

Planning process of forest resources in Turkey from inventory to silvicultural planning

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Abstract: Since 2008, forest resources in Turkey have been planned and managed according to ecosystem based multi-purpose planning principles. The planning process begins with forest ecosystem inventory of eight titles. The data obtained from the inventory are entered into the computer and the geographic database is established using the geographic information systems (GIS). Participatory meetings are organized and the main requests and demands of the people are determined. Forest function maps are prepared according to the inventory data and the demands of the people. Then goals and conservation targets are defined and the planning unit is divided into management units. The optimal forest structure is determined for each management unit. The silvicultural treatments to be applied to each sub-compartment is shown in the relevant table and cutting map. The planning process of forest management is ended with calculation of allowable cut and preparation of maps and outputs in the forest management plan format. When the process of preparing the silvicultural plan starts after this stage, firstly the ecological conditions in the regeneration areas are examined and the existence of the seed tree is determined. Then, silvicultural treatment methods and times to be made for reforestation and regeneration areas are determined and related tables are arranged. In this study; In particular, the forest management planning process will be examined in terms of legal and application from the inventory to silvicultural planning. The process of preparing the silvicultural plan integrated into forest management plans over the last five years; measurements and evaluations in forest area, establishment of database and preparation of silvicultural prescriptions, calculation of allowable cut (to be taken from tending and regeneration areas), and finally preparation of cutting or silvicultural maps. Sample applications; Erzurum Forest Regional Directorate Oltu Forest Management Enterprise consists of forest management planning process and silvicultural planning process. The research area is generally composed of pure *Pinus sylvestris* and the year of abundant seed is every two years. In preparing the silvicultural treatments prescriptions, artificial and natural regeneration methods, taking into consideration the biological characteristics of *Pinus sylvestris*, clear cutting and shelter wood method are recommended. The method applied in the tending areas is low thinning and weeding, release cutting, weak, moderate or heavy low thinning are suggested according to the development stage. Planning period is between 2015-2034.

Keywords: Forest management plan, Silviculture plan, Ecosystem-based multiple use management