

Urban Land Expansion Impact Assessment on Agriculture Land in Kabul City, Afghanistan

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Abstract : Kabul city is experiencing urban land expansion in an unprecedented scale, especially since the last decade. With massive population expansion and fast economic development, urban land has increasingly expanded and encroached upon agriculture land during the urbanization history of the city. This paper evaluates the integrated urban land expansion impact on agriculture land in Kabul city since the formation of the basic structure of the city between 1962-1964. The paper studies the temporal and spatial characteristic of agriculture land and agriculture land loss in Kabul city using geographic information system (GIS) and remote sensing till 2008. Many temporal Landsat Thematic Mapper (TM) imageries were interpreted to detect the temporal and spatial characteristics of agriculture land loss. Different interval study periods, however, had vast difference in the agriculture land loss which is due to the urban land expansion trends in the city. the high number of Agriculture land adjacent to the city center and urban fringe have been converted into urban land during the study period in the city, as the agriculture land is highly correlated with the urban land.

Keywords : agriculture land, agriculture land loss, Kabul city, urban land expansion, urbanization

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