



A Study Based On The Loess Plateau Watershed Rehabilitation Project To Examine The Challenges Of Environmental Modernization In China

Zhou Hui^{1*}, Aiman Al-Odaini²

^{1*} Research Scholar Lincoln University College Malaysia, Email: hui@lincoln.edu.my

² Lincoln University College Malaysia

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ABSTRACT

The LPP is the subject of a case study in this thesis. This research attempts to provide light on China's ecological modernization narrative in order to better comprehend China's sustainable development story. This qualitative study, which took place in the autonomous territory of Inner Mongolia in a rural area near the city of Ordos, used information gathered from regional organizations, individual farmers, and project staff. Taking a closer look at the project, this study examines the strategies for planning and carrying out the work that produced these results, as well as the project's long-term implications for nearby farmers and their surrounding areas. Using institutional operations and planning, three primary interventions were found: land tenure contracts, integrated watershed planning, and grazing management. These were carried out via the LPP in order to ensure the project's success and the long-term prosperity of the communities. The project's policies were significantly impacted by World Bank policies. The World Bank's "participatory approach" deviated from legal requirements in actuality. Concerns over women's inequality and lack of empowerment were prevalent in rural areas. The Chinese understanding and execution of western concepts and practices within their development framework may also be at fault, as may the political character of involvement and the obstacles it creates to real bottom-up growth. The argument goes that the LPP is a prime example of the basic contradictions in China's discourse and practice of ecological modernization.

Keyword: *Natural Transformation, Pastoral Development, Authorization, Hydropathy for Healing.*

Introduction

The research laid forth China's long-term strategy for sustainable development in a transparent manner, focusing on ecological modernization, as a technocratic solution to critical environmental problems. Although the development strategy and objective for ecological modernization were initially announced and made public in 2007, the study indicates that ecological modernization in China really started as early as 1998. Based on the author's research, the Loess Plateau Watershed Rehabilitation Project (LPP) in the 90s was a state-sponsored ecological modernization initiative that sought to achieve sustainable development. It is often acknowledged that the knowledge gained from previous experiences may greatly influence how future development unfolds. According to the article stated earlier, the Chinese government has goals for ecological modernization. This case study of the LPP may assist put those ambitions into context. "Loss Plateau Watershed Rehabilitation" (LPP) is the name of a state-led program in rural northern China that is receiving finance from the World Bank. Efforts were made between 1994 and 2005 as part of the project to enhance ecological conditions in basins that feed into the Yellow River and boost agricultural revenue and production in the area. Previous research has failed to show a connection between the project and ecological modernization; this study aims to rectify that. Hopefully, this was helping people in rural China better understand the jargon around sustainable development. This chapter was offering an overview of the study questions and my reason for asking them, as well as a report on the history of environmental concerns in China today. First, I'll set the stage by explaining what the Loess Plateau and LPP are in the next section. Presented at the very end of this chapter is a concise summary of the thesis (Blaikie, 2017).

Background Of The Study

Sustainable agricultural practices on the Loess Plateau have been a long-term goal for the Chinese government. The annual precipitation is around 400 mm, with a low of 150 mm and a high of 750 mm. Nevertheless, nothing positive came out of it. There is a lot of soil erosion in this area due to the wind and water erosion. Given this, the World Bank took the lead in repairing the Loess Plateau, which has been devastated by erosion. The goal is to reduce the quantity of silt that flows downstream the Yellow River, particularly in its middle and upper stages. At the same time, the early 1990s rural areas around the projects were very impoverished. Following the World Bank's human-centered development approach, the initiative aimed to boost the local economy and increase agricultural productivity, with the ultimate objective of decreasing poverty. With a loan of \$150 million from the World Bank, the LPP was initiated in 1994 by the Chinese Ministry of Water Resources (MWR). LPP 2 was active from 1999 to 2005, whereas LPP 1 was active from 1994 to 2002. The project included an area of 15,500 km²—roughly equivalent to Belgium's size—and involved 48 counties distributed throughout nine tributary basins in the provinces of Shanxi, Shaanxi, Gansu, and Inner Mongolia's Autonomous Region. As part of this study, micro-watershed zones ranging in size from 1,000 to 3,000 hectares were established. Multiple criteria were used to choose counties and micro-watersheds for the research. The project's original blueprint called for constructing fresh buildings as the second phase, after land rehabilitation and erosion control had been planned. Aspects of land development and erosion control include terracing, forest restoration, orchards, grasslands, sediment control dams, deformed land, irrigation, gully management, and additional livestock development⁴. Three things were crucial to the development of the institution: training, research, and the transfer of technology. Land tenure contracts, grazing management, and consolidated watershed planning are three novel institutional practices that contributed significantly to the project's success (Zheng, 2018).

