The fast growth of China’s economy during the past three decades has mainly relied on the extensive economic growth model, which consumes huge amounts of resources and carries a high price in terms of environmental degradation and resource depletion. Such an economic growth model not only affects the sustainability of the economy, but also results in lower quality of growth, which makes it difficult for the country’s competitiveness to emerge during the process of economic development. Although great efforts to protect the environment have been made by the Chinese government, enterprises, and the public, the threat of environmental degradation and resource depletion is still severe, with small improvements in some areas but deterioration situation.

Since the implementation of the reform and opening policy, the income and living standards of Chinese people have improved significantly. However, improvement in people’s satisfaction has not been in line with the improvement in their living standards. The main reason is the growing income gap, which has become especially apparent in recent years. The unbalanced development of the economy has resulted in uneven development of industries, regional economies, and social groups. The income gap between individuals, between urban and rural areas, between different sectors of the economy, and especially between Eastern and Western China has expanded significantly.

Three major campaigns to develop Western China have been launched since the establishment of the People’s Republic of China. The first one was introduced during the First Five-year Plan (1953–1957) and the second one was implemented from 1965 to 1975. Due to considerations regarding the distribution of industries and national security, the government invested largely in iron and steel, electricity, coal, petroleum, nonferrous metals, and machinery, thus laying the industrial foundations for Western development. During the Ninth
Five-year Plan, the Western Development Strategy was implemented in order to reduce the gap between Eastern and Western China. This round of development involved fourteen provinces and autonomous regions/counties, including Shaanxi, Gansu, Ningxia, Qinghai, Xinjiang, Yunnan, Guizhou, Sichuan, Chongqing, Tibet, the Inner Mongolian Autonomous Region, the Guangxi Autonomous Region, and the Xiangxi and Hubei Miao Autonomous Prefectures.

Western China is ecologically sensitive and vulnerable. It suffers from both environmental degradation and poverty. In Western China, economic development and environmental protection constrain each other. The major beneficiaries of improved ecological services in fragile ecological areas are not the service providers. Losses due to ecological reservation and restoration, including lost opportunities for economic development, should be compensated by the beneficiaries of such policies. Systems are needed to make the payment for ecological services a reality. Only in this way can we realize the objective of lifting the people in Western China out of poverty at the same time as protecting the environment, achieving a win-win situation for both the economy and the environment.

1. Payments for Ecological Services and Identification of Associated Problems

1.1. Introduction to Payments for Ecological Services

Payments for ecological services have their roots in the theories of externalities, valuation of ecological services, public goods, and environmental property rights. Protecting the environment has externalities since the upstream areas provide public goods, which are the ecological services, while the downstream areas benefit from these ecological services. The upstream areas pay a lot for improving the ecological services and even sacrifices opportunities to improve their living standards by exploiting natural resources or participating in heavily polluting and energy-intensive industrial activities; while the downstream areas benefit from the improved ecological services free of charge. Based on the theories mentioned above, such an externality can be internalized by making the downstream beneficiaries pay for the ecological services to the service providers. In this way, the value of ecological services can be calculated, ecological services and resources can be allocated efficiently, and the environmental property rights of