# THE DEVELOPMENT OF LAND RESOURCES AND MANAGEMENT OF ECOLOGICAL ENVIRONMENT IN HEXI CORRIDOR

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Hexi Corridor belongs to inland rivers and has unique, harsh ecological environment, accounting for about three fifths of the area of Gansu. The paper analyzes environmental problems faced while developing land resources and presents some important proposals for its land resources development and environmental administration.

Key words: Hexi Corridor, Land resources development, Environmental management

**Introduction.** To the environment &lan resources in Hexi Corridor.

- Lies to the west of Gansu Province, takes a total land area of 276K square kilometers, about 60% of Gansu Province;
- Include 5 cities (Wuwei, Jinchang, Zhangye, Jiuquan, Jiayuguan). This area nourishes 4970K population, accounting 18.2% of the total amount;
  - Arable land: 10 400 square kilometers, accounting for 3.76%;
  - Grass land: 81 500 square kilometers, accounting for 29.53%;
  - Forest land: 8800 square kilometers, accounting for 3.20%;
- Utilized land resources for traffic, urbanization, industry and water conservation occupies 2.8% of total amount of 7730 square kilometers, and remains 60.71% unused land of 167.5K square kilometers;
- Qilian mountain and Altunmountian to the south. With the altitude upon 3 kilometers, these mountains conserves abundant amount of water resources from precipitation, and finally becomes to the format of glacier;
- Longhouse mountain, Helimountain and Mazong mountain to the north. The strip and composite plain between the south and north mountains stretches for thousands kilometers in northwestward;
- After being melted and assembling, the fresh water stream flows down to the flatlands, constructs 3 individual inland rivers from east to west (Yangshi River, Hei River, and Shule River), nourishes the civilization along the basin.

The functionality of ecosystem in Hexi Corridor is significantly venerable to the water system itself, as well as the ability of self-recovery, which could be specified as:

- 1.1. The topographic of mountain barrier result in limited land resources in Hexi Corridor, and determine the characteristic of land distribution and diversity in landscape.
- 1.2. The typical continental climate feature in Hexi Corridor brings excellent illumination along the reaches, however this area suffers from problems of considerable limited available water resources due to various reasons, i.e., the great temperature difference between hastens the evaporation procedure, small precipitation, etc.

- 1.3. The major land area of desertification in Hexi Corridor further restricts available resources.
- 1.4. Thus development in artificial system & ecosystem demands for relative high investment.

### PROBLEMS, ENCOUNTERED DURING THE DEVELOPMENT

- 2.1. Considerable reduction of water resources due to variable reasons, i.e., forest destruction in the upper reaches of water conservation, entropy of forest land, erosion of glacier, etc.
- 2.2. Increase on intensity of land development along middle-upper reaches, especially for planting & farming, which consumes dramatic amount of water resources; meanwhile, desertification is still spreading at the down reaches since restricted by the conservation of water conditions;
- 2.3. Water corruption & air pollution in the middle/main reaches, cities in vicinity oasis have been affected as well.

#### STRATEGY AND SOLUTIONS

- 3.1. Maintain the strategy for "sustainable development", i.e., establish environment bureau/agency to coordinate any real-time situations;
- 3.2. Establish & optimize the system of monitoring, i.e., analysis & forecast the trends for land utilization within a related long period;
- 3.3. Reasonable distribution of land resources according to properties of soil itself, i.e., do farming if the land resources is more suitable for agriculture, planting trees if the land resources is more suitable for forestry, etc.
- 3.4. Balance the relationship among the base population, environment, available resources, marketing, and economic development. i.e., looks for optimal solutions for manage & utilization of the land resources;
- 3.5. Make related laws & standards to restrict and formalize the behavior of land development.

## РАЗВИТИЕ ЗЕМЕЛЬНЫХ РЕСУРСОВ И УПРАВЛЕНИЯ ЭКОЛОГИЧЕСКОЙ СРЕДЫ В РАЙОНЕ ХЭСИ

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Район Хэси принадлежит к бассейну внутренних рек, имеет уникальные, суровые природные условия окружающей среды, и на него приходится примерно три пятых площади провинции. В статье анализируются экологические проблемы, с которыми столкнулись при разработке земельных ресурсов, и представлены некоторые важные предложения по земельным ресурсам и развитию управления в сфере природопользования.

Ключевые слова: район Хэси, земельные ресурсы, экологический менеджмент.