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China's Environmental Modernization Challenges: An Examination Based on the Lesser Plateau Watershed Restoration Project

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Abstract

This thesis also focuses on "connecting the LPP to the World Bank's "participatory approach" to development." Project managers have emphasized the importance of this strategy as a means of achieving success. Several reports have praised this aspect of the proposal, claiming that it will help farmers become more invested in and eventually control the venture (S. Chen, Wang, and Wang 2004; Liu 2011; Liu and Hiller 2015). Concerns about China's autocratic, top-down government system may make some people wary of the concept of "participation" in a country-sponsored initiative. According to one study, "the LPP's 'participatory method' has flaws (Dalton and Cai 2007:35-36)." Specifically, "Development of communities through participation and the strengthening of institutions, both of which will under fire, will be targeted for criticism (Hiller 2012: 72). However, neither the project's success in terms of 'participation' nor the LPP's struggle with 'participation' will be thoroughly investigated. There are indications that the western-led initiative's claims of engagement did not match what was happening on the ground in China. As I dig deeper into this topic in my thesis, I hope to shed light on the realities of engagement in a Chinese local environment. Recognizing the complexity and dynamics of the concept of 'participation,' this study will not provide a definitive definition or claim about LPP 'participation,' but will instead keep an open mind to questions of problems and limitations to see if the concept be implemented in China "due to the stringent regulations imposed by the state government.

Keyword: LPP Participation, Deep Design, China's autocratic.

INTRODUCTION

Environmental "protection can be combined with economic growth under the theory of ecological modernization, which challenges the conventional wisdom that environmental protection impedes economic progress" (Dryzek 2013). Ecological modernization emphasizes the possibility that environmental conservation will result in long-term economic gains (Dryzek 2013). Ecological modernization includes the development of market-based environmental protection tools, as well as industrial and technological innovation and resource efficiency. It also requires political commitment from state authorities to incorporate environmental principles into industrial

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regulations and incentives (Dryzek 2013). However, the green economy is not solely driven by the market or the government. There are numerous multinational and bilateral institutions that promote activity and provide business incentives. Early eco-modernism occurred in industrialized countries dealing with modern environmental problems such as pollution, ecological degradation (e.g., land degradation), and climate change (Dryzek 2013).

Since the industrial "revolution," Western-style modernization has dominated the development narrative, emphasizing economic growth as a result of intensive industrialization. Instead of treating nature as an equal partner with humans, it sees "nature as a force to be harnessed" and strives to "master nature via technical innovation" in the process (Shapiro 2012:88). This practice has a negative environmental impact. According to Shapiro (2012), China has begun to modernize in accordance with the Western model since the Maoist era (1949 1966). Rendingshengtian ("Man Must Conquer Nature"), a well-known Maoist slogan, supported this modernizing mindset, which resulted in human misery and environmental catastrophe (Shapiro 2012:89). China's modernization process over the last three decades has resulted in rapid economic growth, but it has also raised major environmental concerns and widespread pollution. Following the global trend of environmental conservation for long-term growth, China is currently transitioning from "traditional" modernization to ecological modernization. According to the 'China Modernization Report 2007: Study on Ecological Modernization' (L. Zhang, Mol, & Sonnenfeld, 2007:662), Chinese authorities are working to "bring ecological rationality into modernization rhetoric, policymaking, and practice in China." China's goal of ecological "modernization" was formally stated in the report, which advocated a technocratic solution to critical environmental challenges (L. Zhang, Mol, and Sonnenfeld 2007). According to the research, China's ecological modernization began in 1998, despite the development plan. Since then, the goal of ecological modernization has been formalized and made public (L. Zhang, Mol, and Sonnenfeld 2007). This dissertation examines a state-led early experiment in ecological modernization for sustainable development using a case study approach. As we all know, the decisions we make today can have a big impact on the ones we make tomorrow. So the LPP case study may help us understand the Chinese government's vision and strategy for sustainable development in terms of ecological modernization, as stated above in the report.

LITERATURE REVIEW

China's Loess Plateau, which covers 640,000 square kilometers, is located in northern China along the upper and middle Yellow Rivers. During a typical year, the Loess Plateau experiences a continental monsoon climate with cold, dry winters and heavy rainfall in the summer (June to September). The Loess Plateau is classified as semiarid due to its distinct climatological characteristics (Kimura and Takayama 2014).

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The loess "soil" that covers the majority of the plateau (hence the name) makes the area vulnerable to wind and water erosion (Yan et al. 2014). This location has the highest concentration of loess soil in the world, but it is also one of the most severely degraded. At the convergence of the provinces of Shanxi and The most severe erosion is occurring in Shaanxi and the Autonomous Region of Inner Mongolia (Inner Mongolia), where climate change has been notoriously dramatic, with frequent natural disasters such as flooding, torrential rain, drought, and sand storms. The Yellow River, which flows through the region's upper and middle reaches, also carries a significant amount of suspended silt. The material dumped in the river's lower reaches has raised the riverbed significantly above the surrounding fields over the years, resulting in frequent and severe flooding that has a negative impact on the livelihoods of local populations.

