Comprehensive Treatment Project of Rocky Desertification in Karst Area

I. Title

Comprehensive Treatment Project of Rocky Desertification in Karst Area

II. Background

Rocky desertification is the most serious ecological problem in the karst area of southern China, affecting the ecological safety of the Pearl River and the Yangtze River, and seriously restricting the sustainable economic and social development of the region. The Party Central Committee and the State Council attach great importance to the prevention and control of rocky desertification. In 2008, the State Council approved the *Outline of Comprehensive Treatment Planning for Rocky Desertification in Karst Areas (2006-2015)*. In order to further accelerate the rocky desertification treatment and restore the ecological environment of rocky desertification areas as soon as possible, the National Development and Reform Commission, the National Forestry and Grassland Administration, the Ministry of Agriculture, and the Ministry of Water Resources jointly issued the *"Thirteenth Five-Year" Construction Planning for the Comprehensive Treatment Project of Rocky Desertification in Karst Area* in 2016, which involves 455 rocky desertification counties (cities and districts) in 8 provinces (autonomous regions and municipalities) including Guizhou, Yunnan, Guangxi, Hunan, Hubei, Chongqing, Sichuan, and Guangdong.

III. Implementation Time

The construction of the Project lasts for 5 years, from 2016 to 2020.

IV. Implementation Stage

From 2016 to 2018, the comprehensive treatment project of rocky desertification received central government investment of RMB 6 billion. 79.1 hectares of afforestation and 8,076 hectares of forest tending have been completed. Through implementation of the Project, the expansion potential of rocky desertification has been initially contained, and the ecological, economic and social benefits of the project construction are significant. As monitored, by 2016, the area of rocky desertification land in China was 10.07 million hectares. Compared with 2011, 1.932 million

hectares of rocky desertification land had been reduced in net, with an average annual reduction of 386,000 hectares and an annual average reduction rate of 3.4%, higher than the annual reduction rate of 1.27% in the previous monitoring period.

V. Parties Related to the Implementation of the Case

Sponsor: People's Government of the People's Republic of China.

Management unit: National Development and Reform Commission, National Forestry and Grassland Administration, and Ministry of Water Resources.

Implementation unit: 200 business management departments of key counties in the comprehensive treatment of rocky desertification in the project area.

VI. Beneficiaries

People of the project area.

VII. Total Investment and Capital Structure

During the "Thirteenth Five-Year Plan" period, the central government invested about RMB 10 billion.

VIII. Supporting Fund and Capital Structure

The project construction provinces (autonomous regions and municipalities) shall implement the corresponding supporting funds according to the actual conditions and financial resources of the project construction.

IX. Project Level

National.

X. Mitigation and Adaptation to the Effects of Climate Change

According to the plan, by 2020, the karst land of not less than 50,000 square kilometers and the rocky desertification of not less than 20,000 square kilometers will be treated, the construction and protection area of forest and grass vegetation will be 1.95 million hectares, and the coverage of forest and grass will be increased by more than two percentage points; the regional soil erosion

will continue to decrease, the expansion of rocky desertification land will be basically contained, the karst ecosystem will be gradually stabilized, the land utilization structure and agricultural production structure will be continuously optimized, and the growth rate of per capita net income of farmers in the project area will be higher than the national average level, the ecological and economic development environment will be steadily improved, and the rural economy will gradually step into a stable, coordinated and sustainable development pattern. Quantitative assessment on the effects of mitigation and adaptation to climate change is not available so far.

XI. Social, Economic and Environmental Impacts

Firstly, the ecological situation is significantly improved. As monitored, the comprehensive coverage of vegetation in the rocky desertification area reaches 61.4%, indicating an increase of 3.9 percentage points compared to 2011. At the same time, the arbor vegetation increases by 1.45 million hectares compared with that in 2011, showing an increase of 3.7 percentage points.

Secondly, it helps poverty alleviation and overcomes poverty. The project area covers 217 concentrated contiguous poverty-stricken counties and key counties of national poverty alleviation such as Wuling Mountain Area, Wumeng Mountain Area, Yunnan-Guangxi-Guizhou Rocky Desertification Area, Qinba Mountain Area, Western Yunnan Border Area, Four Province (Qinghai, Sichuan, Yunnan and Gansu) Tibetan Area, and Luoxiao Mountain Area. Among them, 146 are in the investment scope of key counties in rocky desertification treatment. Through implementation of the Project, regional economic development has been accelerated and poverty has been reduced.

Thirdly, the social benefits of project implementation are significant. Through implementation of comprehensive treatment of rocky desertification, a comprehensive way of rocky desertification treatment of "enclosing, constructing, reforming, relocating, constructing and supporting" has been found. Through construction of the Project, the local ecological quality has been improved, and a good investment and development environment has been created, playing a good role in leading the revitalization of the countryside.

XII. Related Photos and Charts

（花垣县雅酉镇）2001年前广种薄收的坡耕地造成了新的石漠化，童山濯濯，水土流失严重。 (2001年9月摄)

Figure 1 Situation before 2001 when the afforestation of conversion of cultivated land into forests was used in the treatment of rocky desertification land in Yayou Town, Huayuan County, Hunan Province

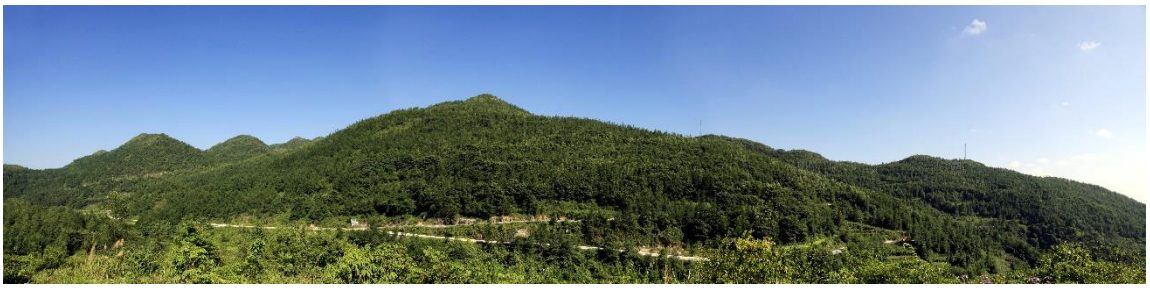

Figure 2 Afforestation Achievements of Rocky Desertification Land in Yayou Town, Huayuan County, Hunan Province in 2008

Figure 3 Treatment Model of Artificial Pure Forest of Zenia insigins Chun in Rocky Desertification Mountainous Area

Figure 4 Zenia Insigins Chun Planting Pattern in the Rocky Desertification Mountainous Area of Laibin City, Guangxi