

Changing Farm Structure and Agricultural Commercialization: Implications for Livelihood Improvements among Small-Scale Farmers in Nigeria

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Work Stream 1 Study

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Introduction

- In the past, national development policy strategies within the SSA region officially regard the smallholder farming sector as the main vehicle for achieving sustainable and inclusive growth in the agricultural sector.
- However, the recent wave of rise of medium scale farms across SSA is providing an alternative pathway to food security, poverty reduction, and employment.
- These changing farm structures is expected to impact to the livelihood outcomes of the millions of smallholder farms through the growth of commercialization

Research Questions

- i. What are the characteristics of the emerging medium-scale farms?
- ii. Are there productivity differences between small and medium-scale farms?
- iii. How do these MSFs influence the behavior and welfare of the millions of small-scale farm households around them?
- iv. Are there differences in welfare of medium scale farm households compared with small scale farm households ?
- v. Should Medium Scale Investor farms be promoted as a policy tool to promote agricultural commercialization and transformation?

Map Of Nigeria showing APRA WS1 & WS3 Study Locations



Key Findings (1)

Basic Types of MSFs identified:

Stepping Up: MSFs who Transitioned from SSFs (TMSFs)

Stepping In : MSF who started off as Medium Scale Farms (CMSFs)

Stepping-up is more common (40%) than **Stepping-in** (24%) in past 8 years (2010 -2018)

Land Use Patterns :

Non-staple food crops are more common with MSFs relative to SSFs

Productivity Differences

*Land Productivity: SSFs **greater than** MSFs*

Labour Productivity: MSFs greater than SSFs

*Productivity (both land and Labour) : CMSFs **greater than** TMSFs*

Key Findings (2)

Degree of Commercialization:

HCI: “Stepped Up” MSFs (72%) **higher than** Small Scale Farms (63%)

HIMCI: “Stepped Up” MSFs (15%) **higher than** Small Scale Farms(10%)

Spill-Over Effects :

Providing extension services/information in terms of use of improved seeds and better planting techniques is most common form of Interaction between MSFs and SSFs

Key Findings (3)

Welfare Indicators

Income Poverty Index : Small Scale farm Households (SSFH) are poorer (IPI= 35%) than Medium Scale Farm households (MSFHs); (IPI=13 -14%)

WEI : Women in MSFHs are **more empowered** (63% For TSMFs and 59% for CMSFs) **than** women in SSFHs (56%)

MDD_W: SSFHs (59%) are better than MSFHs (53% and 37%)

MPI : MSFHs not different from SSFHs (20% -22%)

Food Insecurity Experiences : MSFHs not different from SSFHs (42-44%)

Key Findings (4)

Some Key challenges for growth of MSFs

- Security of tenure is very low among MSFs as is with SSFs
- Land acquisition through land markets is Limited due to underdeveloped land markets
- Inheritance, which is the most important source of land for expansion, is unsustainable

Highlights

- i. Promoting Medium Scale farms could be an important policy tool for enhancing agricultural commercialization and smallholder transformation in Nigeria
- ii. We observe that MSFs are better off than SSFs in terms of labor productivity, degree of Commercialization, and some livelihood outcomes such as poverty reduction and women empowerment
- iii. The rise of MSFs can potentially enhance the transformation of SSFs through observed spill-over effects
- iv. To promote the growth of MSFs, policy will need to effectively address the issue of land tenure security and increased access to land markets by prospective investors.

NEXT STEPS : PLAN FOR 2019

1. Finalize WS#1 Report and Working Paper
2. Prepare at least four research papers and journal manuscripts
 - i. Medium-scale farming as a pathway to agricultural commercialization in Nigeria
 - ii. Relationship between Farm Size and Productivity: Evidence from Nigeria
 - iii. Spillovers between medium- and smallholder farms
 - iv. Do medium Scale Farm households have better livelihood outcomes than small scale farming households:
3. Conduct qualitative data collection
4. Conduct stakeholder outreach event in Nigeria

