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The Study of Suitable Forest Territorial Organisation in the Northern Zagros

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Abstract

This study conducted for investigation on a suitable forest territorial organisation in the northern Zagros. In order to achieve the goal, “Group Decision Making” approach was used. The method used was based on “Analytic Hierarchy Process” which is one of multi-criteria decision making methods. At first, the most important effective criteria in the determination of management unit in the northern Zagros were recognised by a questionnaire. The second questionnaire was designed to determine the importance factor of each criteria to achieve the goal and choose the best alternative. The results show that eight main factors are effective in management unit determination. These factors are as below according to their importance: 1) Social acceptance, 2) The goals homogeneity in the management unit, 3) unity of the manager, 4) Using “one” forestry method in management unit, 5) Similarity of the management unit and forest stand, 6) Economical justification, 7) Physiographic and 8) Unit area. There were three main alternatives in managing Zagros forests. The results of this study show that the best choice among three alternatives is considering the family conventional territory as management unit in the northern Zagros followed by village conventional territory and watershed. Studying the family conventional ownership, as the management unit, a 3388 hectare area was surveyed in which all the conventional territory boundaries were surveyed by GPS. Then gathered the data were used as inputs for GIS. The results show that the area of this family conventional territory changes between 2.5 to 136 hectares. Conventional territory of each family consists of separated parts and the number of them changes from 1 to 7. The boundary of conventional territory follows the valleys and ridges. In exceptional cases, the large diameter and old trees separate the conventional territory. Studying the relationship between family conventional territory and factors such as slope, aspect and forest stands show that dividing the forest among the families flow some special rules from old time. It means that the forest has been divided in a way that all the families have had equal shares from the present situation.

Keywords: Conventional territory, Forest management, GIS, GPS, northern Zagros forests, territorial organisation