

# Understanding Smallholder Families, Developing Financial Solutions

Boulder Rural and Agricultural Finance Program  
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**Understanding the distinct segments of smallholder households — within this massive, heterogeneous client group — is the key to effective design and delivery of financial solutions**



**Organizations divide a market into subsets of customers that have common needs, interests, and priorities.**

This allows providers to better design and implement strategies that target them.

**What is segmentation?**





# Smallholder household data and segmentation journey

CGAP and partners



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**Customer segmentation can help divide a diverse market into a number of smaller, more similar markets based on a few meaningful characteristics.**

Segmentation allows providers to better understand their customers, and their varied needs, wants and aspirations.

**Why conduct a segmentation?**





Improve understanding of  
current and potential clients

Address business challenges  
and seize opportunities

Identify and estimate market  
opportunities

Tailor products, services, and  
customer experiences

Shape communications to  
drive uptake and use

**What can a segmentation help providers do?**





# Smallholder household data and segmentation journey

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## Case Study: Centenary Bank, Uganda

### GO-TO-MARKET MESSAGING LESSONS

Without segmentation, Centenary Bank's "Take your bank everywhere" messaging was generic and did not resonate strongly with customers:



But once the bank used segmentation to understand their target customers, they were able to tailor messaging to address some of the pain points uncovered by customer research:



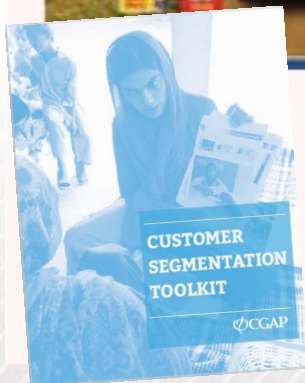
**"Access Your Salary"**  
*Salaried workers* wanted to withdraw money in smaller amounts more regularly, not just all at once.



**"Make Payments Directly from Your Account"**  
*The youth market* wanted to spend less time in long bank queues and receive funds from relatives more easily.



**"Save Time and Transportation Costs"**  
*The business community* wanted to save time by not having to travel to a bank to handle daily transactions.





# Smallholder household data and segmentation journey

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## 2013 Global segmentation

- Based on a desk review of available literature and data
- Crop types: Staple crops and high-value cash crops
- Markets: None, spot market, high-value export markets



# Segmentation of smallholder households

Christen and Anderson (2013)

## Noncommercial smallholders

- Landless, or up to 1 hectare
- Staple crops
- Production consumed by the household
- Little market engagement

Very limited access to financial services, informal tools if anything

## Commercial smallholders in loose value chains

- 1-2 hectares
- Staple crops and some cash crops
- Some production consumed by the household
- Reliable surplus of staple crops sold informally