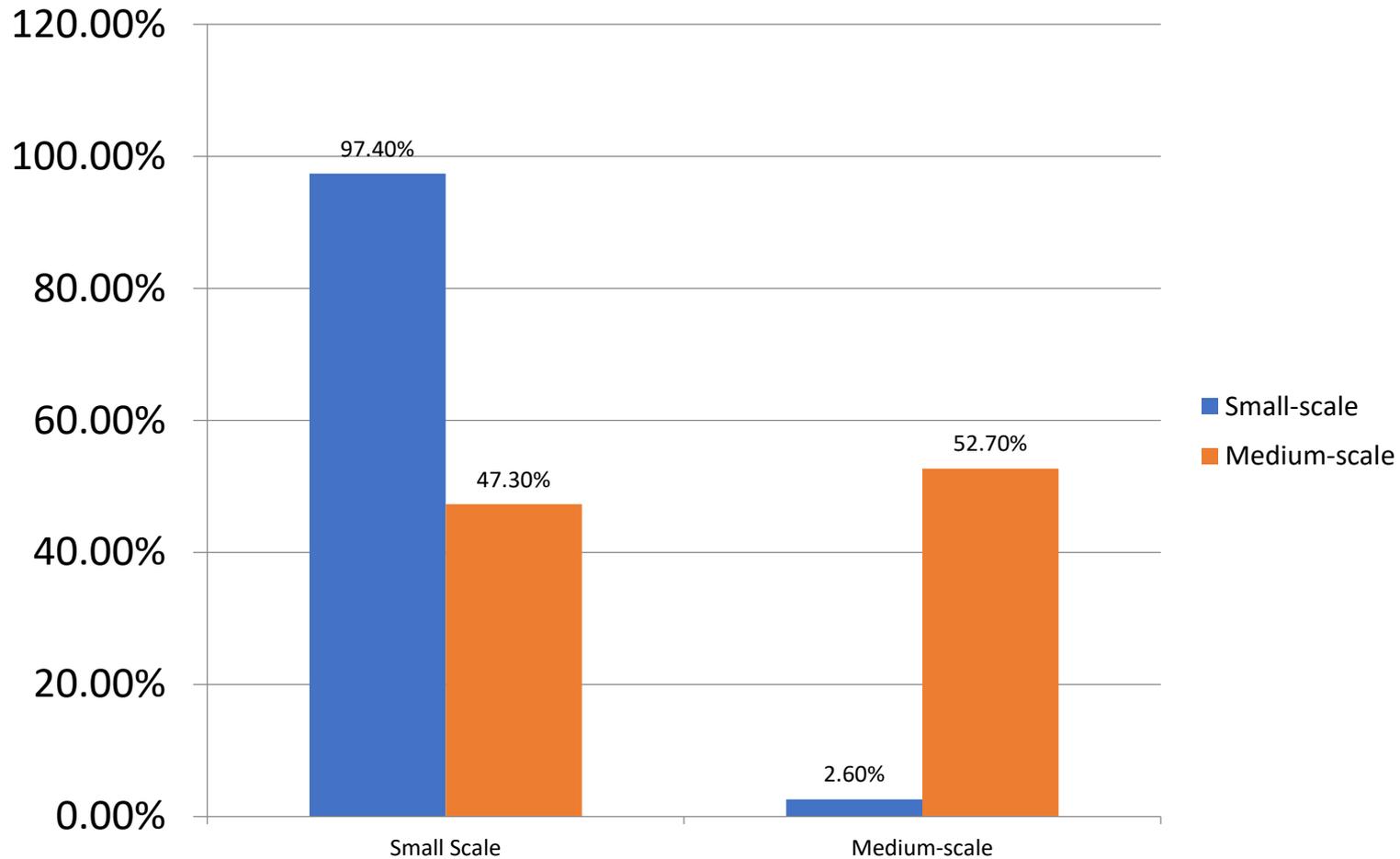
More Detailed Results Presentation

Characteristics of MSFs : Basic Types

The study identifies two basic categories of Medium scale farms:

- i. Transition from small to medium scale farms - “Stepping up group”
- ii. Emergence of investor farmers that start off as medium scale level farmers-
”Stepping in group ”

Figure 1 : Farm-types in the Commercialization Pathway



Identification of Pathways to Commercialization contd.

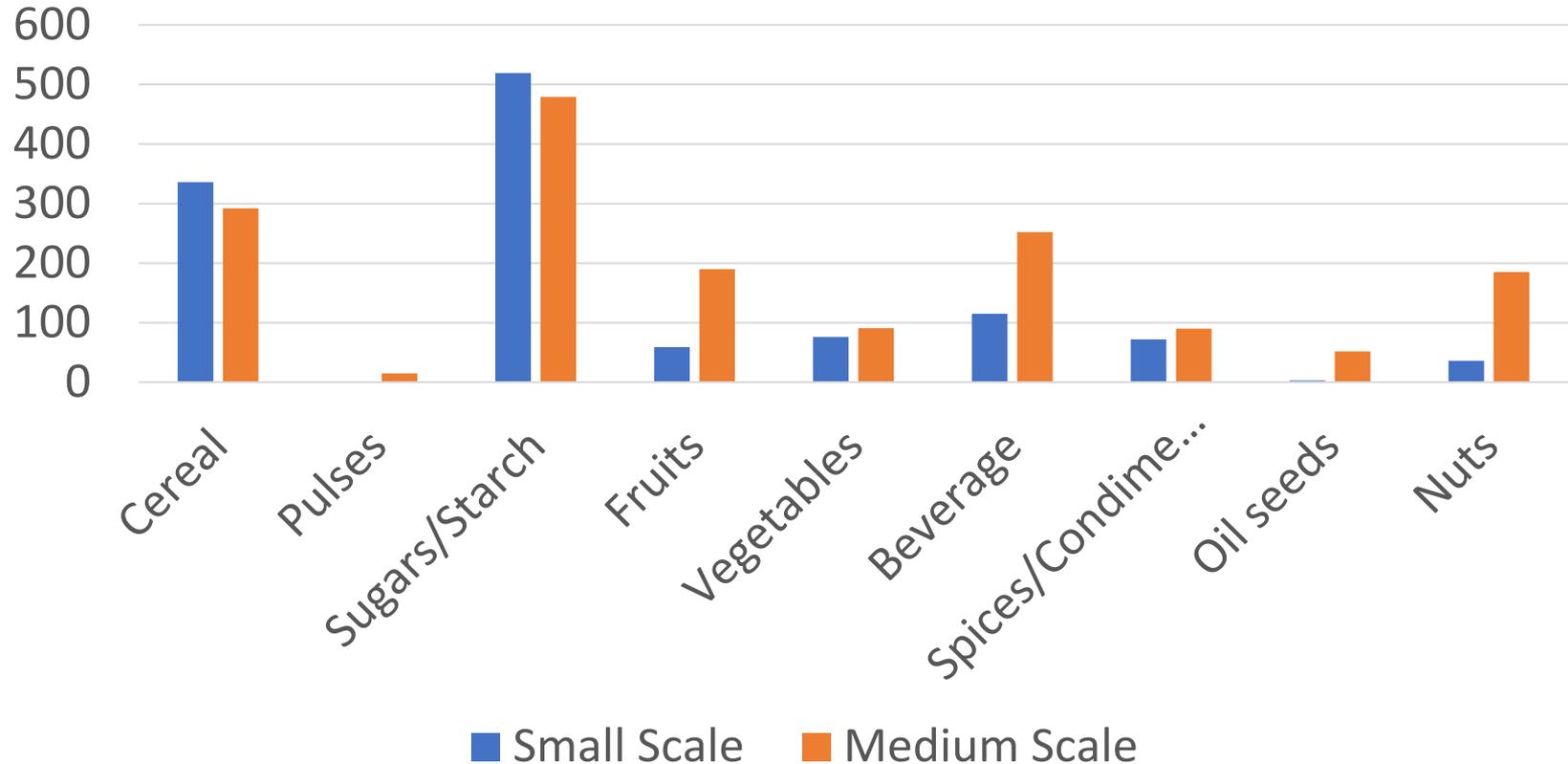
- **Stepping up** rate has been low : 6% stepping up in 3 decades
- **Stepping up** is more important mode of entry into medium scale farming within the past decade. **40% stepped up** and **24% stepped in** within 2010-2018

