

The effects of forestry activities on soil properties

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Abstract: Forests are habitats where combinations of complex communities with different kinds of flora and fauna exist together. The need for forest products, brought forests to a such position that not just in the means of visual sense but one that produces wood raw material. Production planning is being done in order to obtain raw wood. Production activities in forestry; consists of cutting, skidding, loading and transport phases. In the examination of our country's historical development of forestry production activities, there is a tendency towards machine power instead of human and animal power. Nevertheless, especially in the chamber of removing works, human and animal power is still widely used. Forestry practices are having an impact on forest flora and fauna because it is practicing in the forests which are living entities. In particular, the ongoing forestry production activities in various parts of the forest are primarily a negative impact on the environment, including the physical and biological properties of soil. Production activities in forest areas affects soil properties both directly and indirectly. The direct effects found with the reduction of biomass per unit area are associated with a decrease in organic carbon. Indirectly, on the other hand, applied production methods have played a massive role in the compaction of soil also affecting the general physical features of soil. During the friction of raw material of wood upon the ground, soil compaction takes place. According to the researches that have been made, it was put forth that this situation decrease the soil porosity on the ground and affects the water infiltration, soil humidity, aeration of the soil and stem volume. Soil compaction is one of the physical factors that prevent the evolution of plant in the galenic production. The studies that have been done revealed that 80 kPa and more soil compaction prevent the evolution of the stem of plants. The compaction effects can be much more in the clay soil. When the organic matter of the soil increases, the damage of compaction decreases. The production activities should be made when the humidity levels are the lowest in compaction of soil with the good timing and not at the humid conditions of the soil. Forestry production activities may have many negative effects. On the other hand, in order to meet the wood needs of the society, the production in forest is inevitable. However the matter that needs caution is, in the production activities in forestry, environmental damages may stay out of sight. As for that, at the production activities in forest, a sustainable and economic method which gives the least harm to human health, the product and the ecosystem, should be adopted.

Keywords: Production in forestry, Production activities, Forest soil, Soil features