



Investigación socioecológica transdisciplinaria local para la sustentabilidad global



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Programme on
Ecosystem Change and Society



SARAS²

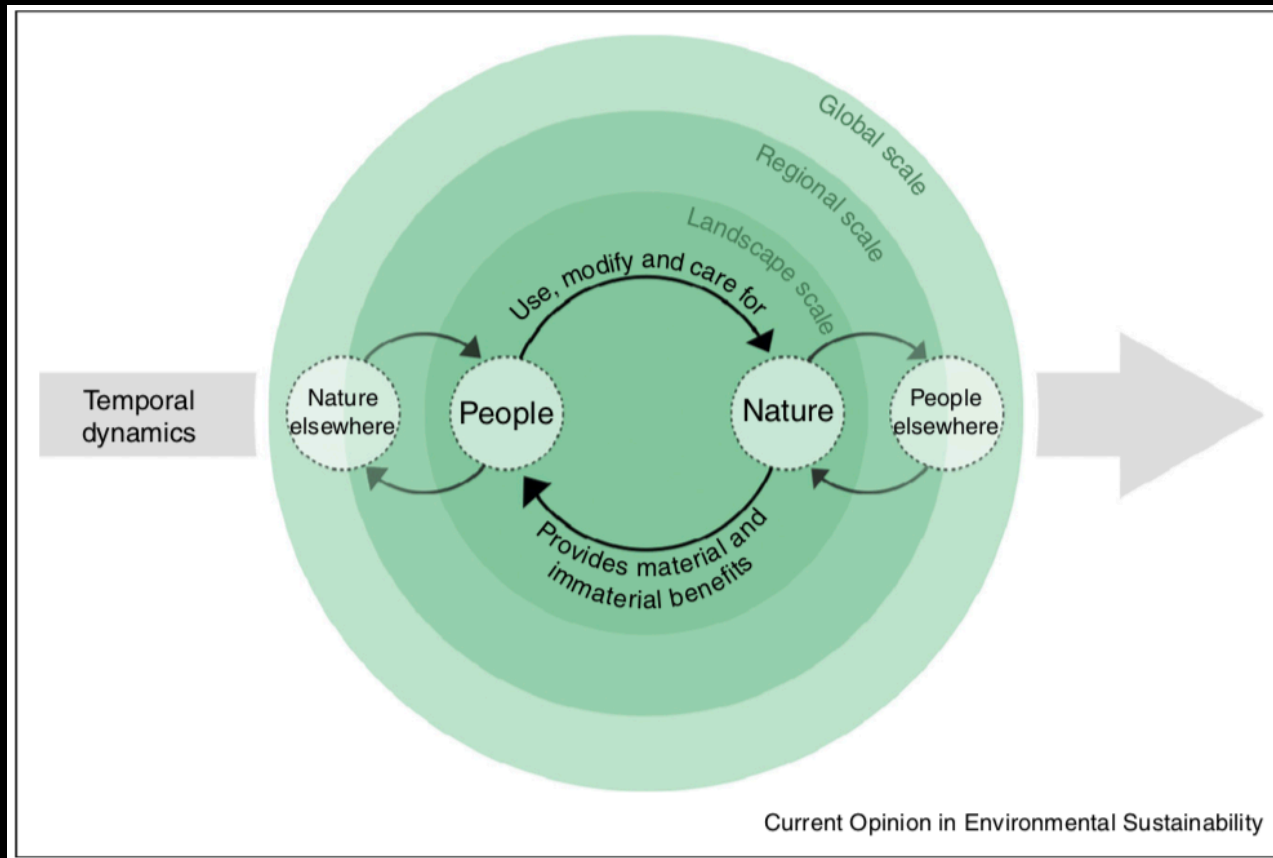
South American Institute for
Resilience and Sustainability Studies

¿Qué contribuye a que la investigación socioecológica transdisciplinaria local sea más exitosa?

Guión

- ¿Porqué investigación socioecológica transdisciplinaria local?
- ¿Qué contribuye a que la investigación socioecológica transdisciplinaria local sea más exitosa?
- ¿Cómo contribuye la investigación socioecológica transdisciplinaria local a la sustentabilidad global?

¿Porqué investigación
socioecológica
transdisciplinaria local?

