

CHAPTER VI

CONCLUSION

This chapter contains conclusions and suggestions based on research conducted at UD Tani Mulia.

6.1 Conclusion

The results of the Waste Analysis research in UD Tani Mulia with the Lean Manufacturing Approach are as follows.

1. Waste that has a significant impact on the production line of UD Tani Mulia are waiting, inappropriate processing, and motion waste. The effect of waiting, inappropriate processing, and motion waste on the production process is 23%, 18%, and 15%, respectively.
2. Waiting waste happens because of lack of material planning and control, uncontrollable drying process and limited drying container, downtime because of a power outage and breakdown machine, and undisciplined workers. Meanwhile, inappropriate processing waste occurs due to ineffective rolling and packaging processes and drying processes that depend on erratic weather and take a long time. The last one that has a significant impact is motion waste that occurs because of the manual loading and unloading of materials, the shifting of operators to the rolling and packaging workstations that are less effective, and a lot of idle time of drying operators.
3. Suggestions to reduce waste and maximize productivity are pull-replenishment as the material planning and control, workplace organization to create a continuous flow, one-piece flow in the packaging process, rolling process ways of working's improvement, and use a multipurpose dryer instead of the manual

drying process. The proposed improvements can increase the proportion of value-added time. The current PCE is 39% and can increase to 93%.

6.2 Suggestion

Suggestions given to researchers who conduct waste analysis in the future are as follows:

1. The improvement has not yet been applied. So, the next researcher can use the proposed improvement at UD Tani Mulia to determine its effect on manufacturing lead time in actual conditions.
2. Improvements should be evaluated and carried out continuously to maximize productivity.