Purpose Of The Study

This project intends to enhance ecological conditions in the tributary basins of the Yellow River by adopting more efficient and ecologically friendly land and water uses. Additionally, the initiative aims to raise agricultural yields and incomes, which was contribute to the Loess Plateau's sustainable development.

Literature Review

The township is the most basic unit of government, responsible for the direct organization and administration of rural areas. A rapid urbanization and industrialization occurred hand in hand with the shift away from collectivization and toward an agricultural economy dominated by the market. The administrative structure of rural China has altered very little since Mao's era, despite the fact that rural society has seen tremendous transformations (Syse, 2018). In rural areas under Mao's reign, the three most fundamental units of governance were the commune, the dadui (brigade), and the shengchandui (production) teams. In counties that typically included more than a hundred villages, the commune served as a link between the rural towns and the county itself. A dadui was allocated in each hamlet, supervising all organized activities inside the community, including political campaigns. The rural organization's grassroots level was the Shengchandui teams. Ten or fifteen families would often make up a shengchandui, and they would all share ownership of a small area of land for farming. Every home in the community pitched in to help tend the field and divide up the crop. Farmers had a vested interest in the financial well-being of their production teams and were thus economically interdependent. In the early 1980s, as part of post-Mao reform, the terms "commune" and "dadui" were replaced by "township" and "administrative village" or "village committee," respectively. Cunming xiaozu, meaning "village small groups," is the new term for production teams. In matters of rural administration, the county government continued to play the role of paramount importance. According to Unger, the rural organizations under Mao were Communist Party machinery that pushed for a radical social and political transformation. However, after Mao, the county-level leadership was driven by the singular goal of rapid economic development, with the phrase "acting in the fashion of a small-scale developmental state" describing their actions (Yan, 2019).

Research Objective

To have a deeper understanding of the elements that go into a project's success locally.
To determine the key local-level institutional structures of the LPP.
To convince communities and local leaders to adopt the participatory approach.

Research Methodology

This study set out to give a "deep description" by looking at the official project documentation, local participants' experiences and viewpoints, and the design and implementation of the LPP from the standpoint of human stories set within larger social, political, and economic settings. Without a larger perspective, it was difficult to understand local agricultural and subsistence patterns, conservation regulations, and other issues.

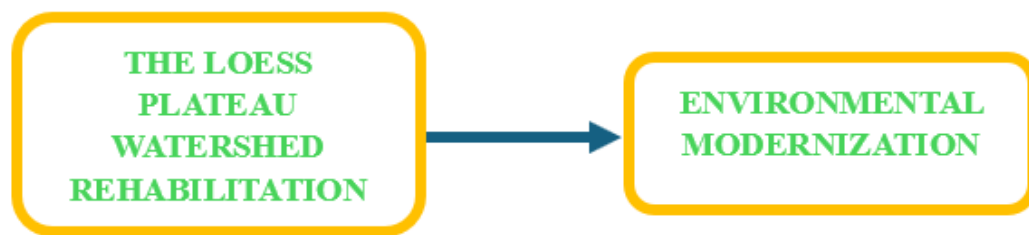
Consequently, throughout the fieldwork, participant observation and interviews served as the primary means of data collection.