Limited access to financial services, largely informal financial tools

## Commercial smallholders in tight value chains

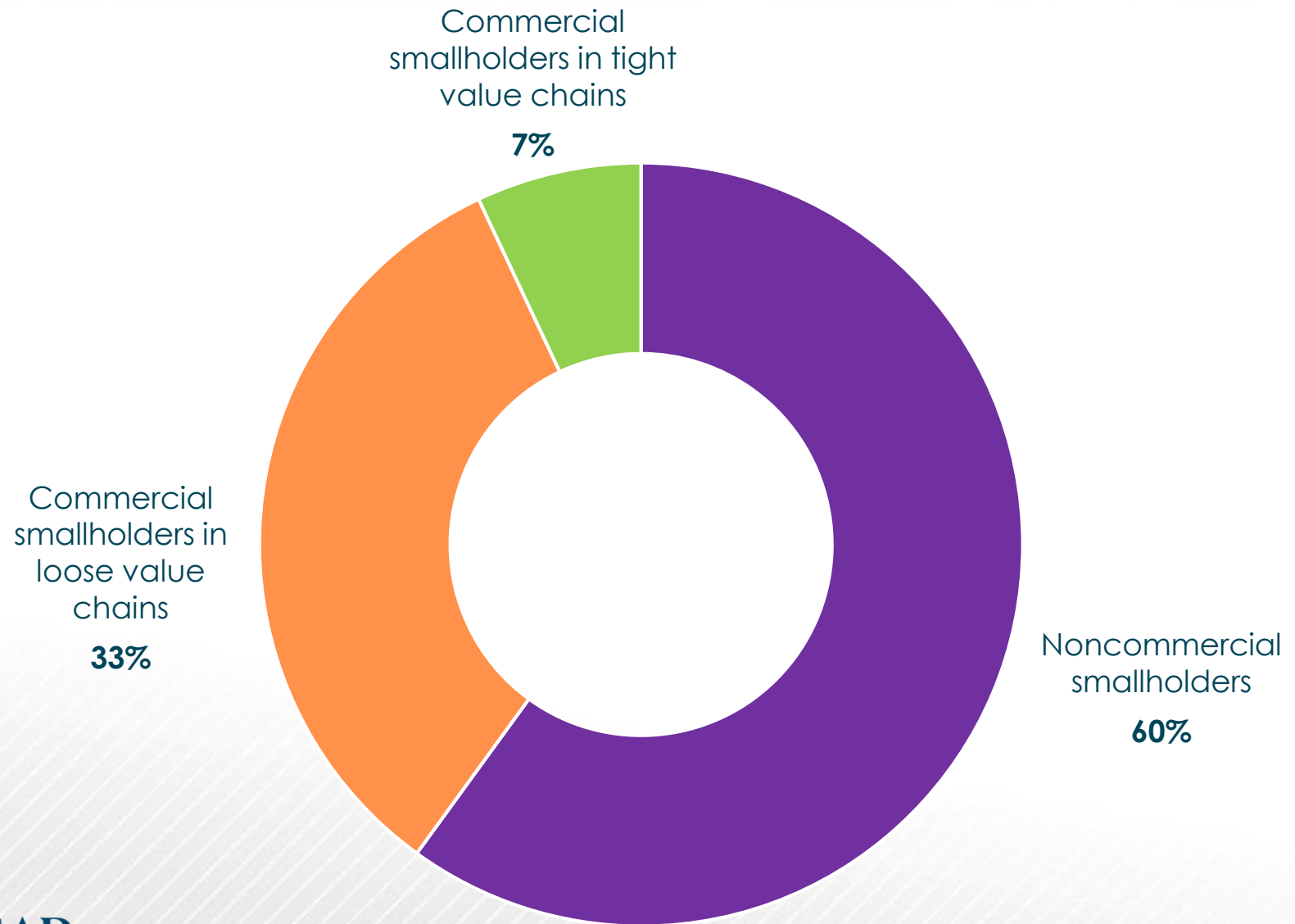
- At least 2 hectares
- Cash crops and some staple crops
- Some production consumed by the household
- Reliable surplus of staple crops sold informally
- Cash crops sold through contract farming

Access to formal and informal financial services, some through buyers



# Segmentation of smallholder households

*Christen and Anderson (2013)*





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## 2013 Global segmentation

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## 2016 Country-level segmentations

- Based on smallholder household survey data
- Financial inclusion as the dependent variable



# Six variables drive five segments to financial inclusion

CGAP National Surveys of Smallholder Households

1. **Educational attainment** of the head of the household
2. **Socioeconomic status** (e.g. above/below USD 2.50 day poverty line)
3. **Access to emergency funds** (5% of GNI per capita in local currency) within a month
4. **Mobile phone ownership** (at least one phone in the household)
5. **Attitude toward the future**: "The future will take care of itself"
6. **Experience of unexpected event** in last 12 months (e.g. severe illness, accidents)

# Five segments of smallholder households

CGAP National Survey of Smallholder Households

## Farming for sustenance

The oldest segment  
Lowest HH income, generating very little ag income  
Very limited access to financial tools

Highly vulnerable to shocks

## Battling the elements

The youngest segment  
Low HH income, more from ag and other sources  
More financial tools, still very vulnerable to shocks

Persevered through harsh agricultural challenges yet remain optimistic toward farming

## Diversified and pragmatic

Growing more, selling more, and earning more  
Engaged in more income streams and using more financial tools

