Chapter 5

Understanding China’s Ecological Restoration Projects: A Study of the Grain for Green Program

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The flow stoppage in sections of the Yellow River in 1997 and the Yangtze River flooding the following year awakened the Chinese public to the large-scale ecological deterioration in western China. The Chinese government responded to the situation, which was approaching crisis proportion, by implementing a series of massive ecological restoration projects. The objectives included protecting natural forests, reforesting retired or reclaimed farmland, and rehabilitating the source region for dust and sandstorms in the Beijing and Tianjin area. These projects, together with a number of other policy initiatives that focused on Western China, including infrastructure construction, regional education programs, and economic restructuring, made up the national strategic plan for the development of western China (known as “Develop the West” 西部开发战略) launched in 1999. The budget for these projects stood at around RMB 700 billion, and the projected timeframe for their completion was just under 20 years. By any measure, these were unprecedentedly ambitious efforts toward ecological protection and repair for a developing country like China.

The first pilot projects for reforestation of retired agricultural land, or “grain for green” (退耕还林) date back to 1999. By 2005, 343 million mu (22.86 million ha) of agricultural lands had been slated for reforestation, and total investment toward the project had already reached RMB 103 billion. Of the total area covered, 135 million mu (9 million ha) was intended for tree plantation, 189 million mu (12.6 million ha) for afforestation in topographically suitable mountainous or non-mountainous areas, and 20 million mu for afforestation through mountain closure. Together, the projects involved 25 provinces and equivalent administrative units, 31 million households and 120 million farmers. The magnitude of the program is unmatched not only in China, but worldwide. Even moderate success of the program would have enormous and profound impacts on the ecological conditions of the country as a whole and on rural development.

In 2000, the system for ecological compensation (生态补偿) was established in China. This provided the institutional platform for addressing an issue that had been the subject of fierce debate for years. An immediate
implication of the establishment of this system is the regular inclusion of the expenditure toward ecological compensation, to be paid to those who must resettle to make way for ecological recuperation, in the government budget. This provided a secure source of funding for the program. The annual government outlay has been RMB 1–2 billion (US$ 152–304 million). As its projected cost continues to grow, ecological compensation may potentially take on pivotal importance to the long-term prospects of ecological restoration in China. Some have even suggested that it may pick up where natural forest protection projects and grain for green programs leave off in terms of issues addressed.

In the past 6–7 years, we have studied the socio-economic impacts of grain for green programs, where farmland is retired to allow reforestation, and the design and execution of the system of ecological compensation. By analyzing the results of these studies we have been to evaluate the effects and effectiveness of those programs so far. We apply economic concepts and theories in evaluating the data we have collected. It is our hope that a better understanding of the challenges in implementing these policies can contribute toward efforts to improve them.

The social and economic impacts of the “grain for green” programs have been a matter of concern. Issues that have been raised include whether it will help increase farmer income, facilitate structural adjustment of the rural economy, and stimulate the movement of surplus rural labor. Indeed, whether the program will be viable in the long term depends greatly on how it affects the economic outlook for farmers.

A series of mid-term evaluation of the program was done around the end of 2002, by both government and non-governmental bodies, yielding mixed results. The government’s official assessment was on the whole favorable, and optimistic on the program’s long-term viability. According to the assessment, the program had helped expedite structural adjustment of the rural economy, facilitated the mobility of surplus labor in the countryside, alleviated poverty and increased farmer incomes. Some scholars share this view, citing as evidence for the effectiveness and the basis for the program’s long-term viability and wider implementation either increased consumption of grain and other food,