Research Design

Both deductive and inductive methods were used in this investigation. A deductive method was used to design the research, with more generic theoretical frameworks serving as the source of particular ideas or research topics. During the informant interviews, the researcher was more adaptable and ready to provide unexpected findings; this method was focused on obtaining factual data with the least amount of theoretical thinking. Prior to, during, and after our fieldwork, the researcher was refining our primary study subjects. Before going into the field, they were researching a variety of topics, such as local agriculture, participatory planning, and alternative livelihood strategies, especially grazing management, all of which had an impact on my work. Preliminary data analysis was also carried out in the field, which shaped the protocols for future data collection. Grounded theory involves refining and expanding upon the ideas and study categories that arise from data gathering and analysis.

Data Analysis

In these situations, a scientific investigation that thoroughly examines a current event in the context of its real-world setting was required, according to a case study. Using qualitative techniques such as observer observation and unstructured interviews, researchers often carry out "an extended, thorough evaluation of a case". Researchers choose cases with the expectation that they would serve as a foundation for answering research questions. Case study outcomes were situationally specific. The arguments against extrapolating results from case studies to other populations or environments was a typical one, according to proponents of this kind of study. However, generalization requires a strong theoretical foundation "based on the results of a case study".



Conceptual Framework

Result

Achieving Gender Parity and Strengthening Women's Agency

"Peer support for women's economic, political, and political participation" is one of the UN's Sustainable Development Goals. A source close to the project said that the World Bank explicitly required women to be involved in the project's implementation, even though the bank never mentioned this in any of the reports they received. According to official Chinese records, the project's recipients were selected with the express purpose of empowering women by enhancing their quality of life and empowering them via the expansion of their capacities. The same Chinese official documents at the national level also claim that advocating for gender equality was a huge success. While doing fieldwork, they came across some official project reports and data from the local government. These documents shed light on their practices and successes when it comes to the gender issue. Unlike previous regional rural development programs, the LPP gave rural women's rights and interests first priority, according to the Ordos project report. The researcher didn't see anything on the field that would lead me to believe this to be true. Efforts to raise their status have mostly" failed, according to a small sample of rural women in Ordos's project zones.

Having Women Take Part in the LPP

As said before, it seemed that the plan treated rural women the same way as other farm laborers. Ordos' official report states that women made up 70% of the LPP's labor force, which is around 31.5 percent of the rural women in Ordos. Findings from the national government report CPMO, which indicated that women made up a large share of the rural labor force, are confirmed by this local government research. According to Chen, Wang, and Wang, women made up 70% of the rural participants in the project's execution, which is not surprising given that many men have left to seek employment as migrant laborers in larger cities. According to local project team informants, women contributed to the LPP's infrastructure just as much as men did throughout the project's implementation due to their representation in the rural labor force. The majority of Ordos's project area informants served as LPP stooges who planted trees.

During the implementation of local projects, higher-ups ordered that rural women acquire education and skills to improve their social status. Research by Ordos found that the formation of the PRC greatly changed the family and societal responsibilities of women. "The LPP project's mandate included providing opportunities for women to gain new skills and advance in their careers. The researcher broke the convention that men handle outside business and women handle household affairs." Over the course of six years, 6,000 women received training, making up 60% of the rural female workforce. Women were more open to new information and suggestions, actively participated in construction project execution, and enhanced their skills and competence, according to the study. Rather than standing on the sidelines, these women were clearly involved in the modernizing of rural areas. On the other hand, during my fieldwork, They met with a number of women who had all acquired their talents via on-the-job training rather than formal schooling. To preserve the land and its water supply, Ling and the other villagers planted trees about twenty years ago. There was nothing in the way of classroom instruction; instead, she learned what she needed to know on the job. In his memory, Ping had a sea buckthorn program in

the inhabitants, particularly the women, were trained and educated to become more self-sufficient. Unfortunately, she was too busy with other responsibilities to attend the training lectures. According to her, most of the workshop attendees were undergraduates. According to her, she had reached the point when she needed no more mental stimulation. According to an interview with Ping, a farmer from Ejina Horo County, China, conducted on September 25, 2014, a significant number of the workshop participants were young women hailing from the neighboring villages. It is possible that the female informants were unable to fully participate in training programs due to their heavy household responsibilities. The fact that women were unable to fully use the project's benefits due to time restrictions supports Friedmann's claim that this is a local Chinese proverb that depicts the traditional roles of men and women.

