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"Development on the margin"

A Qualitative Expert Assessment Tool (QAToCA) for Assessing the Adoption of Conservation Agriculture in Africa

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Abstract

Adoption rates of Conservation agriculture (CA) in Africa are very low as compared to those in South and North America or Australia. However, CA is seen as a solution to overcome continuing poor farm profitability and soil degradation in Africa. It is based on three agronomic principles: (1) to minimise mechanical soil disturbance; (2) to maintain permanent soil cover with organic mulch; and (3) to diversify crop rotations.

Some studies that aim at identifying the determining factors of CA adoption in Africa have become available in the literature. However, a comprehensive self-assessment tool is lacking that allows a systematic evaluation of the determinants in the CA adoption process from field, farm to regional scale and for use in a variety of regional contexts. We therefore developed a Qualitative expert Assessment Tool for the assessment of CA adoption (QAToCA) within the EU funded project 'CA2Africa' (www.CA2Africa.eu).

Guided by existing diffusion theories and conceptual models of adoption, QAToCA is designed to assess in a semi-qualitative manner the socio-economic, institutional and cultural conditions that promote or hinder the adoption of CA in the heterogeneous farming contexts in Africa. QAToCA contains a systematic, expert-based list of adoption criteria with associated questions and possible scenarios for regional CA experts and practitioners to self-assess their CA diffusion activities.

This paper presents the QAToCA tool and reports on the first applications in two African case studies, located in the Bungoma and Karatu districts in Kenya and Tanzania, respectively. The case studies are part of the CA-SARD project that was funded by FAO and coordinated by the African Conservation Tillage network (ACT) with the main objective to improve food security and rural livelihoods of small and medium scale farmers by promoting CA. Main interventions were the adaptation and testing of CA technologies through approaches that included farmer field schools, field days and exchange visits aiming at capacity building and creating awareness.

The comparative analysis yielded in a better understanding of the specific regional socio-economic, cultural and institutional settings that determine adoption of CA and can help in targeting CA technologies within smallholder farms in the region.

Keywords: Adoption potential, Africa, conservation agriculture, expert assessment tool

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