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Title: Investigation and Situation of Timber Harvesting Mechanization of Turkey and the Usage of

Tractors in Timber Extraction

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Abstract: In this study is to summarize usage of tractors in timber extraction and major problems of

mechanized timber harvesting in Turkey. Timber harvesting in Turkey is still carried out by manual methods due to economical, social and environmental constraints. Almost 80% of harvesting activities are mechanized in many developed countries while this value is only 5% in Turkey. Overall ratio of mechanization is relatively low. Approximately percentage of man power, animal power, machine power and skyline harvesting are 72, 15, 8 and 5%, respectively. Turkish General Directorate of Forestry's mechanical park total amount is 457 in 2004. Mechanical park amount has been reduced to 19 tractors (4x4 and assembled shovel), 169 skidding winches, 6 tractors with equipment of snow cleaner, 46 forklifts, 26 loaders, 32 skylines, 65 agricultural tractors, 88 trucks, 4 agricultural tractors with shovel, 2 barking machines as of 2004. Approximate percentages of skidders, trucks, 4x2 tractors, forklifts, skylines, loaders, 4x4 tractors and barking machines are 36.9, 19.3, 16.4, 10, 7, 5.7, 4.2 and 0.5% in 2004. 4x2 and 4x4 tractors total amount has been reached to 41.7% in 1982, but this percentage has been reduced to 20.6% in 2004. Total machine park amount has been reduced 41.4% between years 1998-2004 in Turkey. In spite of existence of substantial number of harvesters, the amount of modern harvesting processor in Turkey is not sufficient. Different type and marked machine hasn't taken into consideration to improve mechanization and a poor

standardization in harvesting is another problem in Turkey.