1. XIXIA INTRODUCTION

1.1 Xixia (AD 1038-1227) was a minority political power established by DangXiang in ancient China. It was successively in the Northern Song Dynasty and the Liao Dynasty; the Southern Song Dynasty and the Jin Dynasty presented a situation in which political power was established.

1.2 DangXiang was a group of nomadic people who originally lived on the Qinghai-Tibet Plateau, not engaged in production or agriculture. In the "Old Tang Book," DangXiang was recorded as "shepherding yak, horse, donkey, and sheep, as food. They cannot tell the five cereals apart, know nothing about agriculture, and there are no grains in the fields."

1.3 According to the "Song History·Xia Guozhuan," it records "the land area of Xixia, Fang is more than 20,000 miles", about 600,000 square kilometers. It is in the eastern margin of the Asian inland.

- Xixia's geography and landforms are complex and diverse.
- The eastern and southern parts are the Loess Plateau;
- The north is the Ordos and Alashan Plateaus in the Mongolian Plateau; the desert and the Gobi are more, the grassland area is small, there are the Mu Us Desert, the Tengger Desert and the Badain Jaran Desert;
- The west is the north of the Qinghai-Tibet Plateau, Qilian Mountain and Hexi Corridor.

- In the Tang Dynasty (AD 618 - AD 907), the DangXiang people migrated from the Qinghai-Tibet Plateau to the Loess Plateau. After years of development, the DangXiang regime was gradually established.
Facing the harsh natural environment, the rulers of Xixia attach great importance to the development of agriculture:

a. Implemented the development of agriculture and animal husbandry;

b. Enhanced the development of irrigation and irrigation of farmland in Hetao Plain and Hexi Corridor, and built a dense irrigation channel like spider web.

c. Established a sound and complete management system, and also passed laws and legislation to protect the implementation of water conservancy.

Through these measures, not only has the ability to resist natural disasters been improved, as recorded in the "Song Shi": "Therefore, Xixia has been harvested from water irrigation, and there is no need to worry about drought and worries every year", which can satisfy the food supply of the Xixia people. It also has an important impact on the development of the Northwest region.

2. Legislation on irrigation and irrigation in Xixia

2.1  TianSheng Law

- The "Tiansheng Law" was a systematic and comprehensive code issued by Emperor Renzong of Xixia in the early days of Tiansheng (1149-1156). It was discovered in 1909 at the Khara Khoto in Ejina Banner, Inner Mongolia, and is now in the East Literature Institute of the Russian Academy of Sciences. The "Tiansheng Law" has twenty volumes, the legislation on water conservancy is mainly in the 15th volume, including the "Cui zu zui gong men" (nine articles), "Chun kai qu shi men" (four articles), and "Yang cao jian men" (five items only), "Qu shui men" (eighteen), "Qiao dao men" (sixteen), etc, a total of about sixty articles. Because the code was printed with the Xixia script, the text was clear, relatively easy to interpret, and had a complete Chinese translation.

2.2  Hai Nian Xin Fa

- The "Hai Nian Xin Fa" was a code of law issued before and after the emperor of the Xixia Zunxu Guangding four years (1214). It was more serious, with only fifteen volumes, and the provisions on water conservancy legislation are also in the 15th volume, there are "Zu di fu yi men", "Shang tang lai fu yi xiao jian men", "Tang lai deng lian tiao cao fa men". Because the "Hai Nian Xin Fa" was a copy of the Xixia text cursive script, the writing was difficult to interpret. There is no complete Chinese translation of the book, only a few translated articles.
3. Contents of Xixia Water Conservancy Management

• 3.1 Establish an institution. For the management of farmland water conservancy, not only Zhong Shu, Zhaixiang, and Zhusi Daren are involved, but the Xixia government has also set up central and local institutions for managing water conservancy. The central management agency is called Nongtian Si, and the local agency is called Shuili Jufen. Xixia’s water conservancy bureau has set up Daren, Cheng Zhi, Sili, Fushi Xiaojian, Qutou Xunjian, and Qutou, Quzhu, etc. only “The Dadoudu Fu to Ding yuan along the canals as a canal inspection, Qutou Xunjian and Qutou was one Hundred and fifty people.” It can be seen that Xixia has a sound management system with complete management system and numerous management personnel.

• 3.2 Juan Sao. Every winter, the Xixia government will use the river water to freeze, and use the firewood and sand to block the channel of the main channel. In the spring of the second year, because there was no river inflow through the channels, it was kept dry, which was convenient for the Xixia people to repair the dredging channels in time to ensure the smooth irrigation of water conservancy. In order to get enough firewood to block the canal, “Tiansheng Law” stipulates: the owner of each land tenant pays Caopeng Zi, Xiapang and other items in winter. One acre of land also has to pay a five-foot bale, which can be composed of various weeds.

• 3.3 Open the canal. “Tiansheng Law” records: "When the canal is opened every spring, the relevant management units of farmland water conservancy will put forward discussions on the prescribed date, and then Fushi Xiaojian, Zhusi and Zhaixiang Daren, Cheng Zhi, Hemen, Qiangongshi and Xunjian Qiangongshi and other people, together in front of the Zhaixiang to discuss. In the same year from the court sent a capable person to the local presidency to open the channel.”

• 3.4 Water supply in sequence. Due to the dry climate and little rainfall in Xixia, the development of crops is very dependent on the irrigation area, and the time node of irrigation is also very important. the Xixia law stipulates that water supply should be sequentially in accordance with the order of the fields. It is strictly forbidden to occupy water conservancy, or to accept bribes in the canal, and not to release water in sequence.

• 3.5 Maintenance of water conservancy facilities.
  • In order to effectively manage and maintain water conservancy projects, Xixia has made the following provisions in water conservancy legislation:
  • First, determine the responsibility for managing and maintaining staff.
  • Second, clearly establish the stone and determine the scope of the inspection.
  • Third, protect the canal and plant trees.
  • Fourth, select high-quality materials and make good material reserves.
4. CONCLUSIONS

• 4.1 Dangxiang was a nomadic nation, but after entering the farming civilization, it began to develop agriculture.
• 4.2 Xixia is located in the northwestern part of China. The natural environment is very bad. The Xixia government attaches importance to agriculture, builds water conservancy, guarantees the people's life and development, and embodies the wisdom and excellence of the ancient Chinese people.

• 4.3 The Xixia rulers formulated very detailed and unique water conservancy regulations. Xixia’s water conservancy regulations not only promoted the social and economic development of Xixia, but also made great contributions to the development of Northwest China, and added a splendid color to the history of Chinese ancient water conservancy.
• 4.4 By contrast "TianSheng Law" and "Hai Nian Xin Fa", we can clearly see that The stronger the country, the more developed the water conservancy; the more developed the water, the stronger the country.

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