HIGHER TECHNICAL INSTITUTE

COMPUTER STUDIES DEPARTMENT

DIPLOMA PROJECT

GEOGRAPHICAL INFORMATION SYSTEM IN SUPPORT OF AGRICULTURE DEVELOPMENT

CS/164

SYSTEMS ANALYSIS AND DESIGN

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SUMMARY

As it has been already noted in the introduction one of the objective of this project is to uncover the information needs of agriculture. The major organization that establishes the government's policies in agriculture is the Ministry of Agriculture, Natural Resources and Environment. As a logical consequence the project team focused towards that direction. A number of people have been interviewed and various books and leaflets regarding the Ministry have been studied. The spherical view provided from the previous actions and certain other factors analysed afterwards, was determining that the project should be narrowed to a single department of the Ministry.

Information gathering was continued for all the sections of the Department of Agriculture. Again the project team had to made a decision on what information to be handled by the GIS to be developed.

The preselection of the data concluded the needs of the first objective of the project, to uncover the information needs of agriculture. From that point and on the project team focused on analysing the information gathered, designing the new system and implementing it.

The SDLC methodology was followed in the development of this project. MapInfo and MapBasic package Version 4.0 as well as FoxPro version 2.6 were used for the development of the system.

The system developed is compromised from two parts. The first part, developed with FoxPro development kit is responsible for entering the information. The second part, developed with MapInfo and MapBasic development package is responsible for the visualization of the data either geograhically or graphically or textually.

It was also used for developing the "cards" required for effective decision making.

The system provides the following features :

1. User friendly environment along with on-line help.
2. Provide easy ways for entering the information.
3. Provide multiple views of the information (i.e. maps,graphs,browsers).
4. Provide information for effective decision making.
5. Provide security procedures.

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