional) and bottom-up (local) policies**
- Lobby about the importance and conservation problems of Andean forests to **include these ecosystems in the national and regional political agendas**, particularly in those dealing with policies of **adaptation and mitigation of GCC**
- Implement programs that aim at **strengthening action-research capacities at local and national scales** considering aspects related to gender, development and access to databases containing biological and social information, and access to research permits

# Group Work

- 1) **Discuss** and **complement** the list of important knowledge gaps, relevant to the sustainable management of Andean forest landscapes in a context of climate change,
- 2) How could you/your research group/institution **potentially contribute** to the implementation of such a research agenda?



# Future collaboration

- Funding of small activities by PBA (MSc, BSc, PhD)
- Activities for capacity building
- Raise additional funding for research / capacity building
- Exchange of knowledge / information / data

# r4d programme, SNIS and others...

Key criteria:

- 3 Mio CHF / 6 years (3 +3)
- $\geq$  1 Swiss research institution
- $\geq$  1 Research institution from a country group 1 (Bolivia)
- Topics: natural resource governance / ecosystems and climate change
- Regional focus a particular advantage
- Deadline 1. April (5 pages pre-proposal)
- Communication & Application as integral part of the project

**Gracias por su atención**