Take pride in their agricultural activities, but more likely to leave the sector if given the choice

## Options for growth

Rely heavily on agricultural income, and most likely to have other stable income sources  
Young, optimistic and love farming, but have options

Could pivot into or out of farming depending on opportunities

## Strategic agricultural entrepreneurship

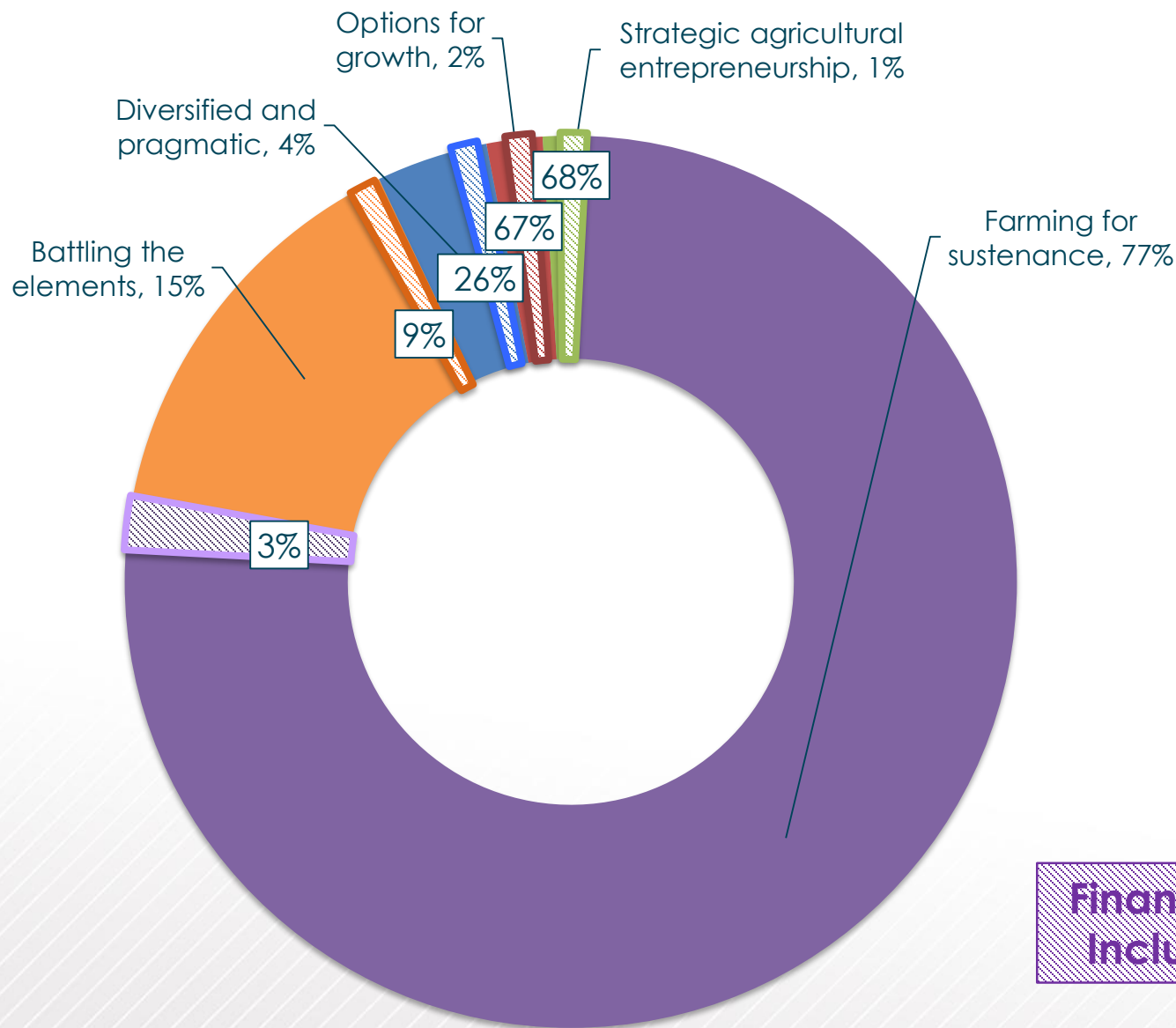
Relatively highest income and most access to financial mechanisms  
Successful in ag  
Have resources and tools to get through tough times

