SUMMARY

Mayang Wigayatri, Department of Urban and Regional Planning, Faculty of Engineering, University of Brawijaya, August 2016, *Potentials and Community Acceptance of Biogas Development in Sub Urban Areas in Malang Regency*, Supervising Lecturer: Dr.tech. Christia Meidiana, ST., M. Eng dan Mustika Anggraeni, ST., M. Si.

Biogas is one of renewable energy resource that can fulfill the needs of renewable energy. Renewable energy development is one of planning objective included in Malang Regional Work Plan specifically biogas energy development. Noticing the number of farmers and livestock, Dau is one of the districts that can be potentially developed for biogas energy. Kalisongo, Karangwidoro, Landungsari, Mulyoagung, and Sumbersekar are the villages in Dau District with sub urban characteristic which is influencing the community to accept biogas development.

This research aims to evaluate biogas potentials of cattle raiser and community's acceptance of biogas in those related villages. The steps on this research are: to identify the biogas potential of cattle raiser with adjusting the minimum requirements of biogas including number of cows and income, analyze the community's acceptance of biogas, and analyze the correlation between cattle raiser's characteristics (age, educational background, the numbers of family member, number of cows, and income) and the indicators of community acceptance (biogas information, the attitude of public acceptance of biogas development, willingness to participate in biogas development, public predictions regarding the benefits/advantages of using biogas, and community's readiness to be involved in biogas development) to the cattle raiser that potentially use biogas. The analysis methods used in this research are descriptive frequency distribution analysis to identify biogas potentials of cattle raiser, likert scale to analyze the community's acceptance of biogas, and crosstab chi-square analysis to corellate cattle raiser's characteristics and the indicators of community acceptance.

The result shows that 30-47% of the farmers are potentially to use biogas while the acceptance of biogas is about 0-22%. Age, educational background, the numbers of family member, number of cows, and income of cattle raiser are not influencing the acceptance of biogas development, but it is more influenced by the limitation of land as one of the issues in sub urban area.. Thus resulting the sub urban areas that still possible for biogas development are Kalisongo, Karangwidoro, Landungsari, Mulyoagung, and Sumbersekar villages, whereas a village that no longer possible is Landungsari village because it is more urban.

Keywords: biogas development, community acceptance, cross tabulation