Land Use Pattern Differences.

- OGUN : Staple foods(Starch & Cereals) more popular with SSFs; Non-staple crop groups (fruits, beverage (Cocoa) , oil seeds , nuts, pulses) more common with MSFs.
- Kaduna: all categories more common for MSFs compared with SSFs

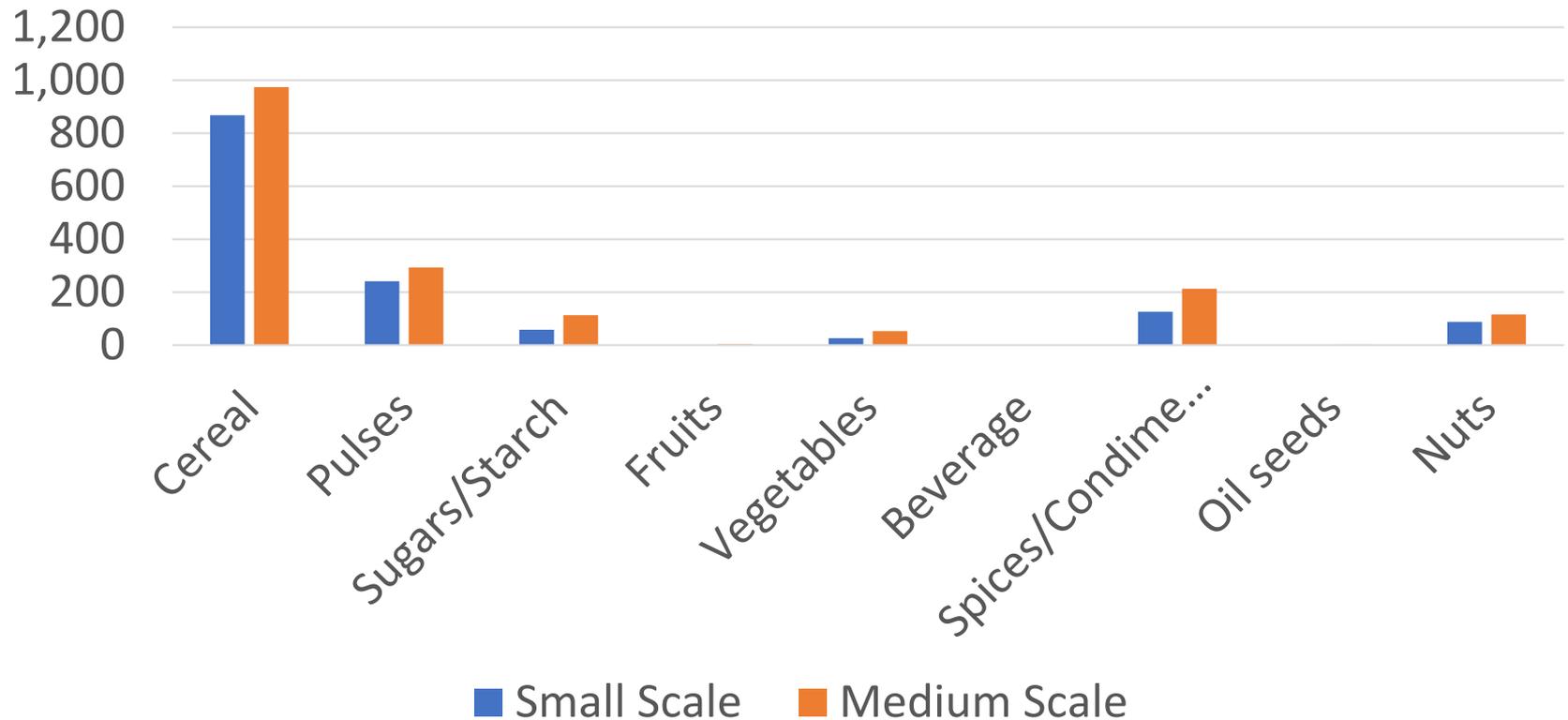
Cropping Pattern Differences: Ogun State

Figure 9 : No of Farmers by Crop and Scale - OGUN



Cropping Pattern Differences: Kaduna State .

