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## A review of the effectiveness of drought warning communication and dissemination in Malawi

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Droughts constitute one of the major and complex natural hazards that may lead to food insecurity due to its long-term and cumulative impact, compounded by the difficulty of drought being predicted. Efforts to improve early warning systems are being conducted to help reduce the impacts caused by drought events, and although significant advances have been made in the forecasting of drought, provision of actionable warning that leads to effective response is challenging due to a range of factors. In this study we aim to improve our understanding of how people-centred warning communication and dissemination is being carried out for drought warning in Malawi. Our methodology is based on five focus group discussions with farmers and 25 semi-structured interviews with various government officials, as well as with representatives from UNDP, WFP and NGOs. The analysis of these interviews and discussions is based on a qualitative approach using the concept of grounded theory and content analysis; to better understand the organisational structure, communication processes and the ability of warnings triggering actions by farmers and NGOs.

Our results identified that both within the farming communities as with the NGO's and working at the local level there is a different perception than expected of what constitutes drought. Droughts are considered to be events that cause the failure of crops, which relates primarily to the occurrence of prolonged dry spells following the planting season, fall army worms and even the occurrence of floods. Consistently, drought warnings that are disseminated at the local level have been found to focus on these aspects. Moreover, it was found that although these warnings do trigger actions, they do so only to a certain extent. Daily weather forecast are not being used by farmers due to the high uncertainty associated with these predictions. For NGOs, drought early warnings are used in combination with the famine early warnings to trigger early actions.

Communication channels and processes were found to be well adapted to local conditions and to disseminate the consistent drought warnings and guidance to end-users. This has led to improved trust towards drought early warnings received. However, the high level of illiteracy and lack of understanding of the link between impacts and weather information render the seasonal forecast and text-messages unusable to farmers, with agricultural extension officers and the community-

radios the preferred channels of communication. Organisational structures and processes appear to be relatively clear. Nevertheless, feedback mechanisms were found to be only scantily implemented due to the lack documentation on local perceptions and indigenous knowledge. Overall our results show that progress has been made in meeting the requirements for a people-centred early warning. However, external challenges such as a lack of local funds which has led to a high dependency on donors or the frequent changes of government officials affect the well-development of such an approach.