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## The Impact of Land-Use Change on the Livelihood of Rural Communities: A Case-Study in South Darfur, Sudan

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### Abstract

This study attempts to identify and analyse rural people's attitudes, knowledge and perception of land-use change, and to examine the impact of land-use change on rural people's livelihood. The cross-sectional data were collected from 100 respondents using pre-structured questionnaires. The data were focused on respondents' socio-economic characteristics, drought and its affect on natural resources (for example agricultural land and crop production, land degradation, forest production and rate of deforestation). The narrative perception of the key informants was used to obtain a clear picture of different historical changes in land-use patterns from 1972 until 2008 in the Edd Al-Fursan area, South Darfur State. Additionally, they provide a beneficial description of the natural resources situation in the seventies and their degradation since the beginning of the droughts in the 1980s. The data were coded, entered in a computer and analysed using the Statistical Package for Social Science (SPSS). Descriptive statistics and correlations were used to present the study results. The findings illustrate that the respondents are aware of changes in land-use patterns over the course of this period. The sampled population indicates that the driving forces of this change included environmental degradation, conflict and war, recurring droughts, human and animal population growth and human activities. This was based on their perception and interpretation of indicators such as the reduction of soil fertility due to over-cropping that led to lowered crop production, overgrazing that has resulted in the change in some grazing species and pasture degradation. The results of the study also indicate that deforestation caused by charcoal production, brick making and building materials ultimately led to land degradation and soil erosion. Moreover, the study illustrates that land-use issues in the study area were directly related to land tenure systems. However, the inability of land ownership and land management systems to cope with the demand for farms and pastures due to increased human and animal population resulted in land degradation caused by overuse, which hinders the sustainability of rural livelihood in the area.

**Keywords:** Land use change, livelihood, rural communities