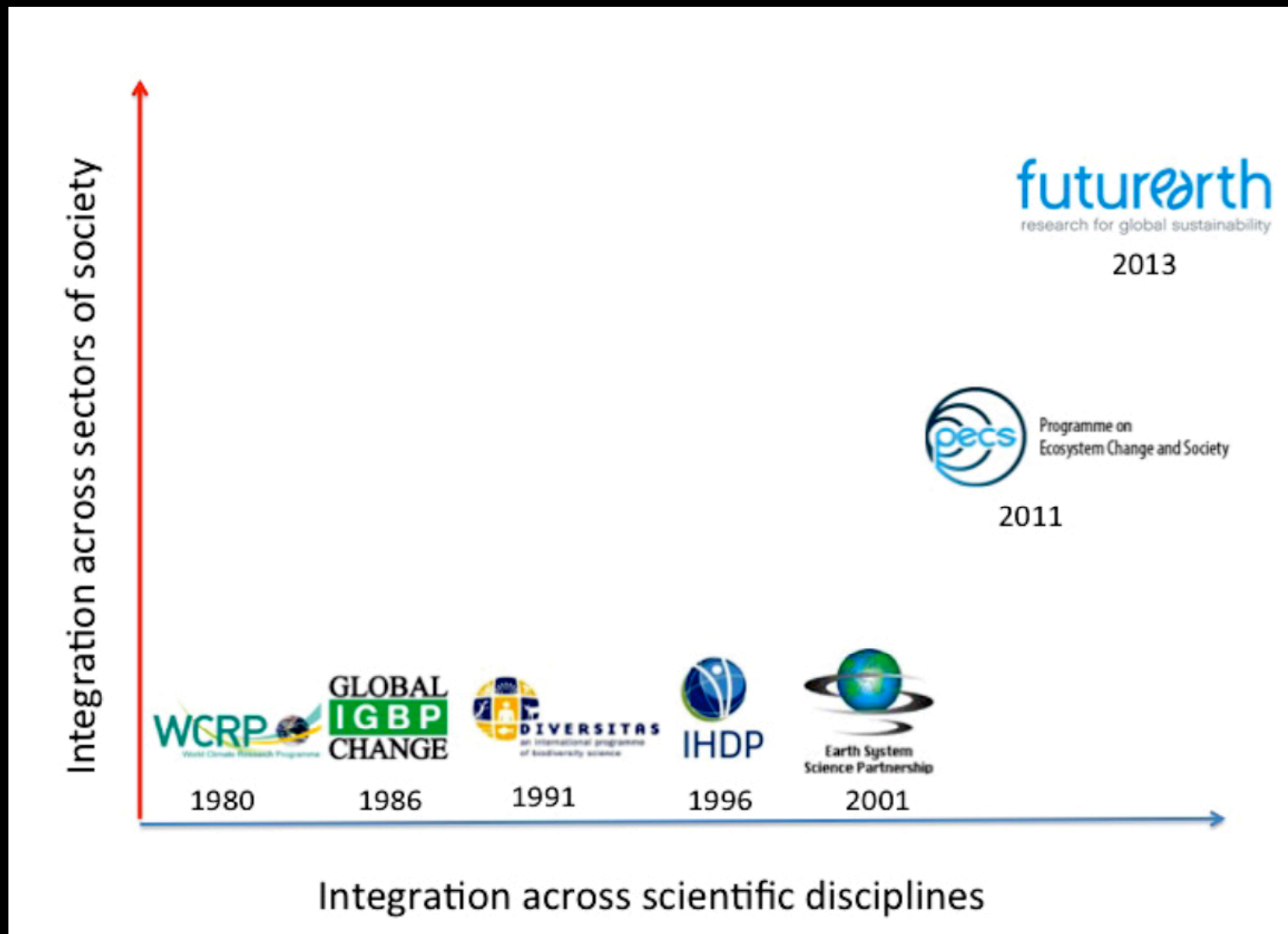


- Los sistemas socioecológicos son los sistemas interdependientes que conforman a la naturaleza y a las personas
- Estos sistemas están anidados a distintas escalas.
- Las personas son parte de los sistemas naturales, los modifican, y dependen de la capacidad de los ecosistemas para sostener el bienestar humano y el desarrollo de las sociedades

- El Program for Ecosystem Change and Society (PECS) parte de la Evaluación de los ecosistemas del Milenio
- Reconoce que los servicios son ofrecidos por los sistemas socio-ecológicos
- Aborda la dinámica multiescalar socioecológica
- Parte desde lo local para explorar las particularidades del contexto sociocológico en esta dinámica