Figure 10 : No of Farmers by Crop and Scale- KADUNA

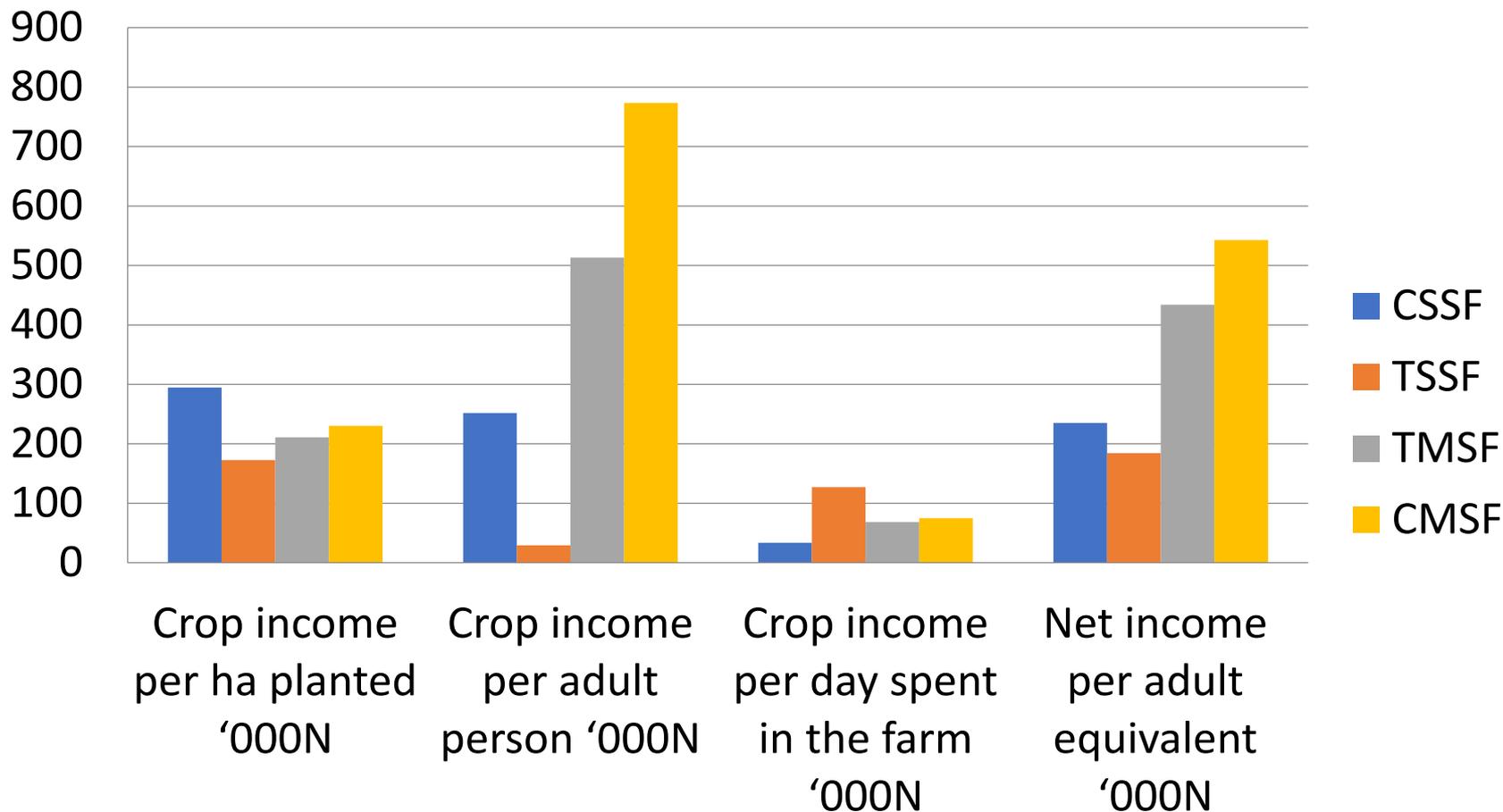


Characteristics of Pathways: Productivity Indicators

- land and labor productivity are generally **higher** for MSFs who “*stepped in*” relative to those who “*stepped up*”.
- **Land productivity declines** with farm size, while **labor productivity increases** with farm size.

