

Appropriate technology (AT) has been recognised as a key development strategy for rural areas. It is now accepted that AT innovations can free rural women from drudgery and time-consuming labour. This saves them time and energy, which they could use to engage in self-development activities such as education and training in new skills. However, the available information indicates that rural women are not utilizing the available technologies to a significant extent. The purpose of this study therefore was to establish factors affecting adoption of appropriate technologies by rural women.

The study was designed to carry out a survey on a target group of rural women. A random sample was obtained from an accessible population of rural women in Meru and Kiambu districts where AT programmes were initiated. A total of 160 respondents who included users and non-users of AT were selected.

The research instruments used to collect data included an observation checklist and a structured interview schedule. The data collected and used in this study included types and conditions of technologies adopted by respondents; demographic and social economic status of respondents; experiences in adoption process and utilization of devices, and perception of rural women on AT. The data were analysed through descriptive statistics-tests analysis chi-square test of association and Pearson's Product moment correlation analysis.

The findings show that the majority of respondents were married, middle aged women, who had attained a primary school level of education. They were in occupations that combined subsistence farming with housework and other related activities. Consequently, the women carried daily heavy workloads of more than 15 hours.

The factors that were found to facilitate adoption of AT included long duration of stay in the community, age, family income, salaried occupation encouragement by husbands and participation in women groups. On the other hand, the major constraints inhibiting adoptions of technologies were found to be financial problems; lack of awareness. Others include inappropriate policies in women projects, biases on women, lack of access to technologies, complexity in implementation and adaptability of technologies.

Some of the technologies adopted by women in Meru and Kiambu were improved stoves, dish racks, cement water jars, ventilated improved latrines, bore holes, solar energy, biogas, soakpits and charcoal coolers. Most of the women kept their devices in good conditions and utilized them well. Home Economics Extension played a significant role in the adoption process of AT devices by rural women and in the utilization of devices.

Statistically significant relationship existed between adoption of technologies and some key variables. These key variables were age of the users and the level of education; users' rating of rural women's work load and age; types of occupation and belief that lack of formal education hinders adoption technologies by rural women; users' level of education and the study of home science in schools.

A comparison of users and non-users in respect of AT devices used showed that the users had resided in communities for longer durations of time, were older and were in more regularly salaried occupation than non users. Generally Kiambu women found to be significantly older than those in Meru and also they had stayed in their communities for a significantly longer period of time than the women in Meru. Kiambu women users and Meru users differed significantly in terms of types of technologies adopted, duration of time technologies were used and maintenance condition of devices. Meru users kept their devices in significantly better condition than Kiambu women. However, users in both districts were similar in the way they perceived the need for technologies.