

Abstract

As climate change continues to impact negatively on crop productivity, hardy crops such as sorghum could end severe food insecurity due to their potential to withstand adverse conditions. Farmers rely on localized indigenous knowledge passed on by word of mouth, informal training systems and growing practices as farmers interact. Though there are many stakeholders in sorghum production and its value chain, access to information and knowledge by farmers is still limited especially in marginalized regions. To understand information and knowledge management systems in sorghum production and how stakeholders interact a study was conducted in Eastern, Nyanza and Coastal regions of Kenya using structured questionnaires. The results showed most farmers were females. Majority had attained primary and secondary education, while 7.5% had no education. Farmer-to-farmer source of information on where to source seed was highest compared to agricultural extension officers and media advertisement. 60% do not consult where to get seed, instead use on farm saved seeds. Majority use traditional knowledge through experience compared to sources such as ministry of Agriculture, trainings and fellow farmers. Farmer-to-farmer information network and market analysis was commonly used on where to sell the grain. On-farm saved seed was selected based on size and color and about 60% conduct germination test on the seed from whichever source before planting. Majority (82.5%) use on-farm saved seeds, manure/compost and cultural methods to control pests. Of the respondents, 15% (eastern) and 7.5% (coastal) reported they have no measures to respond to climate change. Majority use grain for human consumption and about 73.1% are not members of any farmer group. Therefore, sensitization on benefits of sorghum crop, formation of more active farmer groups, involvement of agricultural related stakeholders, provision of more support and capacity building could enable them attain optimum agricultural productivity.