Productivity Indicators

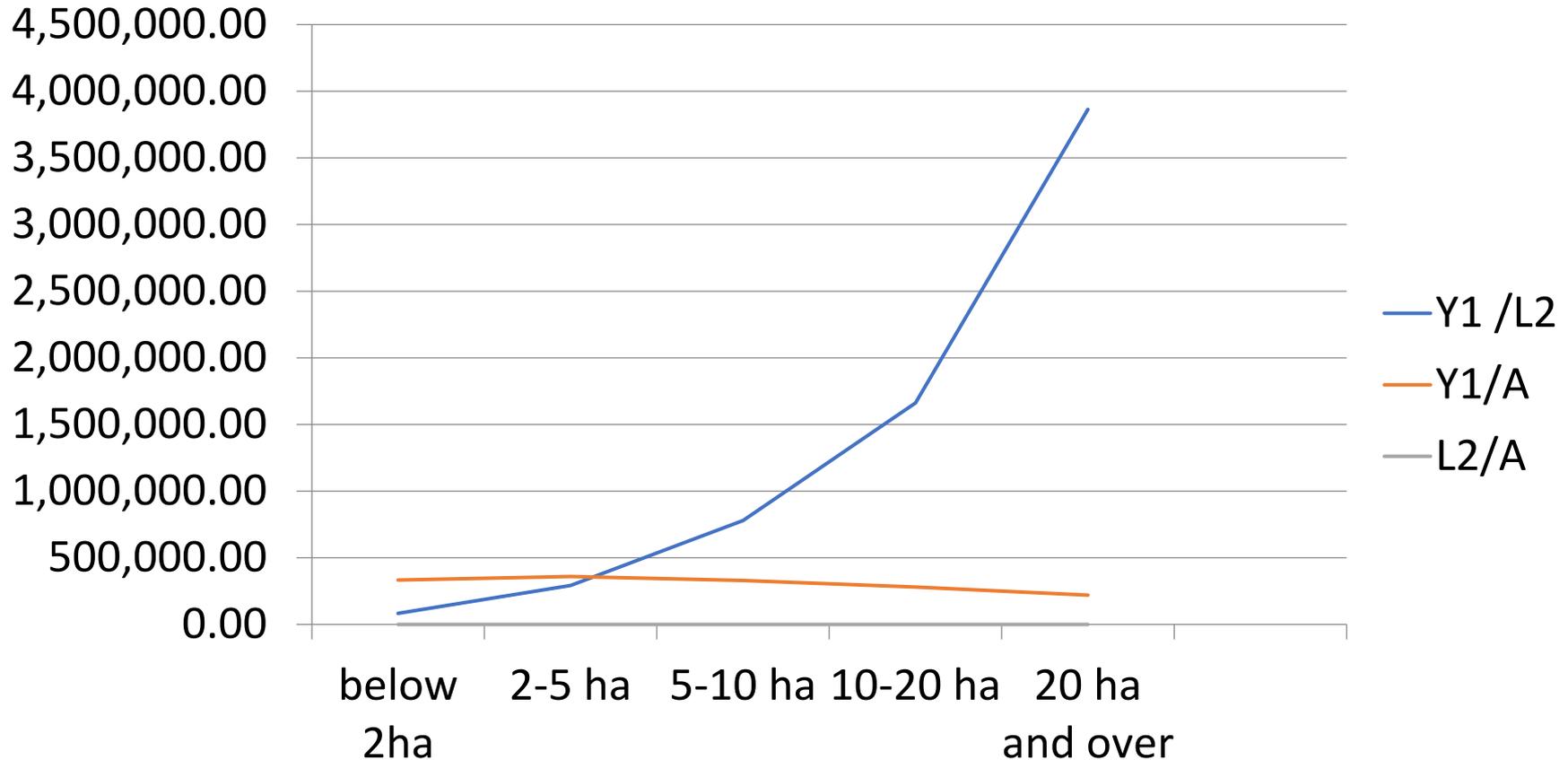
Chart Title



Productivity Indicators by State (Ogun) : Net

Income(Y)/adult labor use (L2)