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Balvanera, P., T. M. Daw, T. Gardner, B. Martín-López, A. Norström, C. Ifejika Speranza, M. Spierenburg, E. M. Bennett, M. Farfan, M. Hamann, J. N. Kittinger, T. Luthé, M. Maass, G. D. Peterson, and G. Pérez-Verdin. 2017. Key features for more successful place-based sustainability research on social-ecological systems: a Programme on Ecosystem Change and Society (PECS) perspective. *Ecology and Society* 22(1):14. <https://doi.org/10.5751/ES-08826-220114>



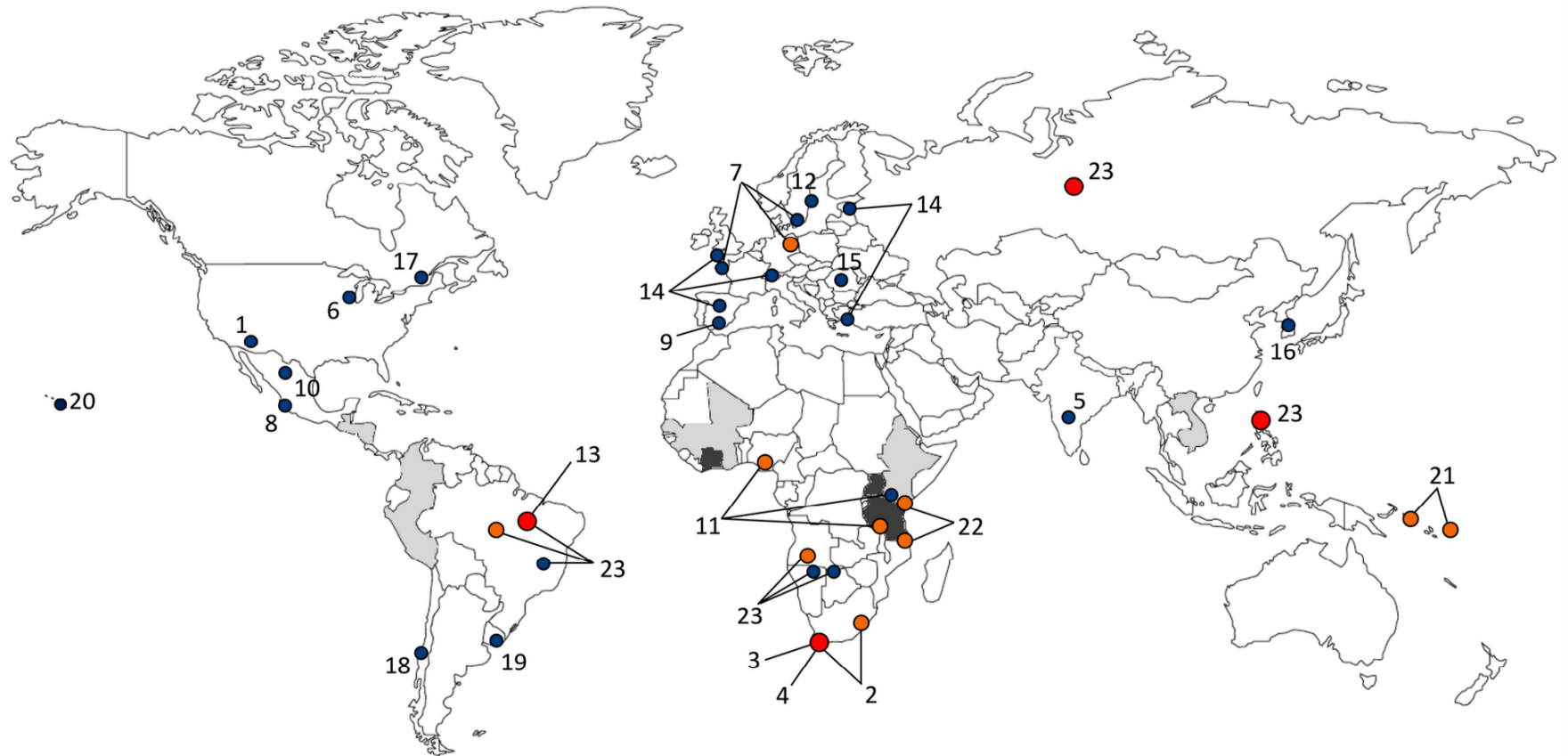
Research, part of a Special Feature on [Programme on Ecosystem Change and Society \(PECS\): Knowledge for Sustainable Stewardship of Social-ecological Systems](#)

