

## ABSTRACT

Environmental maintenance activities on AAU gillance is a routine activity that is done continuously, One of these is the activity of cutting grass. The activity of cutting grass was done using a mower. The magnitude of the activity of cutting grass at a area, hanging from a lot of activity mower that occurs in the area. The displacement activity of the mower is stochastic events. Where the displacement activity mower only visual course, referring to the data has not been done scheduled. So that the result of cutting grass has not been evenly.

A method of markov chains is a method that studies characteristics of a variable at the present based on the their characteristics in the past, that which is purposed to predict characteristics of variables such in the future. From first data known that the displacement activity mower that occurs only dominate a certain area course. This provides a description that of cutting grass happened has not been evenly. By using the method markov chains, then a chance occurrence of cutting grass predictable for some period to the next until it reaches the condition of steady state, condition in which a chance occurrence of cutting grass in the period already fixed or not changed again. From data steady state condition obtained turns activity of cutting grass not much undergo a change as the first conditions. This indicates that for some period in the future the activity of cutting the grass still haven't done evenly.

Based on research done it can be concluded, cutting grass in the area A, B, C, D, I, J and K supported with 1 unit large tractor mower takes 2,06 hours a day and 7 unit pickaback mower takes 1,87 hours a day. Cutting grass in the area E, F, L, O and P supported with 1 unit medium tractor mower takes 2,02 hours a day, 1 unit push mower takes 1,5 hours a day and 4 unit pickaback mower takes 2,03 hours a day. Cutting grass in the area G, H, M and N supported with 3 unit mini car mower takes 2,05 hours a day, 1 unit push mower takes 1,88 hours a day and 2 unit pickaback mower takes 1,52 hours a day.