## Investigating urban growth scenarios in Wadi El Natrun area, Egypt, using the UPIan land use allocation model.

## Abstract

This study aims at establishing an approach for the analysis of urban growth dynamics to support urban planning decisions in Egypt. This approach is based on the UPlan model. It acknowledges the lack of historical land use detailed data in most of the Egyptian cities and is heavily based on socioeconomic and land use patterns collected from field surveys and census data.

The model is tested on Wadi El Natrun city, an urban agglomeration located on the agricultural fringes of the Nile River.

Several scenarios are generated based on changes in a set of attractors, discouragements, and masks. The use of such model is recommended to both urban planners in assessing the effect of their land use allocation decisions and the local authorities in evaluating those plans and possible actions regarding land policies.