TOPOGRAPHY MODULE

This module studies the effect of topography on land suitability for agriculture.

It is divided into the study of land-topography's effect on rain-fed agriculture, and the study of land-topography's effect on irrigated agriculture.

LAND UTILIZATION TYPES MODULE

This module (LUT) module assess the suitability of different land uses to land resources development. LUTs are defined in terms of a product, and the management system, including the operations and inputs, used to produce these products.

REPORTING TOOL

A reporting tool that provides the user with the capabilities-needed to create ad-hoc comprehensive reports was developed.

The Mapping of Natural Resources for Agricultural Use and Planning in Libya project was funded by the Libya. It is coordinated by UNDP and executed by FAO with collaboration from National Institutions. The Phase I started in 2000 and Phase II is planning to start in 2010. For further information visit www.glcn.org/lwias/. National Project Coordinator: Mr. Mabrouk Affan(2007-2010)(mbk_affan@yahoo.com); X- NPC : Dr. Khaled Ben Mahmoud (2000-2007) (khaled_benm@yahoo.com);UNDP Project Officer: Dr. Abdelmenam Mohamed(2008-2010)(Abdelmenam.Mohamed@undp.org); X-UNDP Project Officer: Mr. Abubaker AlKhwaldi (2000-2008); FAO Leader of Project Technical Unit: Mr. John Latham (John.Latham@fao.org) ; National Project Director: Mr.Al hady al Rashdy(2000-2010) (aalrashdy@hotmail.com).

LAND RESOURCES INFORMATION MANAGEMENT SYSTEM (LRIMS)

MAPPING OF NATURAL RESOURCES
FOR AGRICULTURAL USE AND PLANNING IN LIBYA
(LIB/00/004)

LAND RESOURCES INFORMATION MANAGEMENT

The project "**Mapping of Natural Resourced for Agriculture Use and Planning in Libya**" (LIB/00/004) was initiated by the Libyan Government in collaboration with UNDP and FAO to strengthen the capacity of the Agricultural sector to manage land resources at national and sub-national level, being supported by a Land Resources Information Management System (LRIMS).

LRIMS is designed and developed based on FAO guidelines and methodologies for sustainable management of land resources.
It implements an integrated and interactive approach to land use planning and participatory techniques, enabling assessment and modeling of land suitability and responses to potential agricultural production.

LRIMS enables standardization and creation of harmonized complex databases using the GeoDatabase data model.

LRIMS integrates various functionalities and methodologies into one processing environment.

It has 10 modules that allow integration of different layers of information, including a module for report creation.

CLIMATE MODULE

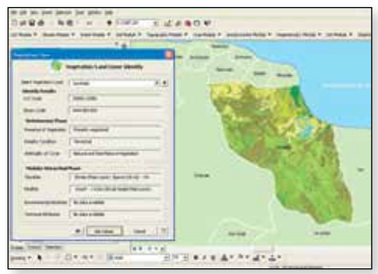
This module enables the user to analyze meteorological data and crop requirements to identify the relationship between climatic conditions and crop yields.

SOIL MODULE

This module tackles the Agro-Edaphic suitability of different soils to crop requirements, and determines the 'fallow land requirements' for each combination of crop and soil type.

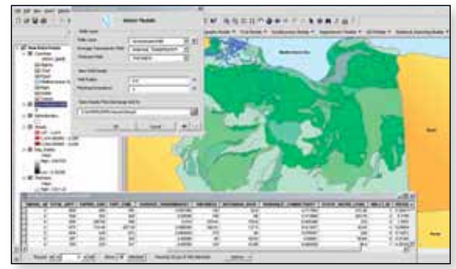
VEGETATION / LAND-COVER MODULE

This module is built to enable the users to incorporate their land-cover data in the Land Evaluation Suitability (LES) analysis process.



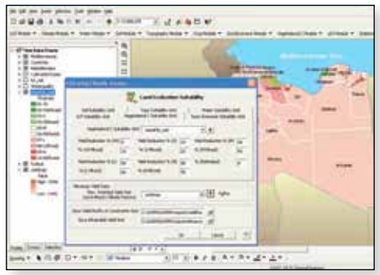
WATER MODULE

This module comprises functions for identification of potential areas for sustainable water withdrawals, and for estimation of groundwater quality.



LAND EVALUATION SUITABILITY MODULE

This module generates the Final Yield grid for a certain crop (Maximum Potential Yield - Total Yield Reduction). Hence suitability ratings are assigned for Final Yield classes; thus LES maps can be created for different crops.



CROP MODULE

This module estimates the yield reduction for a certain crop due to different types of stresses. The module integrates the CropWat Software with the LRIMS, where LRIMS generates all types of files that serve as input to CropWat.

SOCIO-ECONOMIC MODULE

This module tackles the socio-economic suitability of different regions to land resources development. It incorporates 4 different factors (Socio-Economic Indicators), which are: Illiteracy Percentage, Population Density, Accessibility, Poverty.