



Interdisciplinary Nature of Project

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Overview

- Interdisciplinary research: NSF Dynamics of Coupled Natural and Human Systems
- Our project
- General guidelines for interdisciplinary research

What is Interdisciplinary Research?

- Place-based
- Socio-ecological landscape
- Systems approach
 - Explore relationships across scales

What is Interdisciplinary Research?

- Strategic science
 - Thoughtful introspection into the practice of science
 - New methods/New definitions
 - Holistic thinking
 - Integrate theoretical knowledge with practical problem solving
 - Crossing boundaries

Interdisciplinary Nature of this project

- Linkages across
 - Disciplines (ecology, social science)
 - Cultures (Mongolia, US)
 - Sectors (Government, community)
- Codify knowledge from different arenas
 - Common framework/conceptual model
 - Common language/definitions
 - Common database
- Provide venue for interaction between researchers, managers, and stakeholders

How is Interdisciplinary Research done?

- Research is integrated, coordinated, organized, by research participants across disciplines, cultures, and sectors
- Research is synchronized across spatial and temporal scales
- Participatory research: Frequent interaction
- Conclusions generate new types of interdisciplinary questions
- Joint synthesis products

Guidelines for Interdisciplinary Research

- Know and trust your team members
- Calibrate expectations
- Address uncertainty
- Maintain flexibility
- Practice multiple modes of communication
- Reflect on disciplinary strengths and limitations
- Develop proto-type or mini-models to test assumptions, ideas, protocols
- Be adaptive
- Patience and humility