Key features for more successful place-based sustainability research on social-ecological systems: a Programme on Ecosystem Change and Society (PECS) perspective

[Patricia Balvanera](#)¹, [Tim M. Daw](#)², [Toby A. Gardner](#)³, [Berta Martín-López](#)⁴, [Albert V. Norström](#)², [Chinwe Ifejika Speranza](#)^{5,6}, [Marja Spierenburg](#)^{7,8}, [Elena M. Bennett](#)^{9,10}, [Michelle Farfan](#)¹¹, [Maike Hamann](#)^{2,12}, [John N. Kittinger](#)¹³, [Tobias Luthé](#)^{14,15}, [Manuel Maass](#)¹⁶, [Garry D. Peterson](#)² and [Gustavo Perez-Verdin](#)¹⁷

Definición de éxito

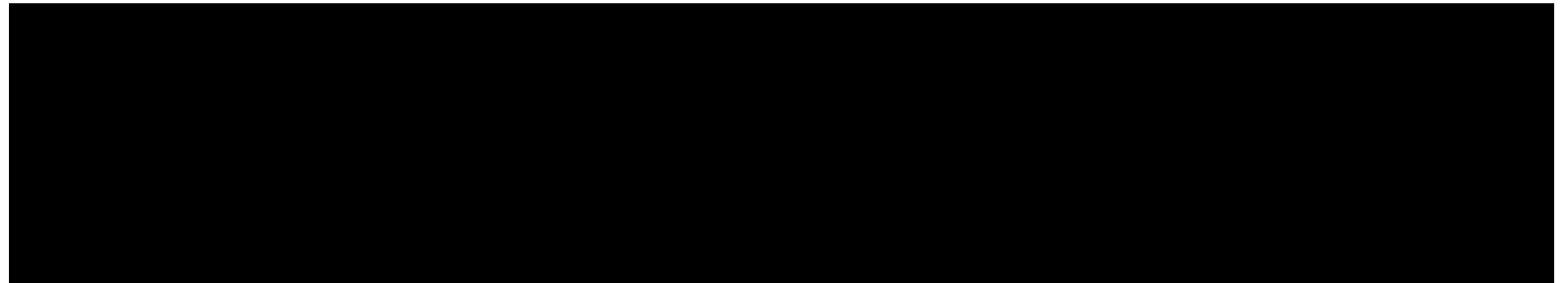
- Una investigación socioecológica transdisciplinaria local es aquella que amplía el entendimiento socioecológico de los investigadores y los actores locales y lleva a la generación de opciones de políticas públicas o de manejo operativas



- 1 case study in region
- 2 case studies in region
- 3 case studies in region
- Regional cases of CCAFS (24)
- National cases of Vital Signs (25)



