



PROJECT: Agro Ecological Zoning and Land Suitability

YEAR: 2012

COUNTRY: Iraq

CLIENT: Consortium SGI Studio Galli / MED Ingegneria / El Concorde Constructions

DESCRIPTION

In the framework of the Project "Strategy for Water and Land Resources in Iraq" (SWLRI), GISMAP was charged to perform the Agro Ecological Zoning and Land Suitability at national scale.

The work, carried out according to the methodologies described in the FAO guidelines, analyse the production of 37 different crops through a cross-examination of indicators related both to the ecological situation in Iraq and the socio-economic conditions of the areas of interest. Six specific reduction factors (YRFs) were considered in order to estimate their overall impact on crops: Climate, Water Quality, Land Utilization Type, Soils, Topography and Fertility.

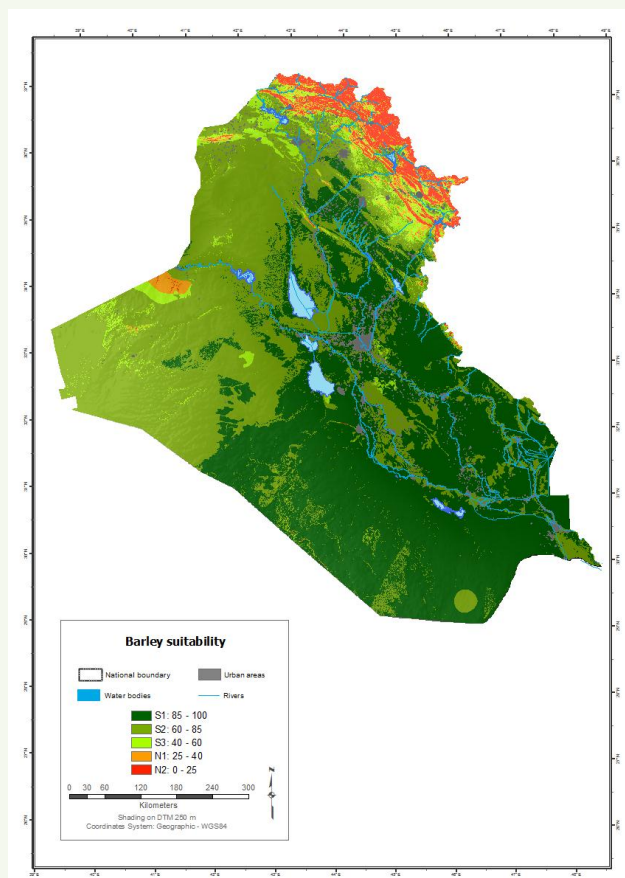
The application of the Land Suitability framework has been implemented in strict accordance with Sys et al.¹, by defining a set of Matching Tables for each crop.

For each of the 37 analysed crops, a series of tables were produced and then aggregated using algorithms, specially designed for the production of GIS layers in raster format (Geotiff file), with a spatial resolution of 250 meters.

The final output is a set of raster files for each crop:

- Climatic Potential Yield, in q/ha of commercial yield;
- Crop Suitability (the aggregation of the six YRFs listed above), in % of reduction of the optimum yield;
- Agro-climatic Suitability (the combination of the Potential Yield with the Crop Suitability), in q/ha of commercial yield.

More details on methodological aspects are available [here](#).



¹ Sys C., Van Ranst E., and Debaeye J., Land Evaluation. Methods in land evaluation. General Administration for Development Cooperation. Agric. Publ. No. 7. Brussels , Belgium, 1991