

## The Cartographic Analysis Of The Digital Land Use Map Of Disouq Town (A study In Urban Geography)

A Thesis Submitted to The Department Of Geography&G.I.S.
Alexandria University, to Obtain Ph.D.

Prepared By:
Hany Samy Abdel Azeem Mohamed

Supervised By:

Dr.Mohamed Farid Ahmed Fathy
Prof.Of Urban Geography at Faculty Of Arts, Alex. Univ.

## **Abstract**

## The Cartographic Analysis Of The Digital Land Use Map Of Disoug Town -A study In Urban Geography

The study includes eight chapters preceded by introduction, followed by a conclusion and a list of references & sources.

The introduction shows the reasons of The choice of the thesis, the aim of it, and the most previous studies on it, other than curriculum and followed steps with shedding light on the most important difficulties that faced the researcher.

The first chapter is concerned with objective study for applying some techniques such as geographical information systems (GIS), remote sensing as the researcher illustrated how to collect data, analyzed satellite images for study region and handling survey to complete the data reaching to accomplish the digital map for Disoug town. Then analyzing and managing data sets inside the geographical information systems (GIS) reaching measurements, querying and extracting results, putting light on used computerized programmes.

The second chapter includes a study of the most important features of population in Disoug town as it deals with the elements of population growth and distribution of them around it .which is concerned with basic facts strongly related to planning the town, the chapter also tackles the outstanding features of ages and varities of population on which futuristic and developmental plans are based .

The third chapter deals with urban structure of Disoug town as it handles the urban growth map ,the stages of this growth ,the difference of growth volume in each direction of these stages ,also deals with the most important parts of internal structure of the town e.g. style of buildings, ages of them ,their conditions ,their height, building materials and the price charts of built land.

The fourth chapter deals with residental chart via analyzing and measuring group of inhabited changes related to housing from which we can deduct the most important features of dwelling inhabited environment in the town "this is one of the elements which considered when planning like number of floors ,price of built land, conditions of buildings and buildings style.

In this chapter the researcher tried to outline a picture to classify inhabited buildings over the town.

The fifth chapter concentrates on the town commercial map starting with general characteristics of numeral and variety spread of commercial institutions all over the town .then the detailed features of them all over the districts inside the town with spotting light on the relation between commercial land use and beneficial value and land prices in the town.

The sixth chapter deals with the industry map of the town beginning with general distributing features all over the town ,then the detailed illustration all over the districts in the town ,with manifesting the concentration of some industries and crafts showing reasons for that .

The seventh chapter introduces the distributive features of services in the town which share side by side with the rest of land uses to form the general style of inhabited part .the chapter deals with distribution of general services, professional services and general institutions all over the town.

The eighth chapter comes as a conclusion to other chapters as it deals with the town problems such as ones related to urban, like sprawl on cultivated lands ,housing problems, streets problems administrative problems ,public services problems and land use problems .this chapter included some suggestions which give solutions to some of these problems .

The study had a conclusion containing the summary of the research and the results such as:

- \* The low population growth in disouq town comparing to Kafr el sheikh cities at census period between 1986 &1996 referring to that the town is at the demographic stabilty.
- \*The style of house buildings is the most distributed style at the town that obtains about half of the town built up area.
- \* The variety of using the ground floor for housing according to variety of land beneficial value.
- \* The raise of the commercial land use distributed ratio comparing to other land uses at the districts of the town center.
- \* The raise of the urban industries land use distributed ratio as general which performs 93.29% of industrial institutions total number.
- \* The variety of services at the town between public services and professional ones.
- \* There are some problems that people at the town suffered from \*some of them related to town urban frame, but others related to, public services and land use.

The study has introduced some recommendations such as: Some suggestions which give solutions to some of the town problems like built up area divider problem and Others as follows:

- 1- Dividing the town to administrative portions that make it easy to set plans for services & utilities.
- 2- Increasing the efficiency of educational & health services.
- 3- Decreasing of pollution that resultant from industries within the town by carrying them out to the south east of it.
- 4- Laying drain problem in prior projects that determined to obtain clean healthful environment, in addition to protection of buildings and roads from harmful effects.

And some other recommendations related to the techniques using at this study as following:

- \* The necessity of developing of geographical curriculum, especially at cartographic studies which still between agreement and disagreement at many of Geographic departments in the Egyptian universities.
- \* hurrying of applying modern techniques like remote sensing, GIS and GPS at geographical studies, specially the applied ones with doing the best for using results practically, that encourages researchers and on the other hand help in governmental plans.
- \* Attempting to make relationship between scientific research institutions and the establishments in ARE for having facilities to obtain necessary data which needs many efforts every time.
- \*Planning to make digital geographical information bank to gain benefit from crude data belongs to research studies with making regularly up to date for them.