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## The Motivation for the Use of Sustainable Intensification Practices among Smallholder Farmers in Tanzania and Malawi

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### Abstract

Agricultural techniques and technologies that could foster sustainable intensification of farming (hereafter: SI practices) can originate from existing farm practices, from the adoption of externally suggested new practices, or from an adaptation of existing or new practices. The rate at which farmers use SI practices is often low and influenced by on-farm biophysical and socio-economic conditions. There is a narrow understanding of the role of motivations and the balance between coercive and external incentives and intrinsic motivations for use of SI practices. We analysed the role of intrinsic and extrinsic motivations among 246 sampled households alongside their perceived benefits and constraints from SI practices in five districts of Malawi and Tanzania. Our results showed that farmer decisions were not exclusively dependent on external incentives, but also on intrinsic values which farmers attach to their production resources and farming practices. Despite various benefits perceived, farmers highlighted the lack of financial resources as a major constraint to use externally proposed SI practices. While our hypothesis suggests intrinsic motivation to be much stronger than extrinsic in influencing decisions to use SI practices, our results demonstrated both intrinsic and extrinsic motivations to be equally important in influencing the number of SI practices which smallholder farmers used alongside other socio-economic and biophysical variables. We suggest explicitly addressing both intrinsic and extrinsic motivations for further research in combination with socio-economic and biophysical variables to give a true reflection of what drives farmers decisions to use more sustainable farming practices. We argue that the design of SI research programs should support motivations of diversified farmers to participate in such programs. Emphasising farmers' autonomy, a key to intrinsic motivation, can (i) stimulate ownership of SI projects and smoothen the process of adoption, adaptation and use of SI practices by farmers, and (ii) reduce the mismatch between proposed practices and farmers' expectations.

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