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## Using video technology as an agricultural extension tool: A case study on climate smart agriculture in Uganda

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## Abstract

Videos can be used successfully in agricultural extension, particularly in reaching marginalised, resource-poor farmers mobilised in groups, particularly women, youth, and those with little prior knowledge of new practices and technologies. While there is a renewed interest in videos, there is a knowledge gap concerning farmers' perception of such videos, especially of female farmers. The study aimed to understand how farmers in Uganda perceive video technology as an agricultural extension tool for Climate Smart Agriculture (CSA) practices and assess the extension agents' perception of using videos in extension services. The qualitative data collected resulted from the BMZ-funded project Reaching Smallholder Women Farmers with Information Services and Resilience Strategies to Respond to Climate Changeïn four districts in the Central Region of Uganda. The study comprised 1443 female and 770 male smallholder farmers who watched videos demonstrating soil and water management, integrated pest management, poultry and piggery management CSA practices, and 49 extension agents who were trained on the project's concept. From this study population, 111 female and 70 male smallholder farmers who watched videos demonstrating Climate Smart Agriculture (CSA) practices were chosen randomly to participate in the FGDs, and 6 extension agents were interviewed using semi-structured questionnaires. The study findings revealed that smallholder women farmers found it motivating and easy to learn about CSA practices through videos and related discussions with extension agents. Extension agents perceived that CSA video technology could complement other existing extension approaches. On the other hand, the main challenges included unwillingness to invest in short agricultural videos, inadequate video infrastructure in rural areas, and technical know-how on using videos among farmers and extension agents. To complement extension services, the study recommends investing more in creating and disseminating agricultural videos by the relevant stakeholders in Uganda's agricultural sector. Additional investments could include enhancing the quality of agricultural video production and messages, constructing video infrastructure in rural sub-counties, and enhancing the capacity of extension agents who use agricultural video technologies.

 ${\bf Keywords:}$  Agricultural extension, climate-smart agriculture practices, female farmers, Uganda, videos

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