A Perception-Based Survey on Innovation and Technology Adoption by Small-Scale Farmers in Semi-Arid Zimbabwe

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Abstract

This study was conducted with agricultural extension agents of semi-arid Zimbabwe to gather their perceptions on innovation and technology adoption by small-scale resource-constrained farmers, as well as the effect of their working conditions on the quality of service delivery to small-scale farmers. Data was solicited through focus group discussions (FGDs) and semistructured interviews (SSIs) with all the public agricultural extension agents operating in the study area. It was found that agents were mainly hampered by lack of in-service training, transport and poor remuneration. Of all disseminated technologies during the last 20 years, respondents assessed that 17% had very low adoption rate, 26% had low adoption, 17% had average adoption, 26% had high adoption and only 13% had very high adoption. Bulky, expensive and risky technologies like tractors, solar driers, metal silos and bee farming were among the least adopted whereas hybrid seeds and value addition were very highly adopted. Reasons for the very low adoption were noted to be lack of capital, markets and information support on how to use new technology. Despite these challenges respondents indicated that small-scale farmers had the capacity to innovate and to adopt technology in the form of indigenous knowledge, willingness and commitment to learn and improve productivity, and labor. Agents suggested the strengthening of farmer-extension-research linkages so that technologies could be developed from some successful indigenous innovations, where possible and also to ensure the development of technology tailor-made to the needs of small-scale farmers, resource-endowments and biophysical conditions of their farming communities.

Keywords: Adoption, indigenous knowledge, innovation, small-scale farmers, technology.