

## SUMMARY

DONA ARI APRIANTO. Analysis Of Value Chain Using Green Productivity in Natural Rubber Cultivation at Kelompok Usahatani Restu. Supervised by ARIEF DARYANTO and BUNASOR SANIM.

The increasing impact of environmental issues that generated in process of agricultural activities, that make us need a form of approach that emphasizes the importance of environmental aspects in implementation process of agricultural activities. Green productivity is a way to increase productivity and minimize waste generated through a reduction on environmental protection, such as the reduction of resources (materials, energy, etc.), waste minimization and reduction of the pollution generated.

This research aims are to calculate the productivity of KUR in one year, counting of Green Productivity Index (GPI) in current states at KUR, analyze problems that occur in the value chain of productivity in natural rubber cultivation and also give the best recommendations of strategy to repair the problems that occur in the value chain process of cultivation of natural rubber with Green Productivity.

The method of this research is using a systems approach to identification of number of needs in research by using Green Value Stream Mapping, so that can produce an operating system that are effective and efficient. The systems approach begins with finding all factors contained in the system to get the best solution for resolving the problem, then making a model of AHP to help select the best alternative solution and than the alternative choosed testing by GPI to see its feasibility.

The results showed that the productivity of the KUR has decreased every month, cause of using the land that is not optimal. GPI on the current state is 3.6, which means they can be improved further to be even better. The problem occurs in the value chain of natural rubber cultivation at KUR when used supporting material that is not environmentally friendly. The best solution chosed is composting, this solution can reduce the waste generated from the cultivation of natural rubber by 95.7% and the use of materials was 66.6%. This solution can also lower the costs generated, increasing the income of farmers in KUR, and increase GPI in amount of 3,4 points.

Keywords : AHP, GPI, *green productivity*, *green VSM*, produktivity