Behaviour of smallholder farmers towards adoption of conservation agriculture in Zimbabwe

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Conservation agriculture is critical to sustainably increasing agricultural productivity, enhancing climate resilience and food security. Much research on adoption of conservation agriculture has focused on its agronomic benefits, but little attention has been paid to the contribution of the behaviour of farmers over its adoption. To close this gap, a study was carried out to investigate the behaviour of smallholder farmers towards the adoption of conservation agriculture in Chivi, Murehwa and Mutoko districts, Zimbabwe. Data were collected through a pre-tested questionnaire administered to 360 farmers, selected through a multi-stage sampling process. This method was triangulated through focus group discussions, key informant interviews and personal observations. Data were analysed using percentages, means and inferential statistics. The results show that, although fewer than 10% of the respondents had received any formal training in agriculture, more than 80% of them relied on it for their major source of income. The respondents had high levels of knowledge on the social, environmental and economic benefits of conservation agriculture. However, the majority of the non-adopters had an indifferent perception towards conservation agriculture. The knowledge and perception of the farmers was explained by age, gender, education and experience with conservation agriculture. Results also show a weak but significant correlation between knowledge and perception ($R_s = 0.306, p < 0.05$), knowledge and adoption ($R_s = 0.484, p < 0.05$) but a strong and significant correlation between perception and adoption ($R_s = 0.808, p < 0.05$). Addressing perception gaps is key to enhance adoption of conservation agriculture.