Finding Paths To A Sustainable Future: Knowledge, Learning, & Societal Change







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Outline

The knowledge, learning, and societal change (KLSC):

- * initiative to develop a core project of IHDP
- * rationale, framework, objectives for KLSC

Research and action projects in the KLSC framework

- 1. Mental models for decision-making for long term risk in Ugandan and Indian farmers
- 2. Improving stakeholder dialogues for governance of the Baltic Sea fisheries the Polish Fisheries Roundtable
- 3. Utility of science literacy in three populations in China
- 4. Trans-disciplinary modeling as a learning strategy

Knowledge, Learning, and Societal Change: Finding Paths To A Sustainable Future



An initiative for a new core project of the International Human Dimensions Programme in Global Environmental Change - IHDP

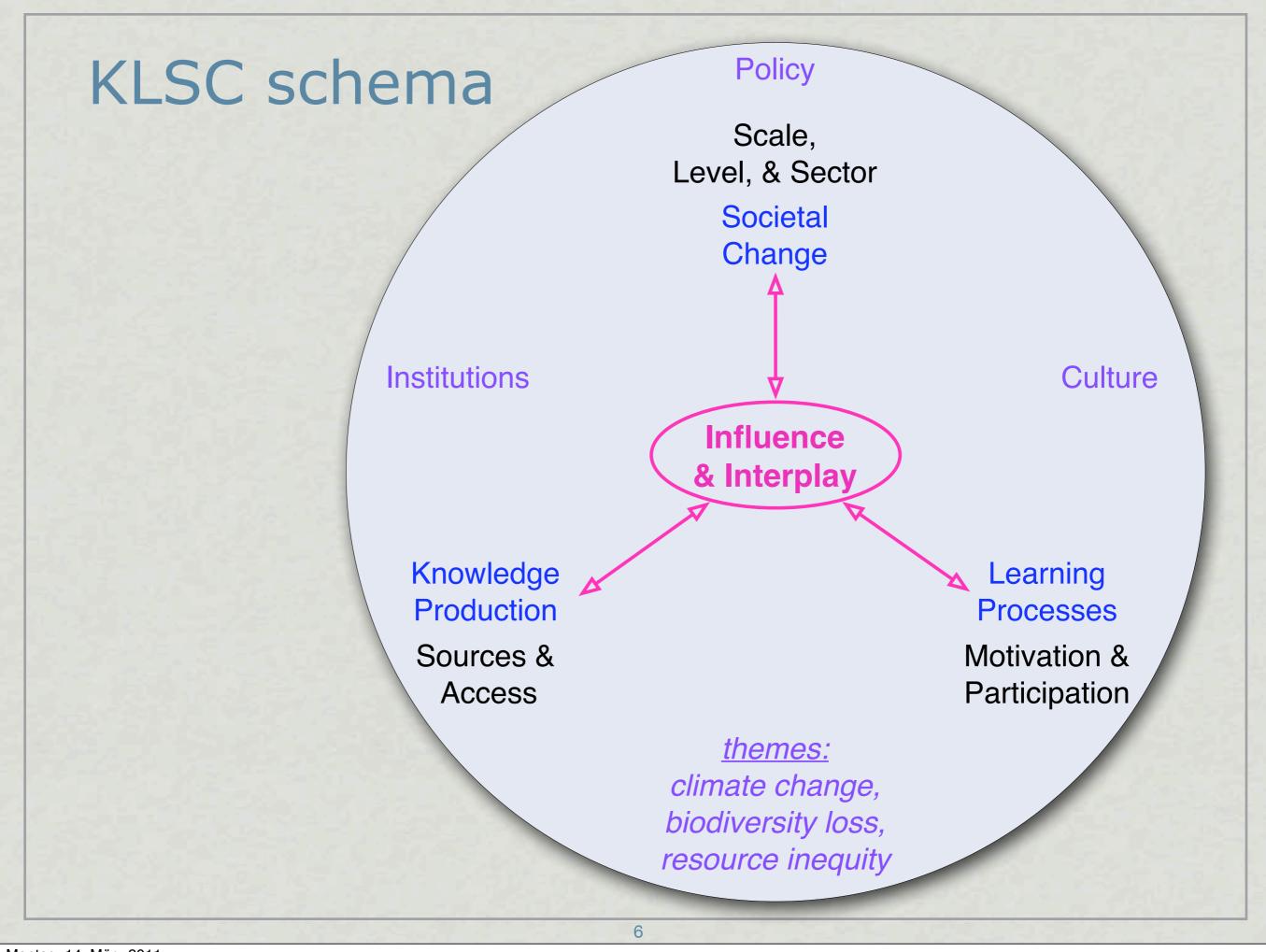
Mission of KLSC

to contribute in effecting a transition to a sustainable future for all

by understanding and enabling the effective use of the mechanisms and levers of behavioral and societal change linked with knowledge and learning

through the combined efforts of a collaborative community of researchers, practitioners, and stakeholders

working at multiple temporal and spatial scales



Relevant priorities in the Visioning and Belmont Global Change Challenges

ICSU Visioning:

1) "How can improved scientific knowledge of the risks of global change and options for response most effectively catalyze and support appropriate actions..."

Belmont Challenges

- 2) "develop and deliver the knowledge required to address pressing global to local environmental and societal issues" [insufficient without **meaningful participation**]
- 3) "Identify the objectives and means for effective translation and communication of scientific knowledge for targeted sectors and regions in order to realize the intended benefits from the application of such knowledge" [focus on co-production of knowledge]
- 4) "Nurture the next generation of experts" [next many generations start early and don't stop at univ!]

strategies and methods

Complementary methods of research and action

- 1. conduct rigorous scholarship for insights and concepts
- 2. employ action research to develop and test strategies and methods for behavioral change at different scales
- 3. foster long-term engagement among stakeholders, including science, public, business, and policy domains