Model or “use case” to inspire growth in other segments



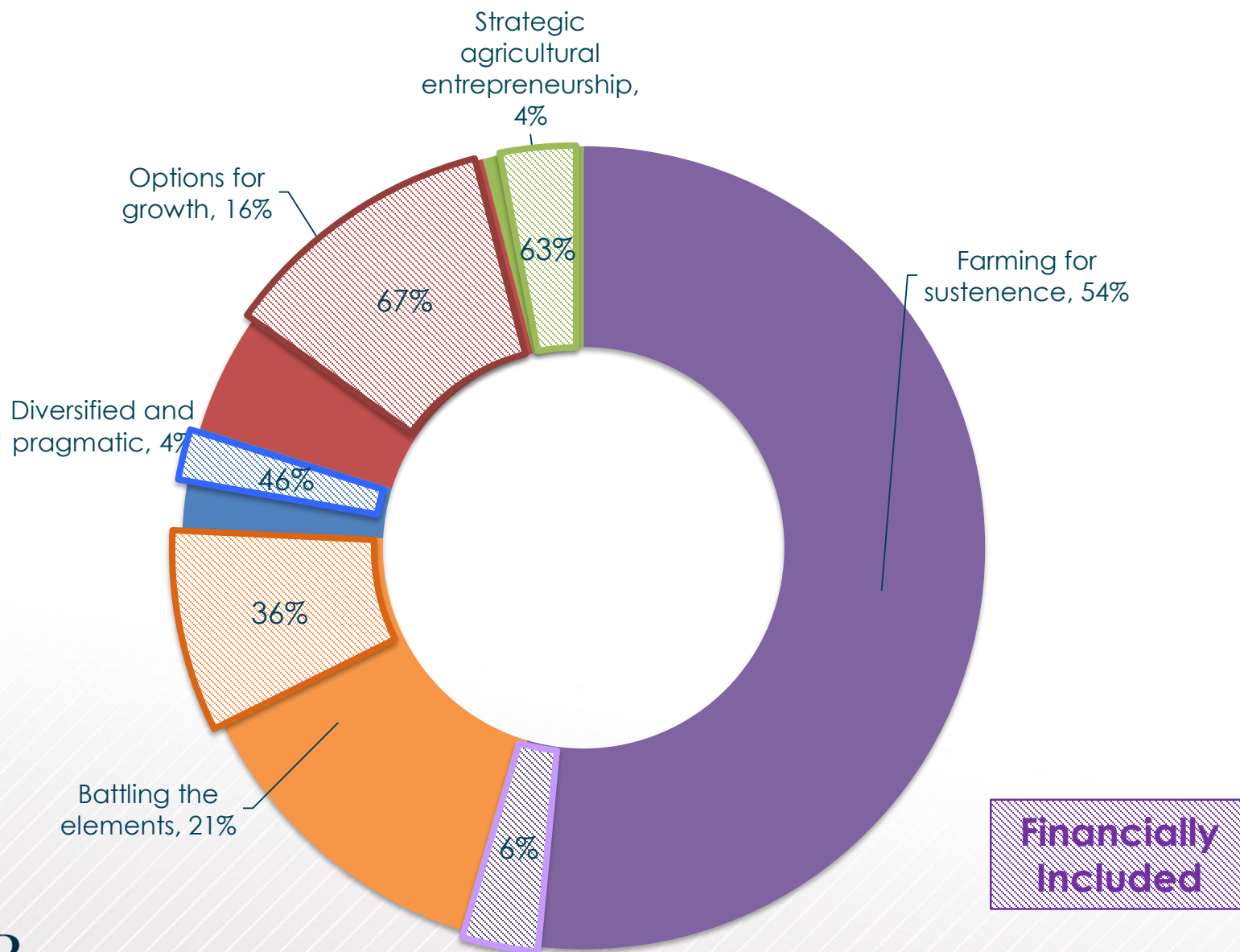
# Five segments of smallholder households: **Mozambique**

