



# GOVERNMENT INTERVENTION IN CONSERVATION AGRICULTURE IN SUB-SAHARA AFRICAN COUNTRIES: PANACEA FOR FOOD SECURITY



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## Introduction

\* Up-scaling commercial agriculture towards green health and safety requires intentional and intensive engagement applications of agricultural methods that promotes natural land use with minimal and or no chemical fertilizer

(Van der Ploeg and Withagen, 2013; Farnworth et. al., 2016).

\* Climate change is fast ravaging and negatively affecting soil media for enhanced agricultural productivity.

\* The gradual but consistent degradation of the soil as a result of natural disaster, inappropriate land use and management strategies (figure 1) are ostensive in many African countries (Kassam, Friedrich, Shaxson, Bartz, Mello, Kienzle, Pretty, (2014).

\* One of the reasons for the low adoption of CA in SSA nations and Uganda inclusive is poor and or insufficient awareness and support for the practice (Kaweesa, S.; Mkomwa, S.; Loiskandi, W. (2018).

\* This submission unveiled the importance of CA in green health and massive yield production and considered the need to promote CA by stirring agricultural stakeholders to actively support the practice



Fig. 1: soil fertility improvement by mulching using crop residue.  
Source: <https://www.stated.gov.ng/ConservationAgriculture>

## Methodology

This study carried out a comparative analysis among six countries in Sub Sahara Africa using Engel and Granger approach to co-integrate and examine the short and long-run government intervention in enhancing conservation agriculture for adoption and practice. Also, scientific literature materials on CA practices and constraints in SSA were sourced from a total of 1, 320 articles from peer-reviewed publications using online database of Scopus Indexed and or ISI web of Science, (Thomson Reuters, New York, NY, USA) and Google Scholar (Google Inc., Mountain View, CA, USA). Primary search terms such as government intervention, gender, food security, African Countries and conservation agriculture and any other related terms from the key words informed the search terms.

## Conservation Agriculture and Implication

\* Sustainability of Agricultural production is dependent on soil property conservation.

\* soil tillage, crop use diversification and permanent soil cover with organic matter crop rotation,

\* Paddy Trans Planter (PTP), use of crop residue and mulches, and intercropping etc..

## Government intervention areas in promoting CA in SSA countries

1. Gender Participation
2. Land availability and acquisition:
3. Demographic and data capturing (table one)
4. Identifying and investing in smallholder farmers:
5. Health care issues:
6. Support for green growth
7. Peace and conflict resolutions

Area	Variable Name	Year	Value (Million)
Kenya	Total area of the country (incl. coastal waters)	2016	5807
	Arable land area	2016	5800
	Cultivated area (arable land + permanent crops)	2016	6330
	% of total country area cultivated	2016	10.91
Kenya	Conservation agriculture area	2016	33.1
	Conservation agriculture area as % of arable land area	2016	0.561
	Total area of the country (incl. coastal waters)	2016	58173
Kenya	Arable land area	2016	199.6
	Cultivated area (arable land + permanent crops)	2016	261.6
	% of total country area cultivated	2016	0.4497
	Conservation agriculture area	Data not available	Data not available
Kenya	Conservation agriculture area as % of arable land area	Data not available	Data not available
	Total area of the country (incl. coastal waters)	2016	92377
	Arable land area	2016	34000
Nigeria	Cultivated area (arable land + permanent crops)	2016	40500
	% of total country area cultivated	2016	43.84
	Conservation agriculture area	Data not available	Data not available
	Conservation agriculture area as % of arable land area	Data not available	Data not available

FAO (2018) STATISTICS from Database  
FAO's Website accessed on (21/11/2020 10:16)

## Conclusion

Conservation agriculture is a most desirable intercept in addressing the overwhelming constraints of climatic vagaries in agriculture, low soil fertility, and green health to small holder farmers at large.

Looking forward, government policies and institutional support will be an intervention to deliberately support small holder farmers especially the girl child and vulnerable women