Food and Agriculture Organization of the United Nations

CA & SAM Synergy: The Role of Medium Scale Farmers

By

Geoffrey C. Mrema

School of Engineering and Technology

Sokoine University of Agriculture , Morogoro, Tanzania

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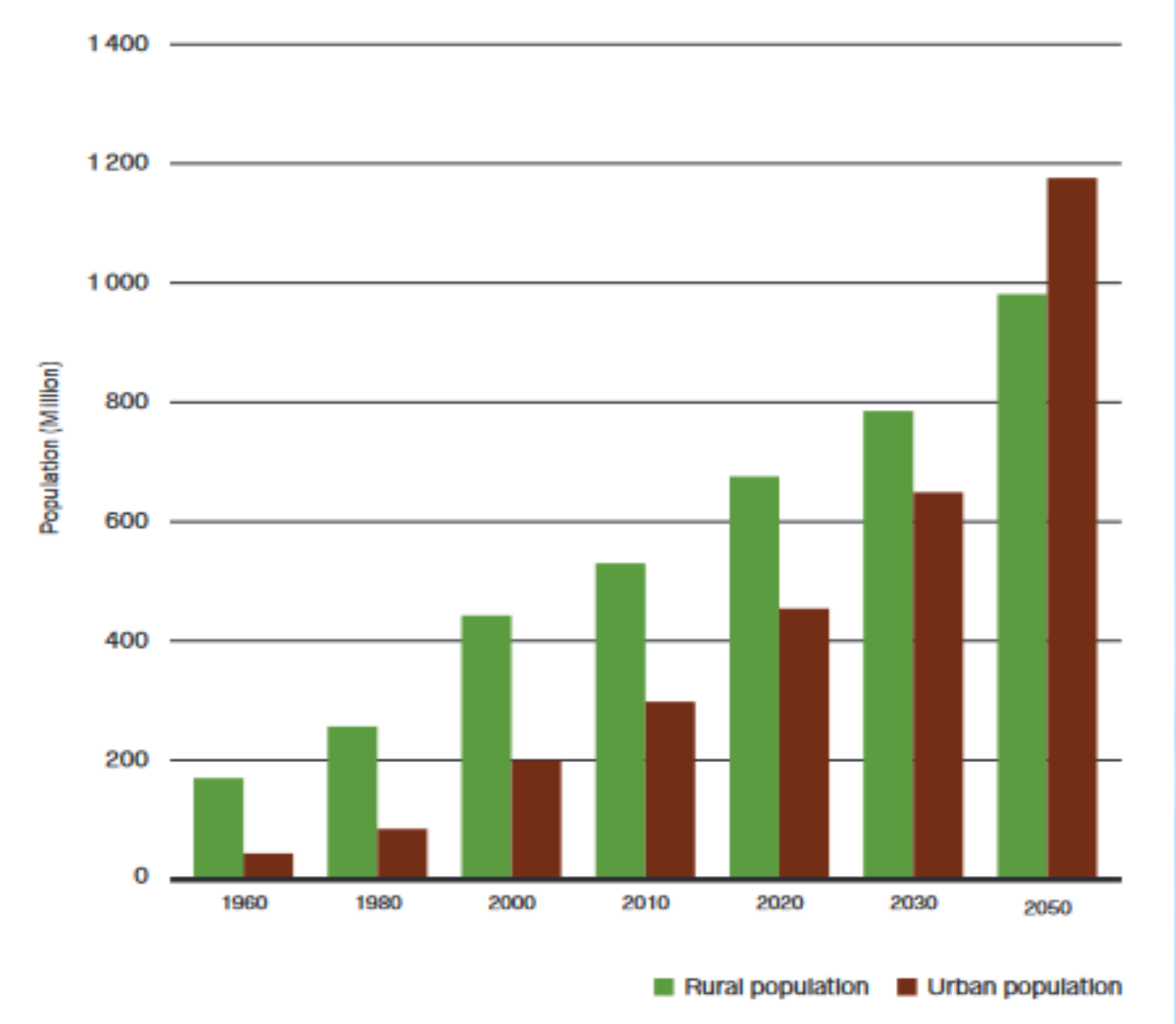
Introduction

