Study on dynamic change of sandy land in the Beijing-around region

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Beijing-around region is one of the important regions, to which the environmental department pay more attention and investment . The environment problems in this region affect not only Beijing but also her around area. According to the characteristic of the dynamic change of sandy land, this paper classified four types of dynamic change of sandy land, including extended sandy land, the reverse changed sandy land, the potential sandy land and no changed sandy land. Then the process and the trend of sandy land change and the environmental influence in Beijing-around region have been analyzed. The results show that, the potential sandy land was the most widely distributed in Beijing-around area, mainly distributed in the north of Yin Shan Mountain. The extended sandy land, which was mainly from degradation of grassland, mainly distributed in monitoring zone of Hunshandake sandy land. The reverse changed sandy land was mainly come from improvement to grassland, distributed in monitoring zone of Horqin sandy land. The area of sandy land increased in the Beijing-around region in the period of 1991 to 2002. Change between sandy land and grassland is the dominating change mode. The region in high ratio of extended sandy land would accompany with widespread potential change of sandy land in monitoring zone of Hunshandake sandy land and the north of Yin Shan, implied that region would have high potential probability to sandy land in the future. On the other hand, in the monitoring zone of Horqin sandy land and Ba Shang Plateau and its around area, desertification had been controlled gradually and the area of sandy land area will decrease. This variety would make the direction of the sandstorm to Beijing change to northwest gradually. Furthermore, the degrease of sandy land and reversing arable land to grassland and forest land in the Beijing-around region affects land quality and atmosphere in around region. Finally, suggestions to the eco-environment construction in Beijing-around region have been put forward.