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## Transaction Costs, Communication and Spatial Coordination in Payment for Ecosystem Services Schemes\*

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### Abstract

Agricultural producer participation and spatial coordination of land use decisions are key components for enhancing the effective delivery of ecosystem services from private land. However, inducing participation in Payment for Ecosystem Services schemes for coordinating land management choices is challenging from a policy design perspective owing to transaction costs associated with participation. This paper employs a laboratory experiment to investigate the impact of such costs on participation and land use in the context of an Agglomeration Bonus (AB) scheme. The AB creates a coordination game with multiple Nash equilibria related to alternative spatially-coordinated land use patterns. The experiment varies transaction costs between two levels (high and low), which affects the risks and payoffs of coordinating on the different equilibria. Additionally, an option to communicate is implemented between neighboring producers arranged on a local network to facilitate spatial coordination. Results indicate a significant difference in participation and performance under high and low transaction

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