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## The Spread of Innovations Within Formal and Informal Farmers Groups: Evidence from Rural Communities of Semi-arid Eastern Africa

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### Abstract

Novel ideas and farming practices spread, and often enough even evolve, through interpersonal interaction and communication in rural communities. Hence, facilitating cooperation and exchange among farmers becomes a core objective of most extension interventions. Formal and informal farmers groups can play an active role to promote the diffusion of knowledge and technologies and thus to improve the efficiency and efficacy of the technology extension efforts.

This paper describes the effect of structural and functional variables of farmers groups on the spread of agroforestry innovations and tree management related knowledge among the group members. Specifically, it was hypothesised that **(a)** group cohesiveness, **(b)** group activity and **(c)** member motivation will each be positively related to the spread of the technologies among the group. Group social networks represent the main analytical level and units of analysis. The technology adoption behaviour of individual farm households serves to operationalize the diffusion variable.

Four full sample surveys of approximately 200 households each have been conducted in two districts of Kenya and Ethiopia, respectively. Primary data was collected using semi-structured questionnaires, expert interviews, group discussions and rankings, as well as observation. Data was analysed employing sociometric and statistical software packages.

The research results clearly support the main hypotheses. The study further presents empirical evidence that illustrates the innovative potential of cohesive farmers groups and social interaction networks, and that exists in spite of the prevailing top-down and largely persuasive extension approaches that currently are being adopted in the four study areas. Recommendations refer to the improvement of formal and informal farmers groups in order to facilitate the agroforestry extension work.

**Keywords:** Agroforestry extension, diffusion of innovations, groups, social networks