"Some women evidently joined the seminars for training at the time, even though the ladies who engaged in this study did not, according to the official Ordos report. Those who participated could have gained self-assurance because of it. Female empowerment and collaboration across genders were exemplified by Zhu Official. A seedling-grafting training program was implemented as part of an orchard enhancement project in one of the project communities. At the age of forty, a local farmer's exceptional skills in grafting plants for orchards brought her immediate fame among her neighbors. They were a formidable grafting team when they joined forces.

Launched its service offerings in the neighborhoods around their offices and started selling seedlings. Thanks to this program, these rural women gained the knowledge and self-assurance to seek out other sources of income. As she did so, she influenced the behavior of other rural women in her community by sharing the knowledge she had gained from the study. As one local team member put it, "helping develop a small group of women into powerful community leaders" was one of the initiative's stated aims. This strategy is consistent with Friedmann's ideas on women's empowerment. That being said, the fact that this source is a project official makes one wonder whether they purposefully exaggerated the LPP's apparent success. Contrarily, this event may have been induced by farmers' enhanced knowledge and skills. Changes in Women's Family and Social Roles as a Product of the Project? The majority of women possessed administration of family assets and production rights, so their families would benefit from their social and educational advancements, according to the official Ordos report. This means it might improve regional renkou suzhi and help the economy and society in the long run. According to the report, the standing of women in the

house and the neighborhood overall have been better. However, field observations suggested that most female informants were subservient to their husbands. The researcher spoke to a lot of local ladies, and the most of them were 65 and more. This individual's " 'quality' "is calculated by their beliefs held by the Chinese government on education, ambitions, and social status. Whenever they visited houses in the neighboring villages, they would often converse with the males there, regardless of the presence of women. Either the ladies sat quietly at his side, listening to the conversation, or they were occupied with other domestic duties, like tending to the children or preparing refreshments for the guest. Because of this, they spoke to or interviewed several women when their husbands were in the office. Gao, the head of a rural women's group⁶⁶, and they had a meeting in the project's communities when she was in her thirties. There was a program to enhance livestock under the LPP, she remembered. This being said, she was vague about the project and assumed her husband would be more knowledgeable. During the times when their husbands were not around, four rural women were willing to be interviewed in their houses or farms. On a constant basis, men farmers had more understanding of the LPP than female farmers. Being uninformed of the LPP, both male and female informants chose to remain quiet in certain situations. Among rural women polled, most were either unaware of the initiative or only participated in it in a passive capacity, such as by planting trees. The enslavement of women is frequently attributed to culturally developed beliefs and attitudes. Traditional Chinese culture, according to Friedmann, contributes to the formation of these values and beliefs" by: "According to Confucian thought, the family is more important than patriarchy alone.

convictions, which highlight the need of societal unity and peace. Much to the Confucian value system, filial piety dictates that one should repay a mother for everything she has done for her children. Both gender and age contribute to this expectation.

According to female farmers, middle-aged (50-60) rural women who took part in interviews expressed sadness and discontent, suggesting that traditional beliefs and attitudes contribute to most women's submissive behavior towards their husbands.

Dealing with their current situations and their aspirations for improvement. Each village committee has a dedicated office for women's problems.

Their primary issue was the amount of time they were spending on housework. In rural areas, middle-aged women often play crucial roles in the administration of small rural residences. They assist out around the house and on the farm, tend to other family members, and search for jobs to bring in extra money. According to Ling, her day was absolutely full:

The researcher tend to my farm, grow vegetables, and watches after my grandchildren every day.

