

## **Opportunities to Produce Carbon Offsets Using Conservation Farming Practices in Developing Countries**

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### **ABSTRACT**

This paper examines opportunities for the United Nations Framework Convention on Climate Change (UNFCCC) to provide a financial mechanism for the uptake of Conservation Agriculture (CA) practices in developing countries. Conservation agriculture has evolved a range of new technologies that can be adapted in developing countries to improve food security, environmental benefits and carbon offsets. The major constraints are investment capital and an established environmental trading mechanism. The total economic valuation of crop production from the soil asset will need to be reflected in any trading mechanism to support long-term soil maintenance. Current trading options such as the Clean Development Mechanism (CDM) do not suit small landholders in developing countries due to high transaction costs. Recognising conservation agriculture methodologies in market schemes would require the development of alternative economic instruments specifically for the aggregation of small landholders to supply payments for ecosystem services such as exist for hydrological and biodiversity schemes. Adaptation of CA practices from industrialised agriculture to developing countries is examined. Despite the complexities involved, the soil environment offers an extensive opportunity to offset carbon emissions by increasing soil organic carbon, which is also valuable to production agriculture.