

## ABSTRACT

*Mendong craft is an innovation villager work of Kamulyan Manonjaya on Tasikmalaya. It has good market opportunities, so it must be supported by a good balance of Mendong craft industry especially in the management of handicraft production. The process of Mendong craft generated considerable much waste. It started from harvest waste until the rest of Mendong waste production. If left unchecked, Mendong waste will accumulate and damage the environment ecosystem. The solution of Mendong waste can be done by the application of independent energy to become biogas. Biogas is a renewable energy and environmentally friendly solution. Feasibility study will be discussed in depth about the feasibility of installations biogas that will be implemented in Lembur Sawah of Kamulyan village Manonjaya Tasikmalaya regency. The analysis reviewed from the feasibility of market aspects, technical aspects, environmental aspects and financial aspects. Based on the market aspects showed that the potential market of biogas made from Mendong waste by 90.22%, the available market for 78.45%, and 13.04% of the target market. From the technical aspect, the production of biogas based on digester capacity adapted to the engine and the availability of Mendong waste from craftsmen. And the environmental aspect, management of biogas waste can be reprocessed into liquid and solid that fertilizer the waste can be beneficial to society. Based on the calculation of the financial aspects for five years period, it showed that the NPV value was idr 7.769.944, BCR value of 1.29, and a payback period of 4.50 years. From the calculation of the financial aspects, it concluded that the implementation of biogas made from Mendong waste is feasible, because the NPV is positive and BCR has a value greater than one.*

*Keywords: Mendong waste, biogas, feasibility study, NPV, BCR, Payback period*