

“Shifting Baselines: How Elders Have Experienced Environmental Change”

Introduction

The proposed dams on the Eg, Uur, and Selenge rivers in northern Mongolia would represent the first major development on these lands that have been utilized for agricultural and pastoral purposes by local peoples for centuries. The temporary construction halt on the Egiin Gol Hydropower Project (EGHPP) allows for the assessment of pre-dam conditions that can be used as a baseline for future research on development's effects. Such baselines include the experiences and views of local peoples who will be affected by the project. These human dimensions are especially critical given the other social and ecological changes people in this area have experienced over the past decades. These include the transition from Soviet rule to a free market economy and climate change.

Northern Mongolia is experiencing climate change effects much more quickly than the global average (Dagvadorj et al. 2009; Nandintsetseg et al. 2006). These shifts in temperature averages translate into changes in precipitation patterns (Goulden et al. 2016) that negatively affect livestock survival for local pastoralists (Marin 2010). Understanding how these changing weather patterns, a shifting economy, and proposed hydropower projects interact and are perceived by local peoples will be key to a fuller understanding of the human and environmental responses to these changes.

Proposed Study and Research Questions

The proposed study would assess the perceptions and views of individuals who have lived through all of the aforementioned changes—elders of herding families. These elders would be able to provide memories of past changes and adaptations that would be important not only to corroborate other data sources, but also as a resource for the communities themselves (Crate 2006). They would also have the ability to compare their own experiences of change across the twentieth and twenty-first centuries, indicating whether or not the major changes in economic, political, and ecological spheres in recent years have created a perception of more rapid change. Records of elder experiences could therefore be utilized to demonstrate the interactions between climate change, economic shifts, and development.

The proposed project would focus on the following research questions:

1. What kinds of changes have herding family elders experienced in their lifetimes

and specifically in the last decade?

2. How are these changes understood, i.e. what factors are viewed as causing them?
3. What are their views on the future of their families and their livelihoods?

Methods

The proposed study would be conducted over a six week period in the Eg-Uur river basin of northern Mongolia. The researchers would travel (by car, boat, or foot as needed) to various herding family households in order to conduct interviews with elders (aged 55+). These interviews would be semi-structured sets of questions addressing observed changes (both past and present), experiences of past adaptations, thoughts on what is causing such changes, and views on what the future holds. As there would be a language barrier between at least one of the interviewers and the elders, ongoing translation would be needed by a co-researcher that speaks the elders' language. These oral histories would be recorded using a digital voice recorder.

Following the interviews, researchers would translate, transcribe, and code the data for analysis. Translation would be provided by a co-researcher that speaks the native language and transcripts of each of the interviews would be recorded on a computer. As each participant would be asked the same questions, comparisons could be made between the different interviews to elucidate common themes and any differences (Bernard 2000). Such results would then be used to address each of the research questions, as well to potentially highlight areas where new questions have arisen.

Materials and Supplies

The following materials/supplies would be needed to accomplish this project's research goals:

- Digital voice recorder (purchased prior to study)
- Transportation to/from the homes of interviewees
- Notebook/pens for field notes (purchased prior to study)
- A laptop computer (personal computer provided by the researcher)

Connection to Graduate Work

This project will inform my graduate work in several important ways. I entered into my graduate program because I hope my research will act as a bridge between the social and natural sciences. It is my belief that neither of these perspectives are sufficient on their own, but rather that in today's rapidly changing world, multiple disciplines must be able to work together. Being

a part of this interdisciplinary and international project would give me first-hand experience in what such work can look like.

It would also give me the opportunity to grow as a researcher. My previous work on the social and psychological dimensions of human-wildlife conflict was survey-based. Though that research led to some interesting results, I felt that it would be greatly improved by more qualitative data that could only be collected using field interview techniques—but I had not been trained in that area yet. Therefore, this opportunity to utilize such techniques to assist in a project that I believe to be critically important would be the perfect next step for me as a scientist. Understanding the impacts of dam construction on the local environment *and* local people is crucial because ignoring such impacts could lead to disastrous ecological and social effects. I am excited about this opportunity to be a part of the team working to build such understanding. It would equip me with the skills and experience that would allow me to design more effective research in the future on issues that, like this one, exist at the intersection of the social and natural sciences.

References

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