



The pattern of water resources utilization and environmental conservation of the lower reaches of Kaidu River in Xinjiang

Xinguo Li (1,2), Hamid Yimit (1,2), Mamattursun Eziz (1,2), Wei Han (1,2)

(1) College of Geographical Science and Tourism, Xinjiang Normal University, Urumqi, China (lxgonline@yahoo.com.cn),

(2) Xinjiang Laboratory of Lake Environment and Resources in Arid Zone, Urumqi, China (lxgonline@yahoo.com.cn)

The lower reaches of Kaidu River are located in arid inland basin in Xinjiang with all features of typical perfect inland water circulation system. The exploitation of water and land resources in the 1950s has strongly changed the water resources distribution of the areas, as a result the existing water and environmental problems are excessive farmland drawn water, rise of underground water table in the inside of oases, severity of soil salinization, increment of mineralization degree of Bosten Lake; decrement of biological diversity on the lake banks and the lake, depravation of ecological environment. All of the problems as above are important ones faced by the sustainable exploitation and development of water resources and environmental conservation in Xinjiang. By means of systematical analysis method, the main water and environmental problems, as well as the harness and conservation patterns are studies.

Keywords: Water resources utilization, ecological environment, Bosten Lake, the lower reaches of Kaidu River