

## **AN ASSESSMENT OF KNOWLEDGE AND USE OF WATER HYACINTH FOR PRODUCTION OF BIOGAS AMONG BEACH COMMUNITIES IN KENYA**

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### **ABSTRACT**

Water hyacinth is an aggressive weed that extensively invades the beaches blocking access to clean water for domestic, livestock, and recreational uses. A partnership approach that brings stakeholders together was adopted in 2013 by the beach communities along Lake Victoria in Kenya, in an attempt to reduce the weed and its negative effects and to explore ways of effectively utilizing the products of the weed. A cross-sectional study was carried out in March 2014 to determine the effect of the partnership approach used among these communities and their knowledge and use of water hyacinth to produce biogas for fuel and slurry for fertilizing urban and rural gardens. The study on 200 fishermen and farmers found that 98% of respondents had no knowledge about biogas, while the same percentage (98%) was interested

in using biogas as a source of fuel. Most respondents (87%) had no knowledge that hyacinth could be used for production of fuel and for slurry, although 99% of the respondents were interested in using slurry. Knowledge about biogas and level of education was statistically significant ( $p=0.00$ ). Production of gas from water hyacinth is a new technology that has potential for use by fishermen and farmers along lakeshores. A partnership approach can be used to engage communities in addressing household energy needs.

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