

ABSTRACT

The present study was conducted to assess the influence of extension service on adoption of artificial insemination. A descriptive survey design was employed with a sample size of 234 comprising of dairy farmers, groups and key informants. Simple random sample was drawn from farmers undertaking dairy production activities. Purposive sampling was used to identify focus group discussions and key informants. Data was collected using structured questionnaires, interviews and discussions and analyzed using descriptive and inferential statistical techniques in SPSS version 22 programme. Adoption rate of AI was 37.7%. The age of farmers ranged between 25-80 years with average of 45.6 (± 1.3) years. There were male-headed (71.9%) and female-headed (28.1%) households. All farmers had formal education with majority (68.1%) having completed secondary education and college/university. Mass media gadgets ownership was 79% while membership of farmer based associations was 57.8%. Department of Agriculture, Livestock and Fisheries had reached, 86.1%, mass media programs reached, 29.7%, Non-governmental organizations, 17.7%, faith-based organizations, 3.8% and private institutions, 5.7% of farmers. Agricultural shows and exhibitions 7.5% while neighbours and relatives 20.3% and private institutions 21.4%. Frequently attended extension activities include officer visits (87.7%), trainings, demonstration, field days and study tours were attended by 51.2%, 37.7%, 2.1% and 15.4% respectively. The average distance to nearest extension service provider's office was 5.8 km with majority of farmers (76.5%) living 15km away. Adoption of AI was significantly influenced by education level ($p < 0.01$), herd size ($p < 0.05$), attendance of extension education activities ($p < 0.05$), participation in farmers based groups and social networks ($p < 0.05$), mass media extension programmes ($p < 0.05$) and negatively influenced by farm location from the nearest extension service provider ($p < 0.05$). Adoption of AI is not influenced by age, sex and experience of household head, family size and monthly income of the household head. Extension service optimizes adoption of AI among smallholder dairy producers even though farmers had varied levels of trust, perceptions of reliability and accuracy of extension providers, availability and cost of various extension activities. Strengthening farmers' associations, improving access to mass media programmes and extension education activities and reducing of extension distance will greatly improve adoption of AI.