First thing in the morning, Lin woke up. while the interview is being conducted. She arrived to the farm around 11 a.m., which was about 45 minutes later than usual, after finishing off some tasks at home. About four or five in the afternoon, she would return home. During the busy season, she would get up at 6 o'clock every morning. Neither Ling's schooling nor her involvement in extracurricular activities were very extensive. She hardly had time for television and other forms of entertainment. Caring for her grandchildren consumed the majority of her time, as was customary for women of her generation in the neighboring towns. Normal life was challenging, according to Ping, another female source. While her youngest grandchild slept, she did light housekeeping, fed the hens and pigs, and tended to the corn, potatoes, and grass crops. Farmers' wives would often take care of the home and the farm while their husbands worked on the village transportation team. Secondly, rural women in their 50s and 60s expressed a preference for non-farm occupations due to the difficulty of farming. Since the local economy is not as strong as it once was, fewer non-farming job options exist, according to Ling. When the mining sector was doing well a few years ago, getting a job was not "difficult." Typical daily wages were 100 yuan. A recent interview with a farmer in Dalad County, Ling, revealed that the current day pay for physical labor ranges from twenty to fifty yuan.

After losing her non-farming job, Ling had no choice but to go back to farming. Her arid acreage needed significantly more work than those in humid regions. She longs for a job where she can contribute financially to her family, away from the house. According to Ping, a large number of local farmers have relocated to neighboring cities and towns. She expressed her eagerness to be released from the gully and the burden of caring for the cattle as quickly as possible, but she and her husband had not yet completed the move since they had to take some time off before relocating to the towns and cities.

Financial rewards was accrued to those who dared to go forth. It is significantly more realistic to earn money in other ways than farming. Being a farmer is not exactly a way to unwind. Since they are obligated to remain here and take care of these animals, they have been deprived of any personal freedom. Ping and her husband had planned to sell the cows and move to the city in the next few years. In her quest to get a cleaning job in the city, she looked up to others who had left the little town for the big metropolis.

Obtaining resources was another challenge that Ling pointed out. Due to budgetary restrictions, she was unable to obtain the sheep that she sought as livestock. Meanwhile, it was obvious throughout our conversation that she had never heard of farming reimbursement a program that the government launched to help farmers out financially and provide rewards for their work. She was less equipped to confront the challenges she faced because of her low level of education and her inability to read and write.

Difficulties she encountered. According to Ping, she could barely read a handful of Chinese characters due to her insufficient education. Thus, she had no choice but to remain a housekeeper as she was unable to enhance her career options. A lack of formal education may lead to poor self-esteem, and this case was a perfect illustration of that. Every day, these farm ladies face emotional and physical challenges that exceed their capacity to cope. They have less opportunities to leave their neighborhoods and are less likely to get bachelor's degrees compared to men. While it is evident that the LPP has assisted rural women in becoming more self-reliant, it is equally important to consider how the project's training and development initiatives have contributed to discrimination against women. As Friedmann puts it, "the structure of opportunities available to women discriminates against them, and relative to men, women have substantially less access to the bases of social power and productive wealth."

Made no attempt to undermine established gender roles or political systems. Rural women informants still have obstacles, as shown by their present situation.

Many rural women already have jobs outside the house, particularly in the mining sector, yet they still encounter much more obstacles when applying for jobs than men do. There are fewer career opportunities and more prejudice for older women in today's culture. In conclusion, they learned a lot from the many tales that were based on interviews and field observations.

Female farmer "informants'" apparent lack of involvement might be due, in part, to the fact that those with lower levels of education simply do not possess the means to follow their passions. Discrimination against women in Chinese society, both structural and institutionalized, is another probable factor. An individual's own disinterest or lack of drive might be a factor as well. The interplay and reinforcement of these elements led to a less-than-ideal outcome.