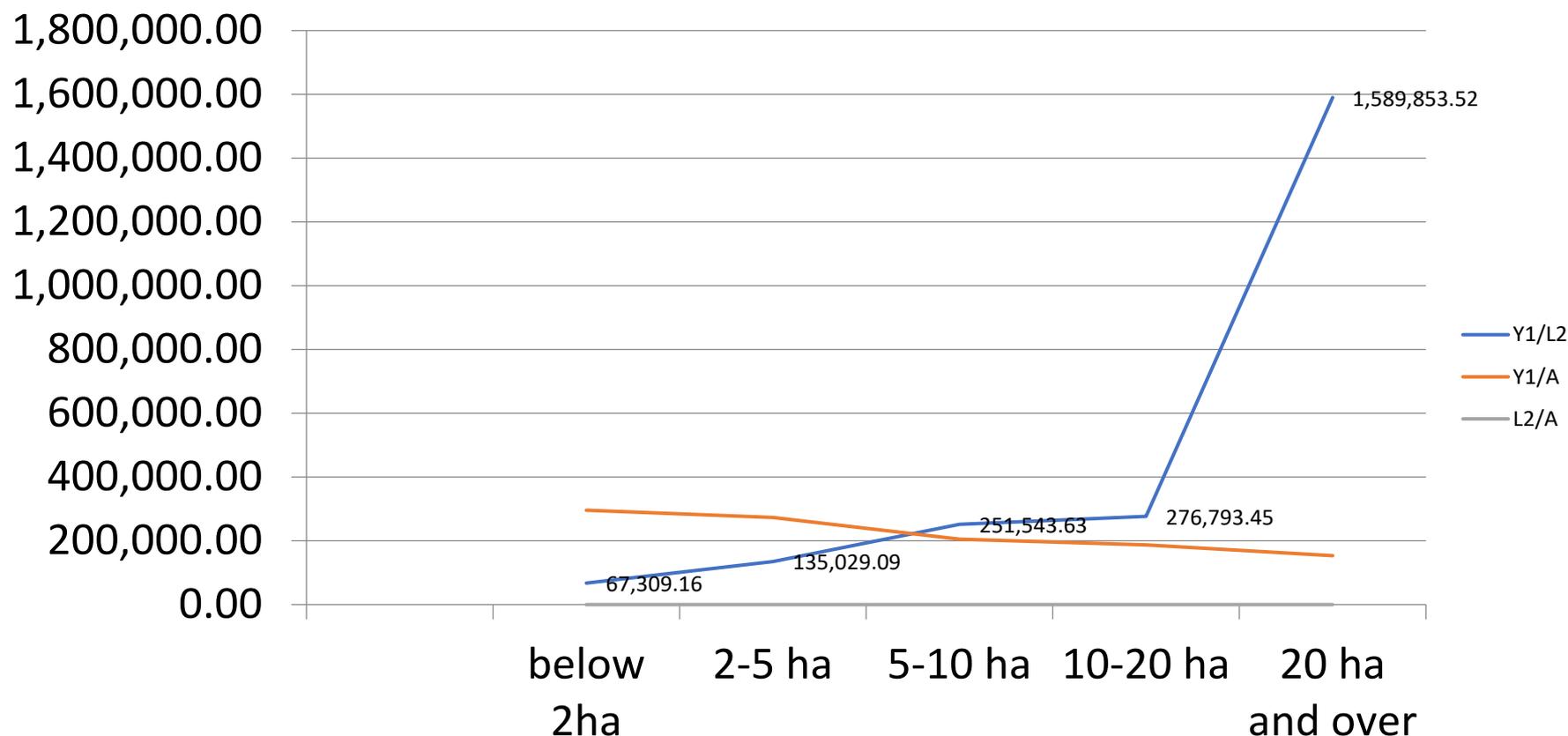
Net Income (y) /Hectare, by farm size



Productivity Indicators by State (Kaduna):

Net Income(Y)/adult labor use (L2)

Net Income (y) /Hectare, by farm size



Characteristics of Pathways: Levels of Commercialization

Medium Scale Farms who “*stepped up*” (TMSF)

Have attained:

Higher degrees of commercialization

Compared with:

Small Scale Farms who “*hanged in*” (CSSF)

In both:

Input and output markets

Characteristics of Pathways: Levels of Commercialization

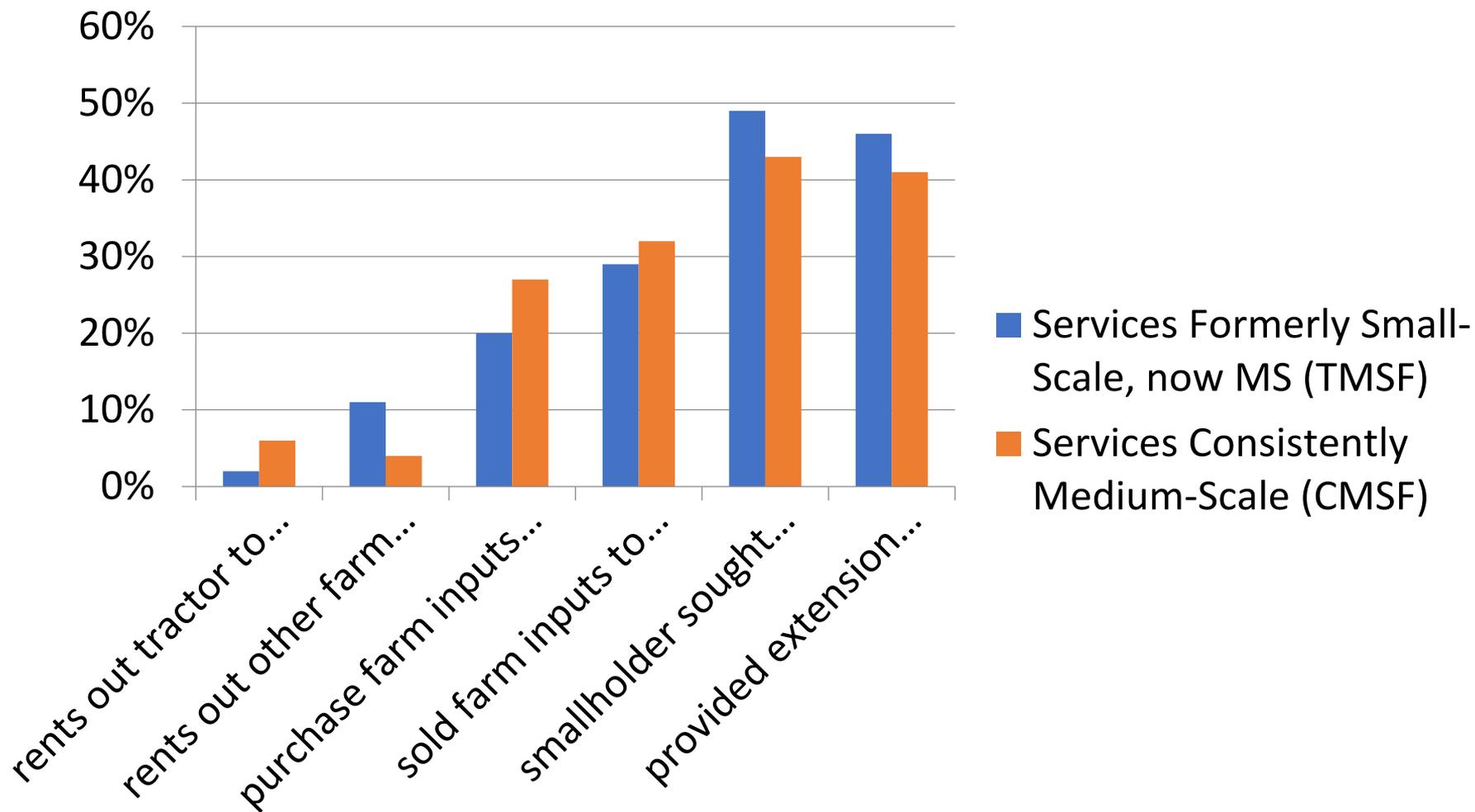
	Current farm scale			
	Small-scale		Medium-scale	
	Farm scale when household started farming		Farm scale when household started farming	
	Small-scale (CSSF)	Medium-scale (TSSF)	Small-scale (TMSF)	Medium-scale (CMSF)
N	1065	34	476	534
Household commercialization index	62.78	62.71	71.92	61.07
Household Input Market Commercialization Index (HIMCI)	10%	18%	15%	9%

