

Why does not increase the level of forest mechanization in Turkey? Problems, Solutions and Opportunities

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Abstract

1.Aim

This study's main aim is investigating to why does not increase the level of forest mechanization in Turkey? And specify problems, give solutions and opportunities for forest mechanization in Turkey.

2.Definition forest operation activities in Turkey

Forest operation activities in Turkey may grouped under these titles:

- a) Contruction and maintenance activities (Road, bridge, retaining wall etc.)
- b) logging and harvesting operations,
- c) loading and unloading of logs,
- d) log transport,
- e) forest fire fighting activities,
- f) nursery works,
- g) planting activities,
- h) erosion control activities
- i) forest cadastre and surrounding activities,
- j) forest protection activities.

3.Who are forestry workers in Turkey?

Practised as a professional forest workers is not a profession in Turkey. Forestry labor-related work is carried out by forest villagers or forestry cooperatives. There are 21800 forest villages and towns and 8313310 forest villagers in Turkey and their economic status and income are not enough. Forest villagers have not social security. For this reason, forestry activities to be done by forest villagers and therefore providing income support is made by Turkish General Directorate of Forestry (TGDF). Forest villagers have low educational level in Turkey. Working and living conditions of forestry workers are low.

5. Why does not increase the level of forest mechanization in Turkey?

Forestry activities in Turkey are still carried out by manual methods due to economic, social and environmental constraints. Almost 80% of timber 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 giving below, repectively:

- a) Man power 72%
- b) Animal power 15%
- c) Machine power 8%
- d) Skyline 5%

Total forest mechanization level is %13 in Turkey. But in recent years, the ratio is believed to fall further. As the reason for this, TGDF is prefer to planted sales in last decades and closure of forest repair main workshop in 1997. Turkish General Directorate of Forestry's timber harvesting machines total amount is 448 in 1982, 859 in 1998, 457 in 2005 and 376 in 2009. 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. Total machine park amount has been reduced 56.2% between years 1998-2009.

General reasons for the not to increase in level of mechanization in Turkey:

- a) The lack of professional forest workers
- b) Does not act considered a profession of forestry occupations
- c) Forestry activities done by the forest villagers
- d) Forest villagers' economic status and income is not be sufficient
- e) Having too much of the population of forest villagers
- f) Inadequate investments for machinery and equipment purchases by TGDF, forest cooperatives and forestry companies
- g) Lack of trained staff to use the machines
- h) Having mountainous geography
- i) Mechanized production methods to be not been mandatory by TGDF
- j) Forestry companies and forest cooperatives does not have sufficient economic strength
- k) Lack of private companies for development of forest machines

6. What to do to increase of forest mechanization level in Turkey?

Suggestions;

- a) Forest workmanship should be regarded as professionals
- b) Other income opportunities must be provided to forest villagers
- c) Forestry workers and forest villagers educated about mechanized harvesting methods by workshops.
- d) Mechanized working methods should be encouraged for forestry companies and forest cooperatives
- e) Should be educated staff to use the machine
- f) Social security should be provided to forest villagers by government

Keywords: Forest mechanization, Forest harvesting, Timber transportation, Turkey.

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