

Report

Bringing cutting edge digital climate services to Rwanda's farmers

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“Through Rwanda WISER National project, agro-climate advisories are disseminated to smallholder farmers and are revolutionizing the agriculture sector. A digital survey on the access, understanding, use and changes informed by the climate services information was conducted using the 5Q tool. Nearly 10,000 farmers were surveyed and feedback on reach and use of climate services information was generated. The survey enabled to promote a two-way communication loop between the demand and supply sides of climate services information”

In Rwanda rural areas, agricultural sector employs 78.8% of the total working force involving more women than men. The majority of these farmers are in smallholder households and their farming system is exclusively rain-fed which makes them highly vulnerable to climate change and variability. Any changes or variations in terms of rainfall does not only increase their risk to food insecurity but would also increase poverty level within these households since farming remains their major source of income. Nonetheless, one of the major constraints these smallholder farmers face is coping with production uncertainties associated with unpredictable seasonal climate conditions and lack of access to improved, co-produced, timely accessible and detailed disseminated weather and climate information.

In order to explore the full transformative potential of climate and weather information, Rwanda WISER National Project is promoting the use of a digital platform to enhance a two-way communication loop between climate and weather suppliers and consumers via mobile phones. Taping into the high penetration of mobile telephones in Rwanda (77%) presents a unique strategic channel to increase the ability to geo-locate users at the farm level and provide highly localized agro-climate advisories. Through Rwanda WISER National Project, agro-climate advisories are more relevant and central to smallholder farmers and could

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revolutionize the agriculture sector. The International Centre for Tropical Agriculture (CIAT) developed the 5Q tool that facilitates a two-way communication loop to stakeholders segregated by their geographical location and influences quick decision-making. 5Q has the purpose of enhancing the feedback mechanisms through digital Interactive Voice Recording (IVR) or Short Message Services (SMS) to improve and simplify monitoring, evaluation and learning (MEL) in order to improve the effectiveness, transparency and mutual accountability of research and development projects. 5Q is an alternative tool to the traditional monitoring and evaluation methods which are costly, slow, complicated and rigid; so it may not be easy to use them frequently to monitor project changes.

In August 2019, we developed a simple five-question tree comprising the access, understanding and use of climate and weather information by farmers. Questions were delivered to targeted farmers through a digital platform that integrates an Interactive Voice Recorder (IVR). Results are presented in figure 1. Figure 1a depicts that the majority of farmers (62%) are receiving climate and weather information. Among the people who received the climate and weather information, 81% used climate information to inform their decisions (Figure 1b). From Figure 1d, it is clear that most farmers prepare for climate shocks by tightening their rooftops (40%) and 23% of surveyed farmers harvest rainwater in different ways. The most used channel to receive the climate and weather information was revealed to be radio (49%) followed by agriculture extension services (17%) (Figure 1c).

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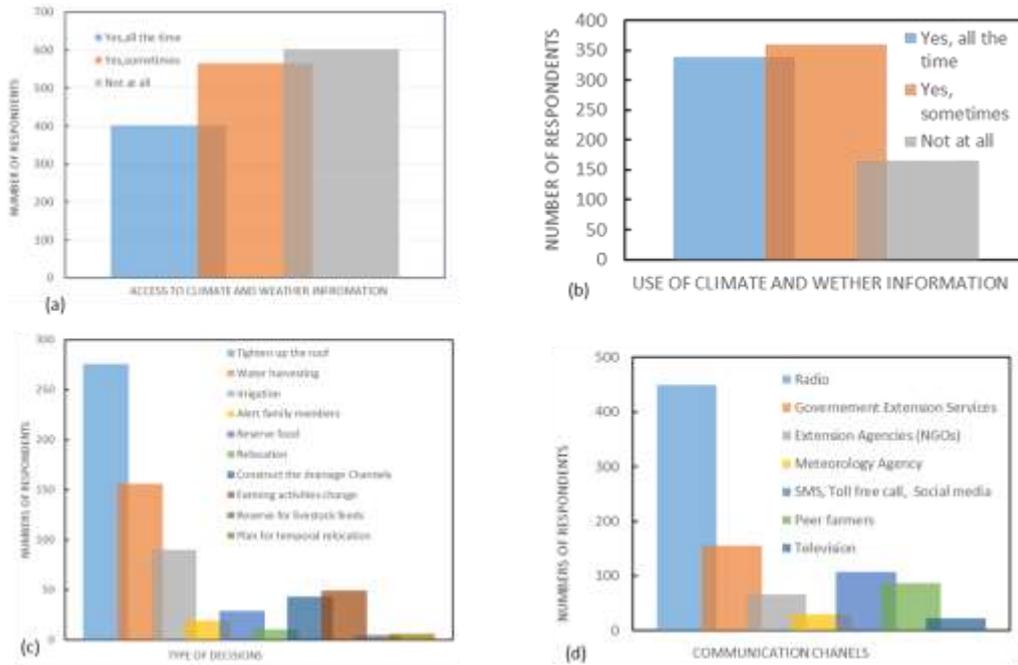


Figure 1: The level of access, communication channels and use of climate and weather information

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