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Land Use and Land Cover Changes of West Tahta Region, Sohag Governorate, Upper Egypt

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Author(s)

Ismail Esam, Faid Abdalla, Niesner Erich

ABSTRACT

Due to the growing of population in Egypt during the last few decades, great changes in agricultural area, and urbanization of Egypt art occurred. In this study we utilized the available record of multitemporal Land sat Thematic Mapper (Tm) and Egyptsat image to produce land cover/land use map of the area between 1987 and 2009. Also we used the post-classification change detection analysis to detect the change in the agriculture, urban areas and the change in the River Nile during the period between 1987 and 2009. The post-classification change detection analysis shows that agriculture development increased by 1785.96 Hectare through the study period with average annual rate of land reclamation 81.18 Hectare/year. While the urban area increased by 2231.24 Hectare with average annual rate 101.42 Hectare/ year the increase of the urbanization and the growth occurring through encroachment into the farmer old cultivated lands. The change in the River Nile is not so much is reached to 138.32 hectare in the study period with average annual rate 6.29 Hectare/year. The result of this study show that, the accuracy are quantify with the land cover changes and also delineate their spatial patterns, which display the efficiency of land sat in evaluating landscape dynamics over a particular time span. This data are very useful for natural resources management.

KEYWORDS

Land Use; Land Cover; Remote Sensing; Change Detection

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