- **Sokoine University of Agriculture [SUA]** in Morogoro, Tanzania established in 1984 as a fully-fledged Agricultural University currently
  - Has over 17,000 students enrolled in under & post-graduate programs
  - About 1000 academic & research staff located in 5 campuses all-over Tanzania
- The **F-SAMA** was developed through an Africa-wide **Consultative Process** lasting **30 months from May 2016 to October 2018.**
- ***F-SAMA Team – a 9 persons team assembled by FAO & AUC***
- Process of developing F-SAMA – consultative with three stakeholder consultations
- There were linkages between ACT & the F-SAMA Team – the December 2016 Nairobi Consultation convened by ACT with support of World Bank etc.

F-SAMA Development Process

- *Review of Agricultural Mechanization from 1940's-2000's including Failures and Successes in SSA and experience of other regions especially Asia. Stakeholder consultation under AUC and FAO.*
- *Took a long-term perspective from 2000 to 2050 e.g. demographic trends, etc.*
- *Fig beside shows the notion of dominance of the rural Population in Demographic trends will end during the 21st Century -UNFPA data.*



Ten Elements of SAMA

A: Commercial Sustainability

1: Boosting farm power

2: Financing

3: Manufacture and distribution

4: Sustainable Value Chains

5: Technology development and transfer

B: Under Environmental Sustainability

6: Transformation of Land preparation

C: Socio-economic Sustainability

7: Social Sustainability

8: Human resources development

9: Long-term vision

10: Cooperation and networking

CA & SAM

(Element 6)

Sustainable transformation of land preparation and crop/animal husbandry practices

- Cropland under Conservation Agriculture in Africa on SSF's, MSF's & LSF's in 2017 :

CA Area in Africa	X 10^3 ha	% Total
Total	1,366	
Small scale farmers [SSFs]	811.4	59.4
Medium scale farmers [MSFs]	33.6	2.5
Large scale farmers[LSFs]	521.0	38.1

- *90% of small-scale farmers are in Zambia, Malawi, Mozambique and Zimbabwe.*
- *CA area under medium scale farmers is insignificant at only 2.5%.*
- *In 2017, of the CA area under large-scale farmers 84% of it is in South Africa.. Since then, by 2021 the CA area by LSFs in South Africa has increased to 1.6 million ha while for MSFs it remained NIL.*
- *Land preparation by both MSFs & LSFs is mostly by mechanical means yet it is surprising that there is no uptake of CA by MSFs in Africa*

