

ABSTRACT

In Sub Saharan Africa, more than 80% of milk is produced by smallholder farmers contributing to household livelihood, food security, household nutrition and employment. However, production is constraint by low quality and inadequate feed resources, diseases and limited access to markets, animal health services, credit services and high post production loses. A major contributing factor to low productivity is inadequate technical skills on appropriate husbandry practices due to limited extension services. To improve extension services provision, there has been effort to use mobile phone based extension to address the challenges that limit productivity among the smallholder dairy farmers. Past studies on the use of mobile phones in agricultural extension have not evaluated the extent to which farmers are willing to pay for mobile phone based extension services. In addition, it is expected that the use of mobile phone based extension services will lead to improved management practices, adoption of technologies, better market participation and eventually increased productivity and higher incomes. The extent to which these goals are being achieved has been partly evaluated; for instance, the effect of mobile phone based agricultural information on dairy cow management by smallholder farmers has not been given attention in the past studies. This study will be based on DigiCow, a mobile based application in Kenya that helps dairy farmers access dairy production information. Specifically, the study will determine the extent to which dairy farmers are willing to pay for mobile phone based agricultural information services; and assess the effect of mobile phone based agricultural information on management of dairy cows, milk production and incomes in Kiambu and Nandi Counties of Kenya. Evidence based on current practices is required to inform policy and practice to enable stakeholders to harness the potential of mobile phone based agricultural information for agricultural development.