Challenges and Opportunities in Communicating Weather and Climate Information to Rural Farming Communities in Central Zimbabwe

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Abstract

Sustainability of rain-fed agriculture in semiarid regions is being threatened by climate variability and change. Weather and climate information (WCI) can be used to reduce the effects of this threat on agricultural production. WCI may be available, but is it readily accessible and communicated/disseminated efficiently to intended end users? Are stakeholders able to interpret the information to correctly inform decisionmaking? To answer these questions, in view of intermediate stakeholders (service providers to farmers), a study was carried out in two districts of the Midlands Province of Zimbabwe to identify the type and sources of WCI received by these stakeholders as well as constraints and opportunities to access, interpretation, and use of WCI. The study sample was drawn from the Midlands Provincial Drought Relief Committee, a link between the sources of WCI and the smallholder farmers. A questionnaire pretested for clarity and checked for internal consistency of themes using the standardized Cronbach's alpha was used to collect data. Descriptive statistics were generated using SPSS (version 20.0). Findings were that WCI was sometimes not readily available or was received late. Approximately 36% of the intermediate stakeholders (service providers) passed on WCI to farmers in its original form, from the main source the Meteorological Services Department. It was also unfortunate to discover that 36% of the respondents had challenges interpreting WCI. Impediments to the use of WCI by farmers included scientific information not aligning with indigenous information, which is better understood by farmers, and lack of trust in WCI. It is imperative to improve access to WCI and to train stakeholders on interpretation and dissemination of WCI.