Participation in training seminars by rural women in the Ordos project zones. On the contrary, Ordos's make the communities where the initiative is located better places to live economically and socially. Because of the intricacy of their circumstances, farmers' access to resources varied greatly. Given our status as members of

rural households also benefited from the project's activities, such as increased access to healthcare, education, and other social services, more time to focus on farming, and new non-farming jobs and income opportunities. Although there were obstacles to women's empowerment in the regions where the Ordos project was implemented, it is evident that the initiative focused on meeting the practical needs of rural women in order to get access to the resources and social power that are essential for empowerment, according to Friedmann. The official Ordos report includes statistics on the role and education of women. Statistics included in the research, such as the representation of women in position of leadership. Researchers from Shanxi province went to one of the project counties in that area to do a field investigation after the LPP study was completed. The impact on women was the primary focus of Hiller's dissertation, which examined the LPP through the lens of a case study of a project county in Gansu province. He conducted surveys and focus groups with women to better understand how the LPP has impacted their labor and equality. In general, women's lives are better, according to his findings. A breakdown of the tasks that girls do on a regular basis was offered. The ladies who took part in his research all agreed that there were several ways in which each task might be made easier and faster. For example, the LPWPR reduced water collection times by 20%, according to the focus group. However, this quantitative method didn't tell us anything about the quality of the teaching. One of the primary reasons women were encouraged to pursue higher gaining autonomy and knowledge would allow them to contribute to public works development and the urbanization of rural regions. Based on interviews, the official Ordos report, and the research of other scholars on the LPP, it seems that rural women in the Ordos project area only felt somewhat empowered. Not only that, but it was unable to significantly deeply held cultural views, but it also did nothing to change the fundamental framework of opportunities for women. They cannot definitively say what happened to women in the LPP in Ordos or any other part of the project where the percentage of empowered women may have been greater due to the tiny sample size. But these women's stories and viewpoints could help us understand the ground-level realities of women's involvement.

Discussion

Based on what we've learned in this chapter, the LPP was just the World Bank's collaborative structure translated into Chinese and administered by bureaucrats. Village committees and leaders encouraged and supported farmers' "participation" in the LPP, with local government institutions mediating between the World Bank and the collaborating villages. The neighboring farmers held the farmers who were able to reap the benefits of the system in high esteem. Beneficiaries within the workforce and farmers experienced varying degrees of "empowerment" as a consequence. Training and capacity development have helped their predicament (Rothman, 2019).

The mental and behavioral changes that occur in children when they go from a state of passive observation and imitation to one of active discovery and application of what they have learned. All of the project's goals and requirements were met because the authorities used these practical strategies for development initiatives. Local communities were delegated power to implement specific project policies, but the overall development plans and objectives were retained by the state government and the World Bank. They had also discussed the ways in which the West had an effect on engagement principles and practices in this chapter. Two areas, the political nature of participation and the legal procedures involved in putting this idea into practice, have shown me that empowerment is ineffective. To support their claim that "participation" in the LPP was made feasible within a local context, they brought up China's unique cultural, political, and economic climate, as well as the lessons learned from collective action and popular mobilization under Mao's dictatorship. Problems inherent to the dominant capitalism system also served to limit participation. This puts the LPP's actions at odds with the participation rhetoric that emerged from the West (Friedmann, 2018).

The extent to which the LPP was useful would be a matter of subjective judgment. According to this study's results, "participation" in China might mean that the central government employs local cadres to coordinate or supervise farmers' "participation," with the central government serving as the final arbiter. On the other side, they may address the initiative's viability by bringing up the idea of bottom-up local participation. Because local governments' translation and instructions, as well as the actions taken by local politicians and groups, rendered villagers' opting out impossible, top-down mobilization proved to be more successful than bottom-up involvement (Plummer, 2019).

Conclusion

"Land contract," "integrated watershed planning," and "grazing management" were the three most influential institutional interventions on local land use patterns, agricultural output, and farmer behavior, according to the study. The unique political, economic, and psychological approaches that would be used at the local level were crucial to the project's successful completion. Despite the World Bank's heavy involvement in project planning, the methods and terminology utilized by the local governments in the project villages to implement the policies—including providing direction and support for the project's associated operations—were largely influenced by the World Bank (Chan, 2019).

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