Spillover Effects

MSFs interacts with SSFs in the following economically beneficial ways, in order of importance :

- i. Provision of extension guide/services
- ii. Sales of farm inputs to smallholders,
- iii. Joint purchase of farms inputs
- iv. Rentals of tractor and farm machinery services

Spillover Effects: Services from MSFs to SSFs



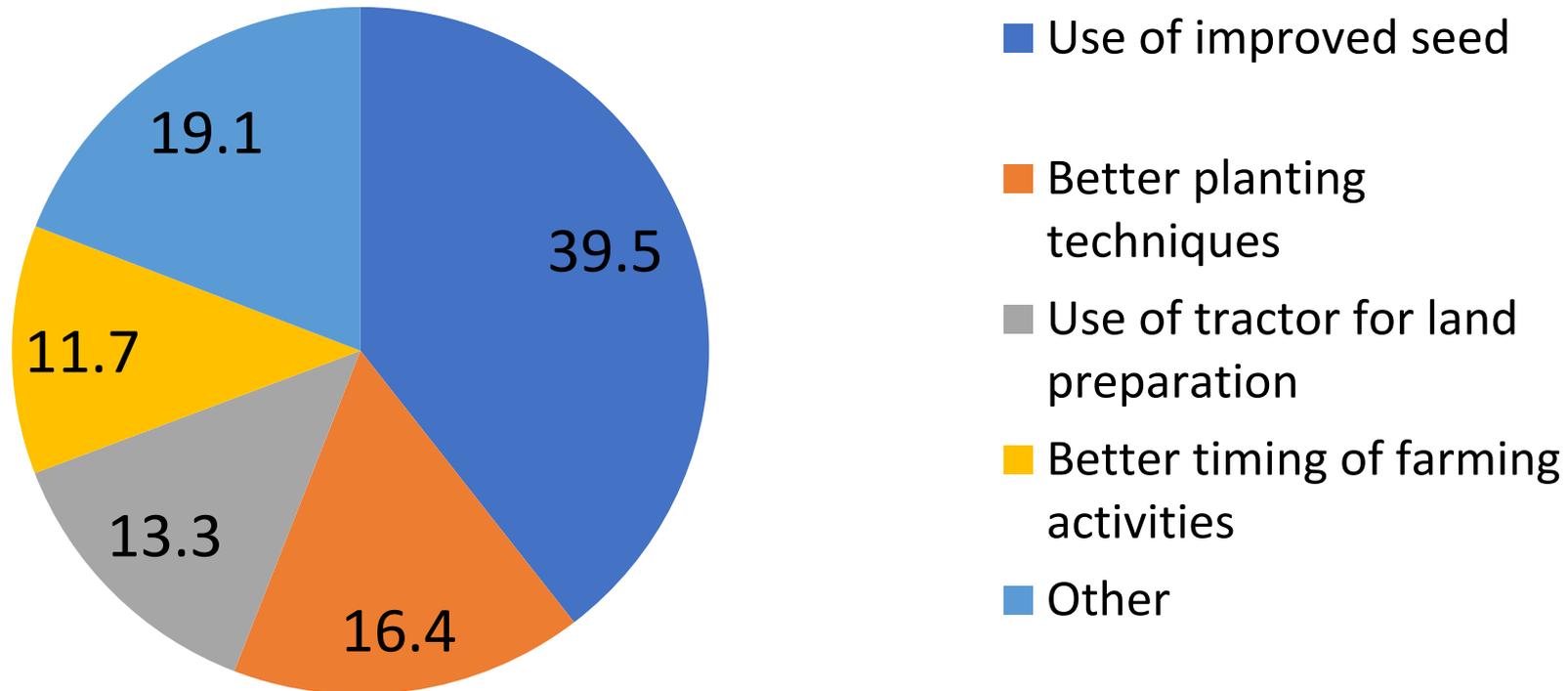
Extension Service Provided by MSFs :

Common forms

- i. Use of improved seeds (40%)
- ii. Better planting techniques (16.4%)
- iii. Use of tractor for land preparation (13.3%)
- iv. Better timing of farming activities (11.7%).