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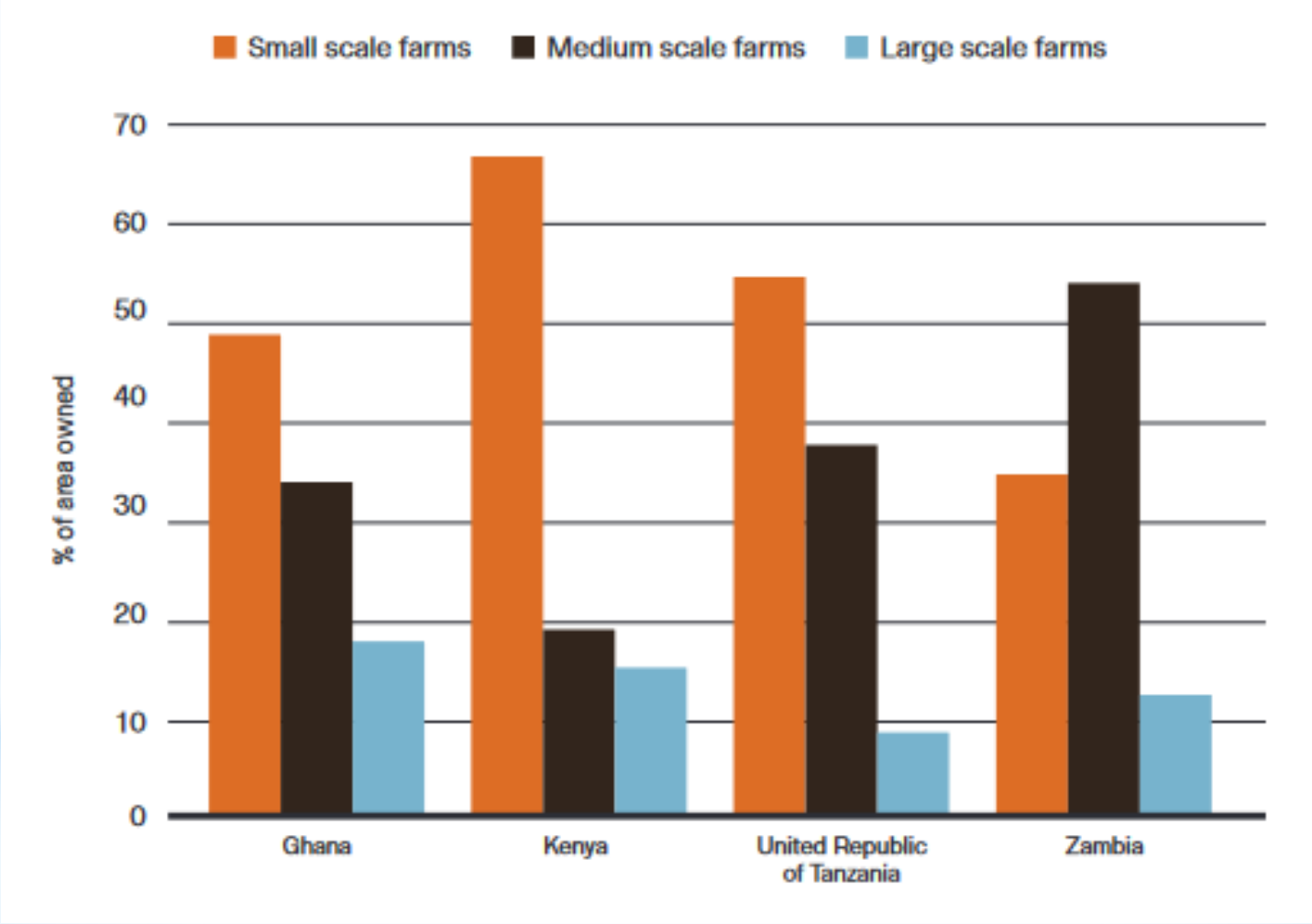
Areas of different farm sizes in four countries (2015)



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Cropland areas under conservation agriculture (CA) in Africa (December 2017)

	SSF $X10^3$	MSF $X10^3$	LSF $X10^3$	TOTAL $X10^3$
Ghana	30	NIL	NIL	30
Kenya	17.7	NIL	15.4	53.1
Tanzania	11	NIL	21.6	32.6
Zambia	280	NIL	36.0	316.0
Zimbabwe	90	NIL	10.0	100.0
South Africa	1.5	NIL	436	437.5

* For South Africa CA areas in 2021 by LSF has increased to 1.6 million ha while for MSF remains NIL

CA & SAM

- MSFs are becoming quite important for production of staple cereals in Africa [maize, rice, wheat & sorghum];
- MSFs produce almost 80% of the cereal grains which reach the market in SSA – important for feeding both urban & rural consumers
- *Why are MSFs not adopting CA? We need to find why as they also provide machinery hire services to the SSFs*.
- Too much R & D effort has been directed at the issue of CA for SSFs
- *Now may be is the time to move up the ladder and look at CA & SAM for the MSFs who are increasingly assuming a critical role in food security in SSA*
- We have to plan & strategize for SAM to fit the conditions of the 2nd, 3rd and 4th Decades of the 21st century and not those of mid 20th century.

Conclusions

- In summary we can conclusively say that the MSFs are critical for both SAM and CA
- The MSFs are the ones who are likely;
  - to be able to mobilize resources to procure the machinery and implements required for both SAM and CA
  - to produce the surplus food required by the increasing urban and rural population over the next three decades
  - to service and manage the supply chains for SAM and CA inputs as well as outputs of farming
- **THERE IS CERTAINLY A NEED FOR A PARADIGM SHIFT FROM THE ONES of 20th CENTURY TO NEW ONES FOR THE 21st CENTURY.**
- **This will need to involve more attention to the MSF**
- BOTH SAM & CA PROVIDE A PATHWAY FORWARD FOR THIS PARADIGM SHIFT.

END

THANK YOU