



Karst Geomorphology and Hazards in Bijie, Guizhou

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The largest intensively karstified area in China is in the Southwest China, including Guangxi, Guizhou, and Yunnan provinces. Bijie Prefecture lies in the fragile karst ecological high mountains of Guizhou, and is one of the country's poorest regions, characterized with serious soil erosion and rock desertification, accompanied with thin-poor soil, aridlands, waterlog, mud-rock flow, landslide, ground cracks, ground subsidence, difficulty in the rural water supply, slope degraded ecosystem, etc. To lift the people especially the farmers out of poverty and backwardness, Bijie Prefecture is set up as the national "Developing Anti-poverty, Ecological Construction" theme pilot area, providing the necessary experience of the coexist in harmony and sustainable development between man and nature. The main task is to control rock-desertification. However, most, if not all efforts, have encountered difficulties. (1) The karst water system characterized by groundriver and rapid conduit flow cannot provide a stable, adequate source of drinking water, not to mention the irrigation water. (2) Plants on the arid slopes, owing to the lack of water and fertilizer, grow slowly and unhealth and cannot help much to improve land carrying capacity in a very long period of time. (3) The current ecological rehabilitation or reconstruction measures cannot stop the continuing expansion of the land rocky desertification, and elimination of frequent droughts alternating flood disaster in many depressions. (4) The harmony is still not reached between economic development and ecosystem rehabilitation or reconstruction, and as a result, the farmers are still in poverty. It is a goal of historic significance to actively exploring the innovation and breakthrough in the scientific theory, method and technology to promote the pilot area changing from the rocky desertification to a beautiful ecological environment, endeavour to achieve economic and social growth by leaps and bounds.