



Analysis of vegetation coverage change of Bohe and Jinghe oases (Xinjiang, NW-China) - natural and human factors

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An oasis is a basic place to maintain human living, activity and development. It has an important significance to utilize soil resources reasonably in order to investigate the change of vegetation coverage on spatio-temporal scales. Based on remote sensing data, we determined the vegetation coverage and analyzed the characteristics of its historical evolution from 1990 to 2005. The results showed, that between 1990 and 2000 (1) the general vegetation coverage of the oases decreased strongly, where farmland had the lowest contribution, (2) however, the decrease of general vegetation coverage was accompanied by some (spatially limited) restoration of vegetation (e.g. grassland), and (3) vegetation restoration dominated vegetation degeneration. The main natural influencing factors on oasis vegetation coverage are precipitation and evaporation. The population growth and the exploitation of land and water resources are the main human influencing factors.