

Land Degradation Caused by Human Activities

Case Study: Shihezi (Manas River Basin), Xinzhang, China

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Abstract

Generally, it is thought that land degradation is occurring by huge scale natural events or long term period of disasters such as drought and global warming. However, in details of the classification, land degradation from human activities, such as developing urban and farm land, has occupied over 50% of entire land degradation. Also, it caused the secondary disasters such as flood, landslide or salinization.

As a case study, the land use of Shihezi (Manas River Basin) was analyzed and estimated using satellite images and geographical data. As the result, 3.6% of the land (1,831 ha) was degraded between 1989 and 1996. The land degradation was expanded over 30% according to the estimation of the simple scenario model analysis between 1996 and 2005.

It is important to keep monitoring to change in land use and to estimate long term changes. Developing farm land is necessary for providing foods for people's living. However, proper developing with proper policies is more important to maintain our land.

Key Words: Land Degradation, Human Activity, Shihezi, Manas River Basin,