

## **Evaluation of Sustainable Land Management Using Agro-Ecological Evaluation Approach In Ceylanpınar State Farm (Turkey).**

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### **Abstract**

Soil protection requires the improvement of agricultural land use, its planning and management, in order to achieve a sustainable development. Evaluation analysis is considered an interface between land resources survey and land use planning and management. Agro-ecological land evaluation approach, such as the assessment of land performance (land suitability and land vulnerability) when used for specified purposes, provides a rational basis for sustainable land use and management. Since, MicroLEIS (Mediterranean Land Evaluation Information System) is a set of useful tools for decision-making which in a wide range of agro-ecological schemes, use in the study. It provides a series of computerized models for agro-ecological evaluation based. Ceylanpınar State Farm was selected to study; in order that is biggest state farm and a most important agricultural production area. It is about 17000 ha and includes environmental characteristics of Mediterranean and the Middle East. In the study; was created an 'interface' between soil survey and land use planning through evaluation limiting factors to sustainability by Mediterranean Land Evaluation Information System, developing of MicroLEIS DSS to agro-ecologic land evaluation by showing advantage or disadvantage in arid regions as the Middle East.

*Keywords:* Agro-ecological evaluation, Land evaluation, MicroLEIS, GIS-based spatialization, land suitability, land vulnerability