Extension Service Provided by MSFs : Common forms

Percent



Welfare Indicators

- i. Farms who remained as small scale **were poorer** than those who *stepped up* to MSFs
- ii. Women from households of Transited MSFs are **more empowered** relative to those from Small scale farming households

Welfare Indicators

- Preliminary Results Indicates

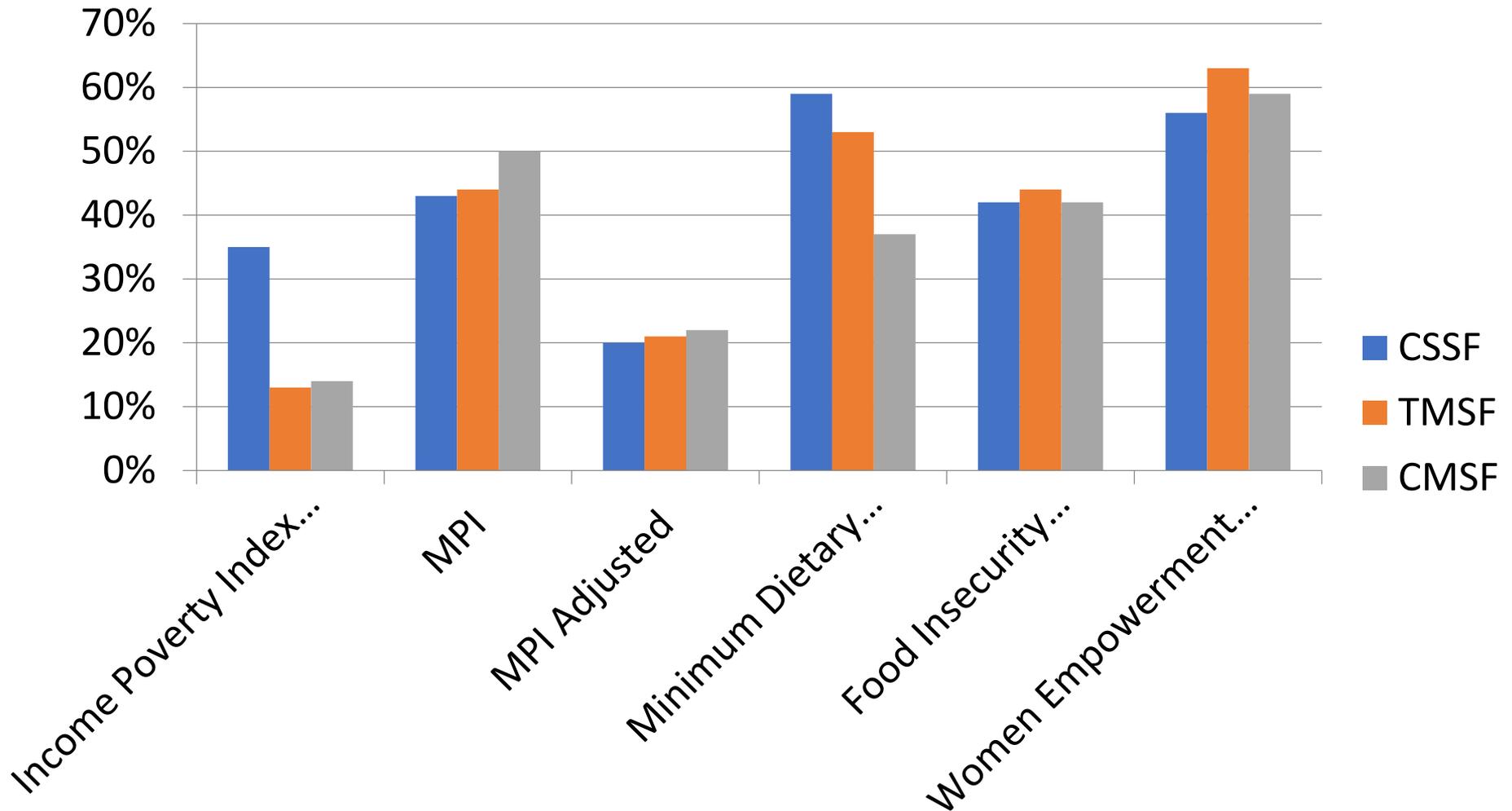
No Difference

- between SSFs and MSFs in terms of both:
 - **Minimum Dietary Diversity** for Women
- and
- **Food Insecurity Experience** of Household

Welfare Indicators

	Current farm scale			
	Small-scale		Medium-scale	
	Farm scale when household started farming		Farm scale when household started farming	
	Small-scale (CSSF)	Medium-scale (TSCF)	Small-scale (TMSF)	Medium-scale (CMSF)
N	1065	34	476	534
Income Poverty Index (Poverty Headcount)	35%	47%	13%	14%
MPI	43%	55%	44%	50%
MPI (adjusted)	20%	27%	21%	22%
MDD_W	59%	48%	53%	37%
Food Insecurity Experience Scale (FIES)	42%	48%	44%	42%
Women Empowerment Index	56%	74%	63%	59%

Welfare Indicators



Key Challenges Characterising the rise of Medium Scale Farms

- i. Security of tenure is very low among MSFs as is with SSFs
- ii. Land acquisition through land markets is Limited due to underdeveloped land markets
- iii. Inheritance, which is the most important source of land for expansion, is unsustainable

APRA Nigeria WS1 & 3 Data Collection Staff



APRA Nigeria Stakeholders Meeting 2018



Visit of APRA Nigeria WS1 Leadership to The Permanent Secretary, Kaduna State Ministry of Agriculture



Visit of APRA Nigeria WS1 Leadership to The Permanent Secretary, Ogun State Ministry of Agriculture



APRA Nigeria WS1 Field Staff in a periodical data collection review meeting with Country and Ogun State Coordinators, at Obafemi Owode LGA, Ogun State, April 2018

