

Investigating the distribution of forest engineer in the state forest enterprises by using Atkinson Inequality Index: Kahramanmaraş Regional Forest Directorate sample

Mehmet Pak^{1,*}, Arif Okumuş²

¹ Forest Engineering, Kahramanmaraş Sütçü İmam University, Kahramanmaraş, Turkey

² Forest Engineering, Kahramanmaraş Sütçü İmam University, Kahramanmaraş, Turkey

* Corresponding author: arifokumus@ksu.edu.tr

Abstract: Income distribution refers the distribution of the national income generated in a given period among the production factors in the country. It is an important indicator of the economic well-being of a country. The categorical, individual and global distribution of income indicates that income is not equally and equitably distributed among the individuals. Income distribution shows the change over time in the applied economic and social policies. The ownership of the production means, the level of public services, the social and traditional relations, the organizational level and horizontal-vertical mobility of the workforce, the forms of political participation and all these changes over time affect income distribution. Income distribution directs to the economic policies. It is revealed to investigate the social and income distribution relations among the factors that constitute national income. Numerous indexes have been developed to measure income inequality. From these inequalities, the Atkinson index is derived from the social welfare function. The social welfare function consists of the sum of each individual's welfare function and has additive, symmetric, non-decreasing with income, concave function properties. This index assumes that social benefit is comparable with social and economic characteristics. The Atkinson index is based on the social utility function. It gives different results depending on the normative sensitivity of society. This index takes values ranging from 0 to 1. Also, Atkinson index indicates that there are consistency among indicators belonging to different segment of society. Demands for forest enterprises increases and diversifies along with the social, socio-cultural and economic change of the society. Forest enterprises should be involved in actions to meet the demands taking into account the demands of the people. For this reason, taking into consideration the characteristics such as work and area density the distribution of forest engineer should be the most appropriate level. In this study, using the Atkinson index to investigate the loss of social benefit for forest engineer who served in the 7 State Forest Enterprises located in Kahramanmaraş Regional Forest Directorate in 2016 has been evaluated. The number of forest engineers, the total forest area of the forest enterprise, allowable cut, the amount of wood production, the expenditure and the gross sales were obtained from the Kahramanmaraş Regional Forest Directorate. The values indicating the loss of social benefit of forest engineers, who are working for the State Forest Enterprises vary between 0,585 and 0,917. In this reason, when different characteristics of the enterprises were taken into consideration, 68 forest engineers, working in Kahramanmaraş District Directorate, felt between 37 and 61 people.

Keywords: Atkinson inequality index, National income, Loss of social benefit, Social welfare function, Distribution of forest engineer