



## A GIS-BASED DECISION SUPPORT SYSTEM FOR FOREST MANAGEMENT PLANS IN TURKEY

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### Abstract

This study is designed to develop a Geographic Information System (GIS) based contemporary forest management planning model (*ETÇAPKlasik*) enabling to embrace the features of forest management planning guidelines. The model is implemented at a forest management unit level for even-age, uneven-age and coppice forests. The model has four modules as Data Input with inventory compilation, Harvest Scheduler with classical approach and Data Output as reporting and mapping with GIS functionalities. The model has been successfully tested on a case study site in Kızılcasu planning unit in Turkey. The results showed that *ETÇAPKlasik* model easily compiled the sampling data from field inventory and mapped the results of plan (forest stratification, age class and site maps etc.). Harvest scheduling was conducted according to even-age and uneven-age planning methods. The outputs are generated according to the management guidelines. In conclusion, the model has contributed to the forest management process with the help of information technologies enabling the process to be faster, sound and timely using relatively less amount of time and labor. *ETÇAKlasik* has the potential for use in preparing contemporary forest management planning process.

**Key words:** Decision Support System, Ecosystem Based Multiple Use Forest Management, ETÇAPKlasik, Forest Management Plan, GIS

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