

# MedAction: An Internet Tool For Forecasting Land Use Change And Land Degradation In The Mediterranean Region

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**Abstract.** MedAction aims to address the main issues underlying the causes, effects and mitigation options for managing land degradation and desertification in the Northern Mediterranean region of Europe. The researchers are developing web-based mapping tools (Carver et al., in press) to allow EU planners, decision-makers and citizens access to modelling systems which forecast land use change and land degradation risk. The objectives of the research are to: · develop a web-based interface to the modelling system and associated data; and · develop an interface which is both an information service and a scenario based analysis tool about the sensitivities of land use change and land degradation risk. The prototype system will provide a web interface to view available spatial and meta data and the existing model results (see <http://www.ccg.leeds.ac.uk/medaction/>). The interface will be developed in order to enable users to alter climate change scenarios and view the effects on land use change and land degradation. The model will integrate predictions of the climatic, the physical and the socio-economic environment to create scenario-based forecasts of agricultural land-use and land degradation for the entire Mediterranean climate region of the EU at a 1 decimal minute resolution. This research builds on an earlier project which developed a means of linking physical, climatic and socio-economic data in order to make predictions of land use change and land degradation for the Mediterranean region for about 50 years hence (Openshaw and Turner, 1999). References Carver, S., Evans, A., Kingston, R and Turton, I. (2001) Public Participation, GIS and cyberdemocracy: evaluating on-line spatial decision support systems. *Environment and Planning B*, Vol. 28. Openshaw, S. and Turner, T. (1999) Forecasting global climate change impacts on Mediterranean agricultural land use in the 21st Century. Paper presented at the 11th European Colloquium on Quantitative and Theoretical Geography, England, September.