Comparative analysis of communication channels for diffusion and adoption of quality protein maize: The case of Kathonzweni and Kirinyaga, Kenya

Author

Wafula, Carolyne K

Abstract

Despite the use of various communication strategies in Kenya, access and use of agricultural information by rural farming communities and other actors along the agricultural information chain is inadequate to cope with challenges in crop production leading to high levels of poverty. In Kirinyaga and Makueni counties, poverty levels of people living in urban areas are 26 % and 35% respectively, with about 67% of the rural populations living below the poverty line. This study, therefore, investigated how different communication channels used in disseminating new or proven agricultural technologies in Africa by the DONATA project among the smallholder farmers in Kirinyaga in Central and Kathonzweni in Eastern counties of Kenya have influenced the farmers decision to adopt quality protein maize (QPM). Random sampling technique was used to select respondents for the survey and primary data collected using structured questionnaires which involved 210 farmers, comprising of 110 from Kathonzweni and from 100 Kirinyaga. Descriptive statistics, covariance analysis and binary logistic regression were applied through SPSS application to ascertain the factors contributing to diffusion and adoption of QPM technologies. The levels of quality protein maize awareness in Kathonzweni were much higher 100% compared to Kirinyaga 98%. Farmer to farmer and farmer groups in Kirinyaga and extension services in Kathonzweni play a major role in farmer awareness of quality protein maize technologies. The results from the binary logistic regression indicates socio economic characteristics in Kathonzweni and Kirinyaga such as age and marital status play a big role in diffusion and adoption of quality protein maize. Field days in both study regions contributed significantly to increased QPM adoption. Farming was found to be the main source of income with 97.3% in Kathonzweni and 98% Kirinyaga. Lack of seed and climate change were major constraints affecting agricultural production in the study areas. It is therefore recommended that farmer field days, demonstrations, farmer field schools, farmer to farmer and group meetings continue being promoted through increased extension visits, and investing in farmer education via seminars, as vehicles of disseminating agricultural innovations. Information and communication technologies like radio, mobile phone and television should be used to complement the conventional channels which promote access to quality protein maize information. This will increase adoption, hence increased production and high yields which will be part of the solution to food insecurity and raising poverty levels in the country.

Keywords.

communication channels,quality protein