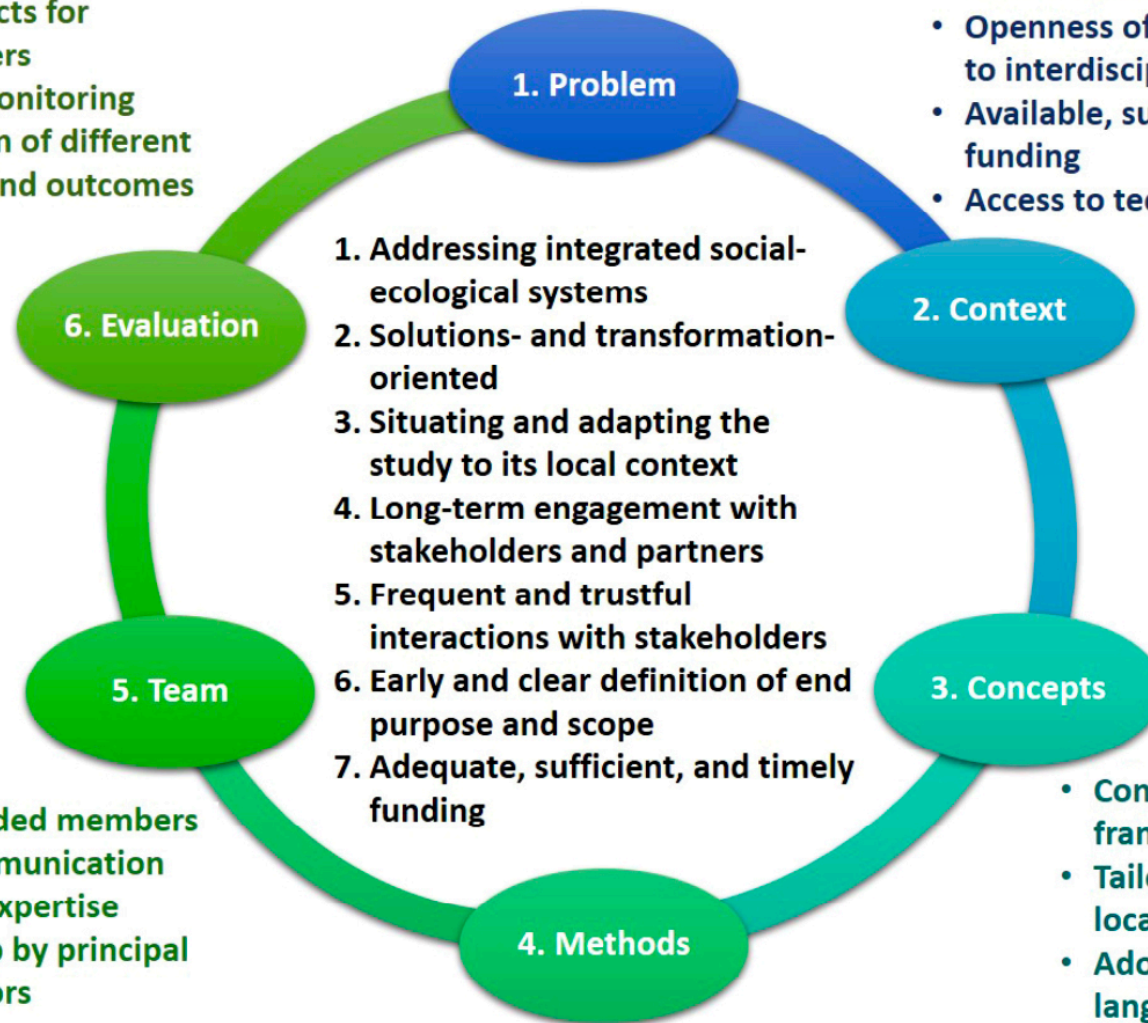
Features, desirable aspects, and enabling factors	Project code†	Examples of survey responses
Addressing integrated social-ecological systems	6, 9, 16, 20	<ul style="list-style-type: none">• “Holistic and comprehensive understanding of the dynamics of ecosystems and ecosystem services provided and sustainable ecosystem management”• Taking into account “trade-offs among ecosystem services”• “Achieving a more realistic view of complex social-ecological systems”• “Looking at multiple levels of governance, from community to state”
Solutions and transformation oriented	2, 18, 19, 20, 21	<ul style="list-style-type: none">• Solution oriented• “Highly policy relevant”• Includes “history of stakeholder interest in managing and conserving the ecosystem”• Project developed to assess the social-ecological effects of a tsunami and opportunities for increased resilience
Situating and adapting the study to its local context	5, 7, 17, 22, 11, 19, 18	<ul style="list-style-type: none">• “Attaching understanding to place rather than to discipline, i.e., understanding how what happens in one area (e.g., social relations) affects other areas (e.g., drivers of change)”• “Flexibility that allows modification of research questions as research goes on, but not too much that it becomes too different from the initial research questions”• “Looking at interventions from social and ecological to institutional context”• “The contextual features need to be considered in terms of the research questions being answered”



- Balance between peer-reviewed publications and products for stakeholders
- Internal monitoring mechanism of different products and outcomes

- Aligned to policy issues
- Relevant beyond study site

- Institutional diversity
- Stakeholders able to foster change
- Openness of academic institutions to interdisciplinary approach
- Available, sufficient and timely funding
- Access to technologies



1. Addressing integrated social-ecological systems
2. Solutions- and transformation-oriented
3. Situating and adapting the study to its local context
4. Long-term engagement with stakeholders and partners
5. Frequent and trustful interactions with stakeholders
6. Early and clear definition of end purpose and scope
7. Adequate, sufficient, and timely funding