CGAP National Surveys of Smallholder Households



# Five segments of smallholder households: **Uganda**

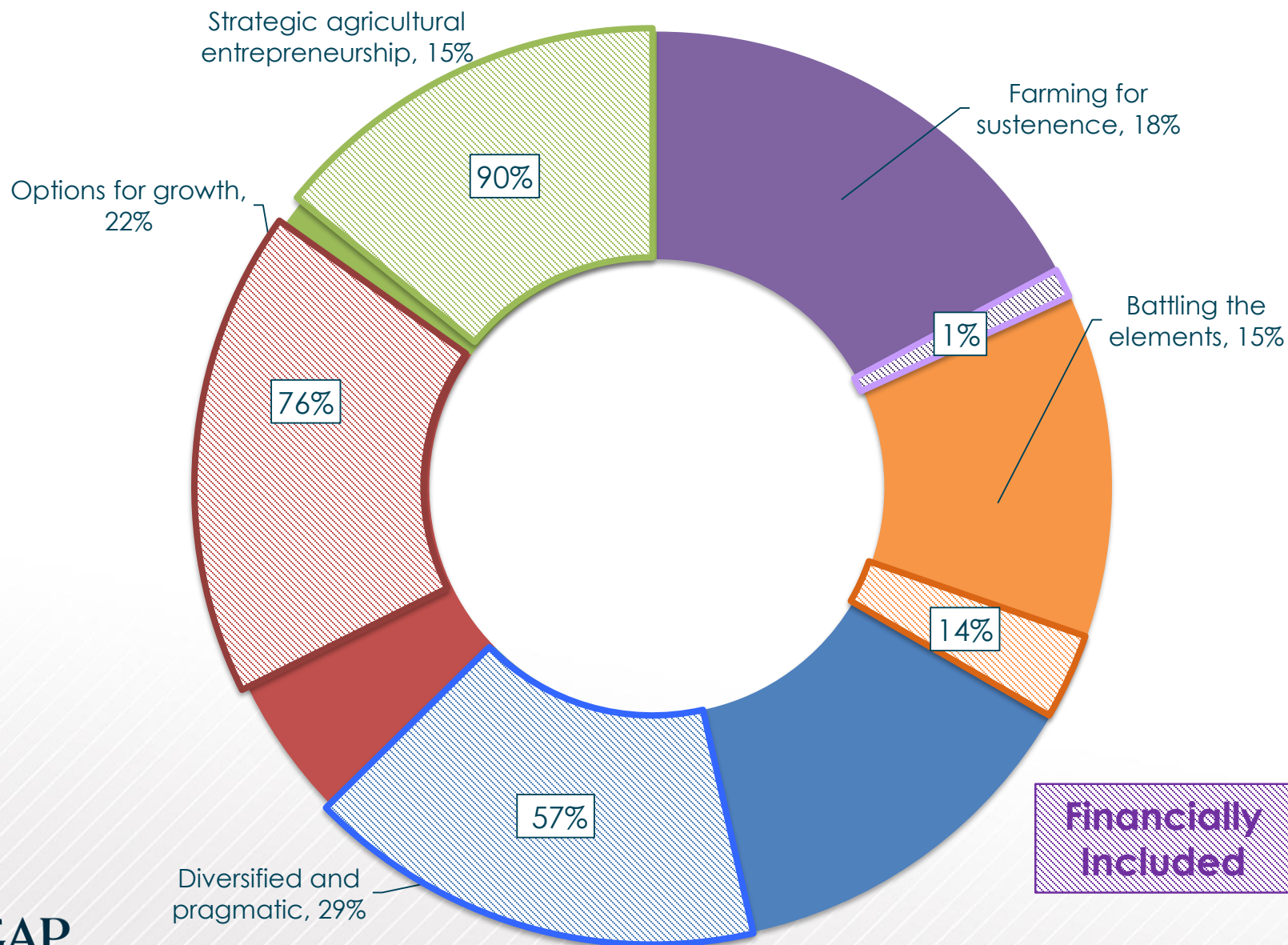
CGAP National Surveys of Smallholder Households





