

Land cover change of oases in Tarim basin in Xinjiang Uyghur, China derived from satellite data

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Land cover change and land use of the oases in Tarim Basin in Xinjiang Uyghur in the past 40 years was examined by means of satellite images. From the results of the analysis of these images, the following have been explained. The farmland utilization ratio in average stands at 0.28 in the northern edge of Taklimakan Desert. In the meantime, the ratio stands at 0.13 in the southern edge, whereas 0.31 in the western edge. It is revealed that in the northern edge, area of the irrigation land is vast enough to be utilized. Small oases are much noticed generally in the southern edge, and accounted for usually less than 0.15 resulting in lowness in the utilization ratio of the farmland. However the smaller the value of the said ratio is, the higher the potential of the farmland development is. It is explained that the vegetation land is slightly expanded in the upper reaches of the river in the small oases in the northern edge, but the vegetation land is drastically changed to barren land in the lower reaches of the river. On the other hand, it is explained that the vegetation regions are being expanded year by year in the oases in the northern edge. Especially in Aksu, the farmland area was expanded accompanied with increase of the number of the development settlers.