ABSTRACT

Bandung Regency has a growing number of small and medium-sized batik industries, contributing significantly to regional economic development. However, this growth also has a significant impact on environmental quality, particularly due to the waste generated by these small and medium-sized batik industries. If not properly managed, batik industrial waste can have negative environmental impacts, such as polluting water and soil, and disrupting the surrounding ecosystem. Therefore, the objective of this final project is to design a decision support system that can assist the Bandung Regency Environmental Agency in determining the optimal management of batik industrial waste objectively and efficiently.

This decision support system was developed using the Rapid Application Development (RAD) method. The Rapid Application Development method consists of several stages, including requirements, design, implementation, and testing. Data processing calculations are also included in the decision support system using the Simple Additive Weighting method. Once the design is complete, a verification and validation process is carried out to ensure the system meets its objectives and needs.

The final result of this final project is a decision support system website that can process data from each small and medium-sized batik industry to generate rankings for determining the appropriate management options for industrial waste. This decision support system website is expected to assist the Bandung Regency Environmental Service in waste processing in Bandung Regency.

Keyword - Bandung Regency, Small and Medium Industry Batik Waste, Simple Additive Weighting (SAW), Rapid Application Development (RAD) Decision Support System