

**STUDY OF THE POTENTIAL OF BIOGAS AS UTILIZATION OF COOKING
NEEDS IN CURAHNONGKO VILLAGE TEMPUREJO DISTRICT JEMBER
DISTRICT**

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ABSTRAK

The community service activities aimed to overcome the problems of organic fertilizer from cow manure that has not been used by farmers into biogas. Biogas is gas produced from anaerobic fermentation process from a wide variety of organic waste into energy through anaerobic digestion process. The energy generated can be used to meet the fuel needs of everyday life, so they no longer use kerosene for cooking. Mantaren transmigration area is an area with mainly agricultural livelihoods and breeder. Almost all farmers in the village Mantaren have at least 3-4 cattle, but almost 100% not aware of the use of organic manure into biogas. The method used are counseling, demonstration of simple Biogas Installation, and mentoring biogas production by involving students K2NM. The activities was followed by a rancher/farmer in the village Mantaren II. Results in a simple implementation of biogas production from manure showed that the gas formed is characterized by the presence of a gas bubble plastic and smells like the distinctive smell of cow dung. Gas produced at day 16 after charging cow manure, and the maximum reached at day 20. For sustainability of gases as fuel, every two or tree days need charging cow dung about 3-4 buckets/1 arco. Biogas has been successfully used by farmers to the boiling water and fry dishes for everyday needs.

Keywords: cow manure, biogas households, organic, fertilizer.