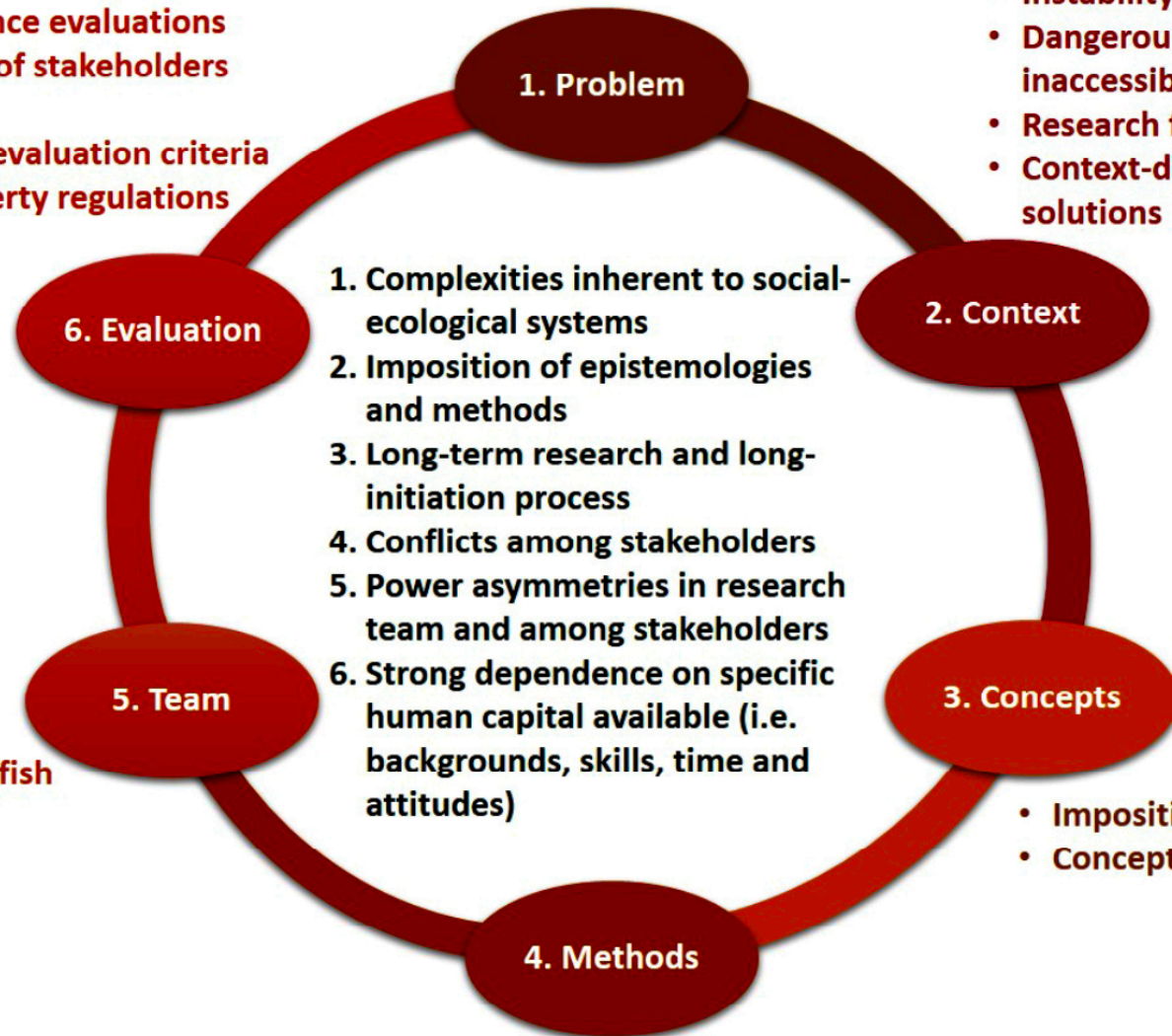
- Open-minded members
- Good communication
- Relevant expertise
- Leadership by principal investigators

- Common conceptual framework
- Tailoring concepts to local realities
- Adopting a common language

- Multi-method approach
- Triangulation of the information
- Tools to link across scales and spatial analysis
- Methods to involve and engage stakeholders

- Difficulty in demonstrating products
- Expectations of fast high impact publication
- Biased performance evaluations
- Undue influence of stakeholders and funders
- Lack of clarity in evaluation criteria
- Intellectual property regulations

- Resistance to change
- Instability
- Dangerous or inaccessible sites
- Research fatigue
- Context-dependent solutions