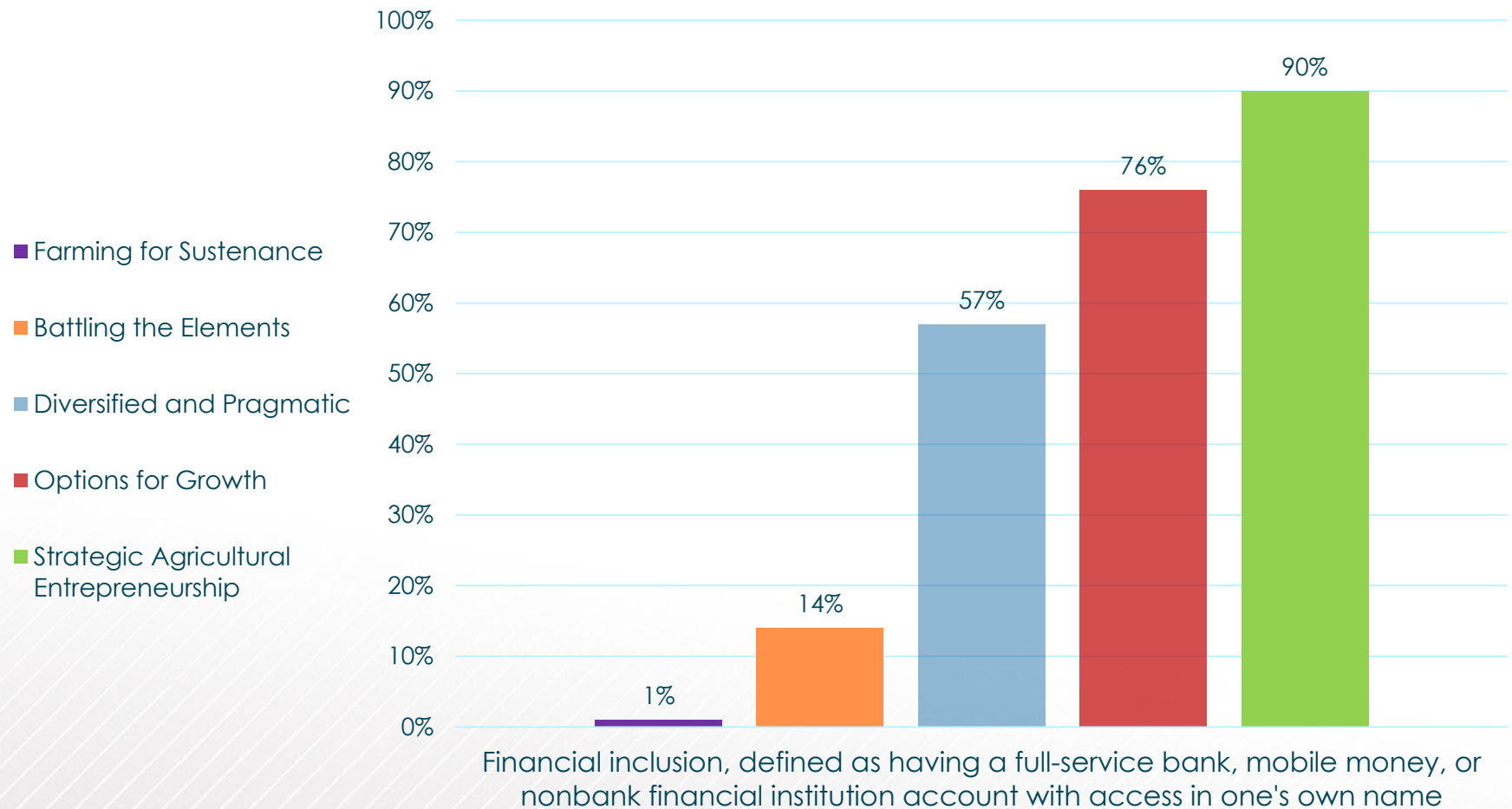
# Five segments of smallholder households: Tanzania

