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## Consumers’ attitudes, purchasing intentions and preferences related to baobab fruit shell briquettes in Malawi

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### Abstract

Malawian energy sector still suffers from insufficient energy supply coupled with the limited sources of energy. In addition, the constant use and high dependency on forest products especially firewood and charcoal for energy purposes causes the nation’s forestry to be at a loss. Biomass briquette production is considered an alternative in the quest for energy product; however, briquette products are not widely used in Malawian communities despite its viability as a sustainable substitute for firewood and charcoal. Lack of awareness hinders the perceived benefits associated with briquette products and it will take conscious effort for its benefits to be widely recognised.

An innovative energy product, baobab fruit shell briquettes, has a great potential to fulfil the energy demand considering its abundance in the Malawian environs. The main aim of this study addressed consumers’ attitude, purchasing intention and preferences towards the baobab fruit shell briquettes as an energy product. Utilizing structural equation modelling (SEM) analysis, factors such as subjective norms, purchasing behaviour, energy knowledge, perceived price and environmental concern had a significant positive influence on consumers’ attitude and purchasing intention towards the potential energy product. Furthermore, this study implements a discrete choice experiments (DCEs) analysis of consumer’s preference towards attributes of the potential energy product. Results showed that consumers showed a significant preference for an energy product that is available and accessible most time, and easy to use. These attributes were preferred more than other features of the product. Also, the study expanded the analysis to include moderating effect of variables such as location (urban and rural), education and income levels, on the relationship between consumers’ attitude and purchasing intention. Only location had a significant moderating effect on the relationship between consumer’s attitude and purchasing intention towards baobab fruit shell briquettes. In conclusion, the baobab energy product has a futuristic viable success upon establishment in the Malawian market despite other competitive energy product.

**Keywords:** Awareness index, baobab fruit shell briquettes, Malawi, purchasing intention