- 4. produce widely accessible policy-relevant materials
- Build capacity for KLSC research and actions: workshops, mentoring, and seed grants in developing countries
- Link closely to existing Global Change projects
- Form partnerships with development projects to learn from their experiences and contribute to their successes

examples of research categories

In context of climate change, biodiversity, and resource allocation, KLSC goal is to deepen understandings of

- links between knowledge, learning, and decisions in governance of socio-ecological-economic systems
- influence of leadership and narratives in individual, community, and institutional capacities for and commitment to mitigation and adaptation
- factors linked to scaling of change from micro to macro: e.g., tipping points and social movements

The initial set of 2-3 research projects and collaborative groups in KLSC will emerge from the international launch workshop in April 2011 in Grindelwald

Examples in the KLSC framework

Three current research projects:

- Nature and significance of mental models in risk mitigation and micro-finance of low probability, high impact events; games and interviews
 - J. Helgeson and S. Dietz, London School of Economics, UK
- Knowledge, learning, and change in the Polish Fisheries Roundtable on governance of Baltic fisheries
 - Christian Stöhr, Chalmers University, Gothenburg, Sweden
- Knowledge acquisition and use in work, health, environmental decisions of rural, urban, and internal migrant worker populations in China
 - Jin Wang, Sun Yat-Sen University, Guangzhou, China

Coping With Complexity: computational modeling as a learning strategy

Equip next generations to understand and address complex issues in a rapidly changing landscape

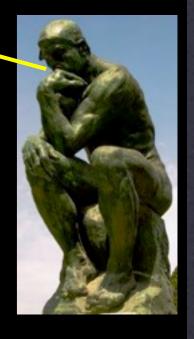
- acknowledge and use models as fundamental tools
- coherent strategies and curricula to progressively build understanding of computational modeling
- inherently transdisciplinary project-based learning
- elementary school through university and beyond
- particular emphasis on role in policy making
- pilot programs in diverse settings and cultures

Developing in collaboration with Sander van der Leeuw, Ruth Chabay, Márton Balassi, Dávid Horváth, and Monika Reti

Please join us in developing KLSC to co-produce and use knowledge that will help us find a path to a sustainable future for all



THANK YOU FOR THINKING WITH ME!





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