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Impact of an extension campaign and the mediating role of women's empowerment on the adoption of agricultural technologies in Uganda

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Abstract

Research and development interventions promoting agricultural technologies in developing countries are increasing, yet uptake remains low. However, the impact of these interventions on women's empowerment and its role in facilitating adoption is rarely explored, despite women often being highly involved in farm activities. We investigate the effects of an agronomy extension-based campaign executed through a randomised controlled trial on women's and men's empowerment. The campaign employed various methods such as audio, audio-visual, and hands-on approaches for disseminating agronomic information. While the control group received information solely through radio broadcasts, additional dissemination channels were utilised for the treatment group including lecture trainings, drama video shows, demonstration trials, and farmer field days. Throughout the campaign, emphasis was placed on encouraging and supporting the formation of genderinclusive groups for knowledge sharing, collective marketing, saving, and access to credit. Campaign activities were scheduled in the afternoons and decentralised at the parish level to facilitate women's participation, with at least forty percent of demonstration trials hosted by women. Empowerment was assessed using the Abbreviated Women's Empowerment in Agriculture Index (A-WEAI) tool administered separately to male and female decision-makers in a household. Our findings reveal that the campaign enhanced men's empowerment in resource and leadership domains, leading to increased involvement in credit decisions and participation in groups. Conversely, the campaign significantly influenced women's empowerment through the production, leadership, and time-use domains resulting in increased participation in agricultural decision-making, formal and informal groups, and agricultural production tasks. We further evaluated how women's empowerment in these domains influenced the adoption of soil and water conservation technologies namely mulching, manuring, and trenches. Women's involvement in agricultural decisions and participation in groups significantly influenced the adoption of mulching, a labour-saving technology. Additionally, group participation facilitated the adoption of the three technologies combined. In conclusion, providing farmers with information and involving women in decision-making processes significantly boosts technology adoption among small-scale

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farmers. These findings underscore the pivotal role of women's empowerment in fostering the uptake of productivity-enhancing agricultural technologies among smallholder farmers.

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