STATEMENT OF THE PROBLEM

Numerous studies have revealed that the "Loess Plateau was very fruitful and simple to Cultivation in ancient times resulted in the formation of an agricultural civilization. However, due to a weakened natural environment and ongoing human activity, environmental and agricultural conditions have deteriorated significantly (Liu 2011; Tsunekawa et al. 2014). Massive agricultural land conversions (including inappropriate ones) occurred in the second half of the twentieth century, resulting in severe land degradation and soil erosion. As a result, agricultural output fell even further, leaving locals with a scarcity of food. For decades, the area's residents had to deal with a "unforgiving" climate and extreme poverty.

The World Bank-led "Loess Plateau restoration project" began with the goal of controlling and lowering sediment flow in the Yellow River's upper and middle reaches, as Disaster prevention is also an important consideration. In the interim, in the early 1990s, the village communities in the project regions were impoverished. The initiative aimed to reduce poverty by increasing local agricultural output and strengthening the local economy, in line with the World Bank's human-centered development concept. The LPP was established in 1994 with a $150 million World Bank loan from China's Ministry of Water Resources (MWR). Phase 1 of the project lasted from 1994 to 2002, and phase two began in 2003. (1999-2005). The project, which covered 15,500 km2, was carried out in 48 counties across nine tributary basins in Shanxi, Shaanxi, and Gansu Provinces, as well as the Autonomous Region of Inner Mongolia (the size of Belgium). A The initiative resulted in the creation of 1,100 micro-watershed zones ranging in size from 1,000 to 3,000 ha (Darghouth, Ward, and Gambarelli 2008; S. Chen, Wang, and Wang 2004). Project criteria were used to select counties and micro-watersheds for the project.

THE STUDY AIMS

To identify the LPP's key local-level institutional structures.

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RESEARCH QUESTIONS

The questions that motivate my research are as follows:
• What factors influenced the project's local success? How did the LPP implement the "essential institutional structures" locally?

RESEARCH METHODOLOGY

To establish a "deep description" (Geertz 1973), this "study emphasizes human stories within larger social, political, and economic settings, with an emphasis on the LPP planning and implementation process, the local participants' experiences and viewpoints, and through official project documentation." Understanding local agriculture and livelihood practices, conservation regulations, and other issues requires taking into account the larger context. As a result, during the fieldwork, the primary data collection techniques will be participant observation and interviews.

RESEARCH DESIGN

This investigation makes use of both deductive and inductive methods. Research is designed using a deductive technique, with specific hypotheses or questions derived from broader theoretical concepts (Bryman 2004). This strategy is based on collecting empirical data with the most minimal assumptions or Theoretical concerns are feasible, and the researcher is more open-minded when questioning informants, prepared to make unexpected findings (Bryman 2004). During and after the fieldwork, the primary research questions will be revised. Before entering the field, I planned to conduct research on a variety of topics, including participatory planning and local agricultural and alternative livelihood practices, particularly in grazing management, which undoubtedly influenced the outcomes of my work. "Early data analysis will be carried out in the field, which aided in formulating future data collection steps" (Bryman 2004). The process of gathering and analyzing data resulted in the emergence of several ideas and research categories, which will be iterated and developed as a crucial aspect of grounded theory" (Bryman 2004).

DATA ANALYSIS

Indeed, "At such times, it is necessary to conduct a "empirical investigation that analyzes a current phenomenon in depth and within its real-world context," which is what a case study does (Yin 2014:16). Participant observation and unstructured interviews are popular qualitative methods for case studies because they allow researchers to conduct "an extended, detailed analysis of a case" (Bryman 2004: 49). When selecting cases, researchers look for ones that could serve as a foundation for answering research questions (Bryman, 2004). The findings of case studies are only applicable in specific situations. Proponents of case study research methods frequently argue that

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this particular methodology is meant to prevent extrapolation to larger populations or settings (Bryman, 2004). To generalize, however, one must have a solid theoretical foundation "based on the findings of a case study."

CONCLUSION

The researchers identified three institutional interventions—"land contract," "integrated watershed planning," and "grazing management"—as key factors influencing local land use patterns, agricultural systems, and farmer behavior. These interventions will be implemented locally using specific political, economic, and communication strategies, all of which contributed to the project's success. 2) When implementing these policies in the project villages, local governments provided guidance and support for the project interventions (the deployment of incentives), and used the World Bank's requirements and rhetoric, despite the World Bank's significant role in policymaking. Throughout the project, "their sovereign authority (e.g., in the implementation process)."

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