CGAP National Surveys of Smallholder Households



# Six variables drive financial inclusion by 5 segments

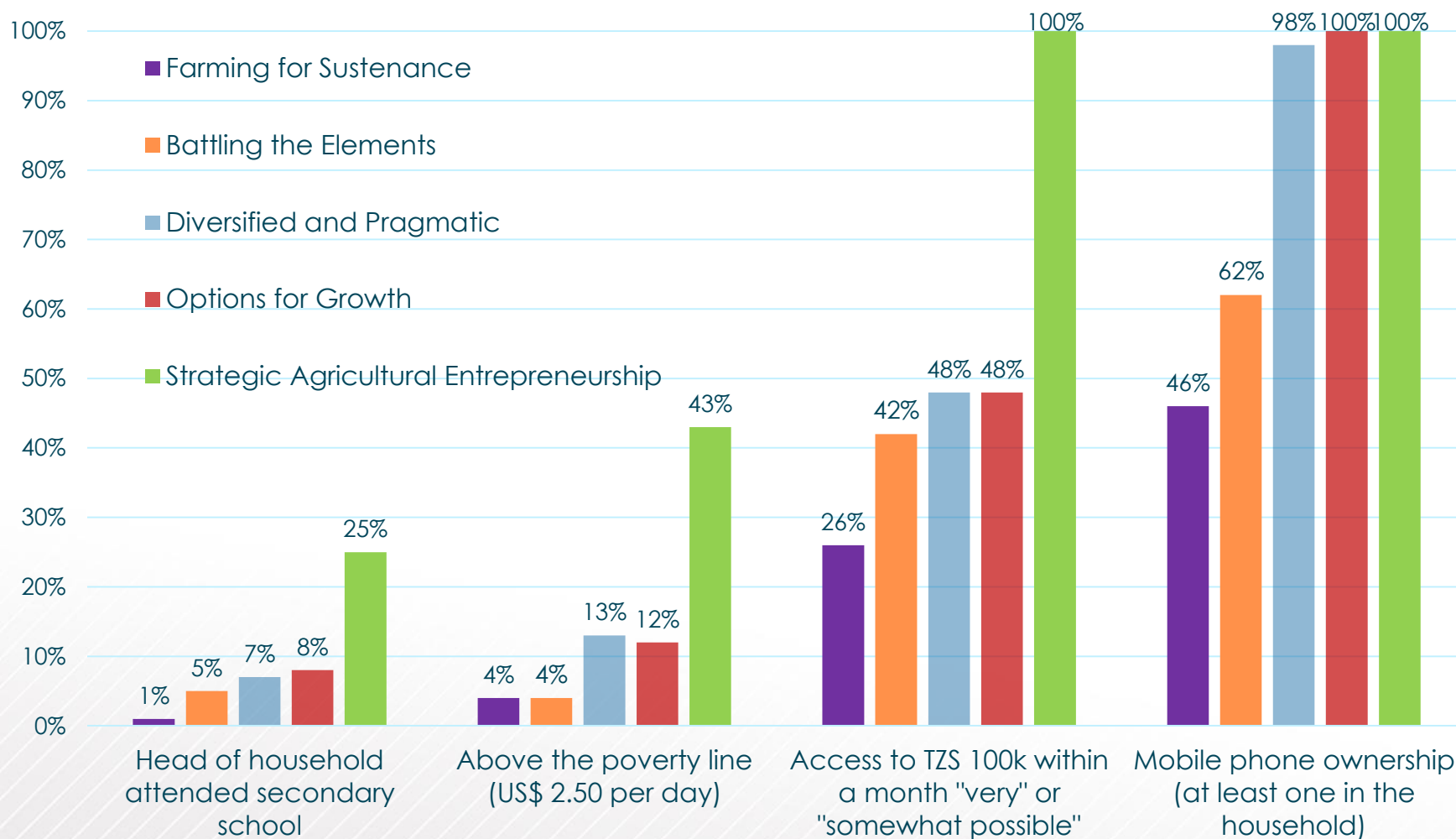
CGAP National Survey of Smallholder Households in Tanzania





