

## CHAPTER V

### CONCLUSION AND IMPLICATION

#### A. Conclusion

Based on the results of the research conducted, the following conclusions can be drawn :

1. TPST Kedungrandu generates economic value by processing waste and recycling raw materials. Despite its small operational scale, the facility has demonstrated the potential for profitability through these activities, aligning with the first hypothesis (H1), which states that the Kedungrandu Waste Management Site generates significant profitability. The revenue from recycled products offsets operational costs, creating a financially sustainable model. However, the limited volume of managed waste compared to the total waste in Banyumas Regency restricts its overall revenue generation. Expanding processing capacity and exploring additional income sources, such as composting or energy recovery, can further enhance its profitability and solidify its role as a model for profitable waste management within the circular economy framework. This highlights the importance of scaling operations to fully realize the profitability potential outlined in the hypothesis.
2. Workers at TPST Kedungrandu have experienced measurable income growth after joining the facility, aligning with the second hypothesis (H2), which states that Kedungrandu Waste Management Site activities

provide an economic benefit to workers, leading to an increase in their earnings after working at TPST. This increase in earnings highlights the facility's positive socioeconomic impact by creating job opportunities and providing stable wages. Furthermore, these findings reinforce the broader role of waste management activities as a catalyst for improving livelihoods in local communities. By scaling its operations and involving more workers, TPST Kedungrandu has the potential to amplify these economic benefits, further strengthening its contribution to community welfare and creating a more inclusive and equitable economic impact.

3. TPST Kedungrandu significantly reduces waste volume through effective recycling and management, contributing positively to environmental sustainability. By implementing waste sorting and recycling practices, the facility has minimized the amount of waste sent to landfills, thereby reducing potential pollutants in soil, water, and air. Although this study does not include a specific hypothesis for environmental impact, the descriptive analysis highlights the critical role of these waste management practices in mitigating environmental degradation. The reduction of carbon emissions and the promotion of resource efficiency underscore the environmental benefits of TPST Kedungrandu's operations. Furthermore, adopting additional methods, such as composting, could enhance its contribution to pollution

reduction and strengthen its role as a model for sustainable waste management practices in the region.

## **B. Implication**

Based on the conclusions drawn, the implications of this research are as follows :

1. While TPST Kedungrandu has demonstrated profitability, optimizing operational costs, such as fuel consumption and electricity usage, could further enhance profit margins. Additionally, diversifying revenue streams through partnerships with recycling industries or by selling processed waste products could lead to greater financial stability and scalability.
2. The significant increase in workers' income supports the hypothesis that TPST Kedungrandu contributes positively to the economic welfare of its employees. Policymakers should consider replicating this model in other regions, focusing on workforce development and financial incentives to maximize employment opportunities in waste management sectors.
3. The facility's consistent environmental performance aligns with the hypothesis that TPST Kedungrandu has a substantial environmental impact, particularly in waste reduction and recycling. Expanding public awareness campaigns on sustainable waste management practices could further amplify its impact by engaging more households and businesses in recycling initiatives.

Overall, TPST Kedungrandu has successfully balanced economic, environmental, and social objectives, providing a comprehensive model for sustainable development. Its achievements underline the potential of waste management facilities to address multidimensional challenges, creating lasting value for communities and the environment alike.

### **C. Limitation of the Research**

The limitations of this research are as follows :

1. The research relies on secondary data and self-reported information from TPST Kedungrandu and related stakeholders. Some data, particularly for income comparisons before and after employment, may be subject to inaccuracies due to memory recall or incomplete records.
2. The findings are specific to TPST Kedungrandu and its unique operational model. They may not be directly applicable to other waste management facilities with different scales, technologies, or socio-economic contexts.
3. The environmental impact assessment focuses primarily on waste reduction volume and recycling rates. Broader indicators, such as carbon footprint reduction, soil quality, and long-term ecological effects, were not included due to data limitations.