- Uncommitted selfish participants
- Lack of time

- Imposition of concepts
- Conceptual biases

- Linguistic and technological barriers
- Access restriction to data due to confidentiality

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Current Opinion in
**Environmental
Sustainability**

Interconnected place-based social-ecological research can inform global sustainability

Patricia Balvanera¹, Rafael Calderón-Contreras²,
Antonio J Castro^{3,4}, María R Felipe-Lucia⁵,
Ilse R Geijzendorffer⁶, Sander Jacobs^{7,8}, Berta Martín-López⁹,
Ugo Arbieu¹⁰, Chinwe Ifejika Speranza¹¹, Bruno Locatelli^{12,13},
Natalia Pérez Harguindeguy¹⁴, Ilse Ruiz Mercado¹,
Marja J Spierenburg¹⁵, Améline Vallet¹⁶, Laura Lynes¹⁷ and
Lindsey Gillson¹⁸





PECS 2015 CONFERENCE

Social-ecological dynamics in the Anthropocene

3 - 5 November 2015

Spier | Stellenbosch | South Africa

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Opportunities

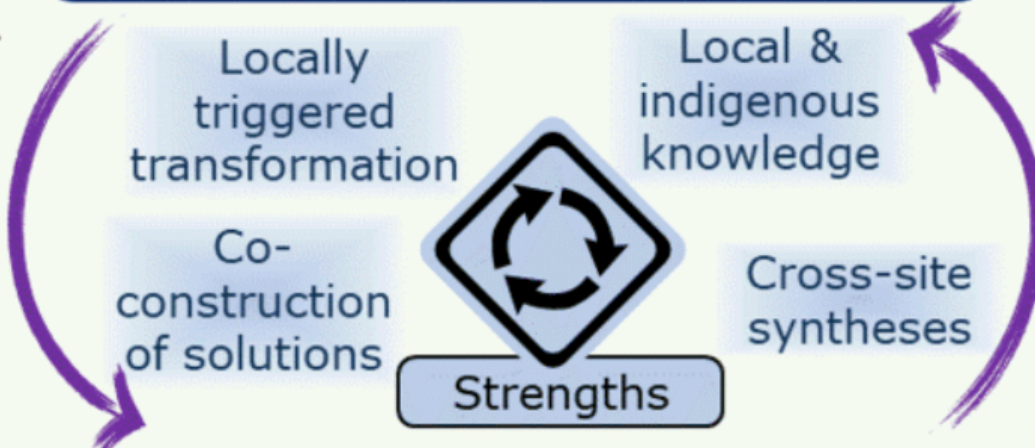
- Networks of place-based long-term research
- Conceptual frameworks
- Training & communication
- Global community of practice
- Regions for linking global & local

Place-based sustainability research



Challenges

- Transferability
- Knowledge integration
- Spatial and temporal mismatch
- Upscaling



Global sustainability

Strengths

- Place-based social–ecological research allows for a better understanding of the linkages between global and local sustainability
- Transformations towards sustainability are often triggered at the local scale
- Place-based research fosters the co-construction of solutions
- Place-based research renders the important contribution of indigenous and local knowledge visible

Challenges

- The very nature of place-based research can hinder its transferability
- The integration of different knowledge systems into place-based research is both a strength and a challenge
- Global integration of place-based sustainability research faces mismatches in spatial and temporal scales
- Upscaling place-based research faces several methodological challenges

Opportunities

- Networks of place-based long-term social–ecological transdisciplinary teams are critical to inform the global sustainability scientific and political agendas.
- New research initiatives and new institutional settings can foster the integration of place-based research insights into global sustainability research and policy agendas.
- New conceptual frameworks are increasingly available to foster the uptake of place-based research insights into global sustainability initiatives.

Opportunities

- Place-based participatory scenarios can be integrated into global models in the search for pathways towards sustainability
- New capacity-building opportunities and communication tools are available
- A global community of practice for place-based sustainability research is rapidly growing
- The regional scale provides a potential conceptual bridge between local place-based research findings and global sustainability questions

Conclusiones

- La investigación socioecológica transdisciplinaria local está creciendo
- Presenta algunos obstáculos pero se han identificado las mejores formas de hacerla
- Una red de estudios socioecológicos transdisciplinarios locales de largo plazo es clave para informar la sustentabilidad
- Ustedes pueden ser parte de esta búsqueda



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iiiiGracias!!!!