# Clear distinctions between smallholder household segments

CGAP National Survey of Smallholder Households in Tanzania

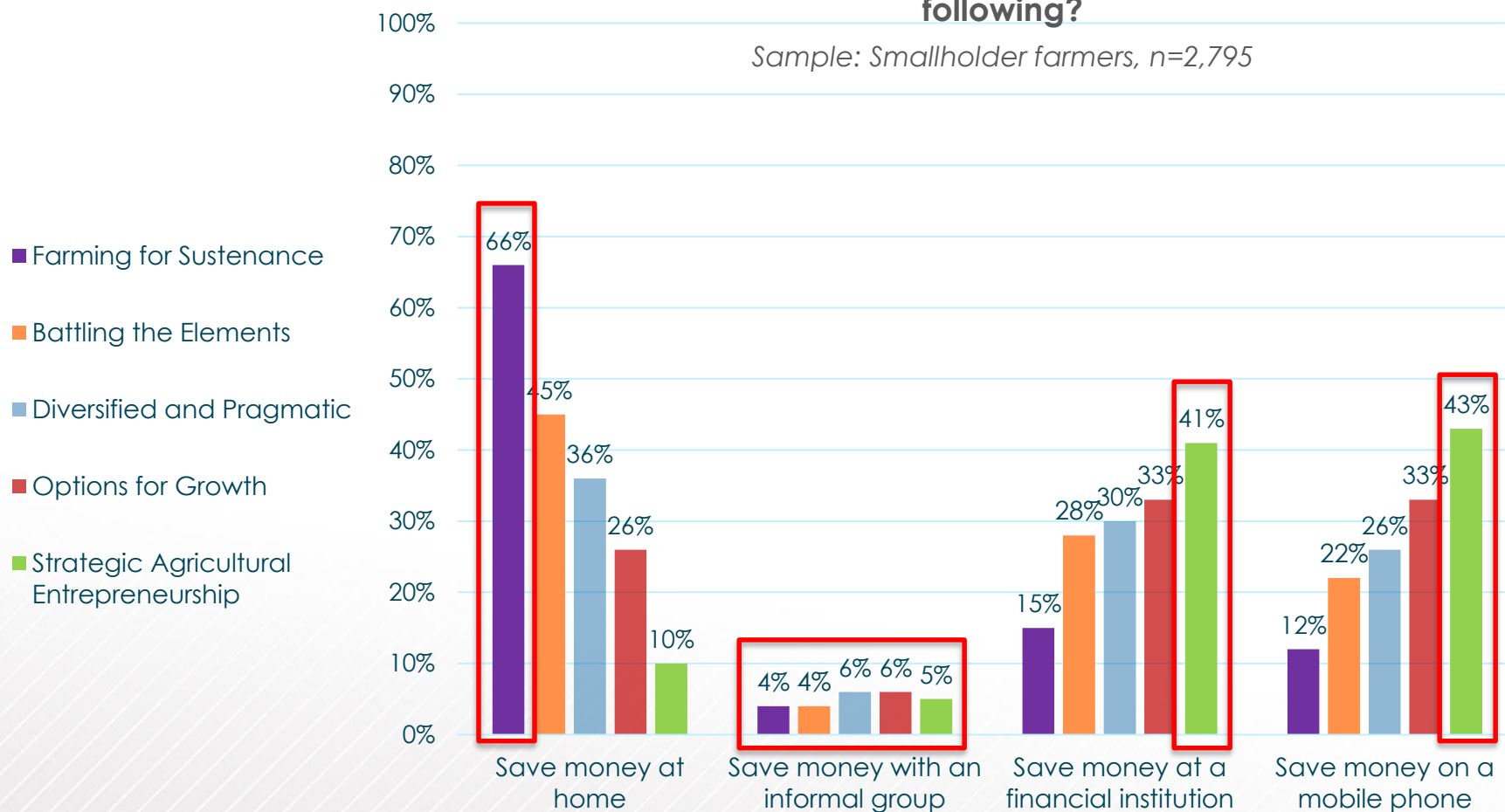


# Varied importance of savings mechanisms across segments

CGAP National Survey of Smallholder Households in Tanzania

How important is it for your household to save at each of the following?

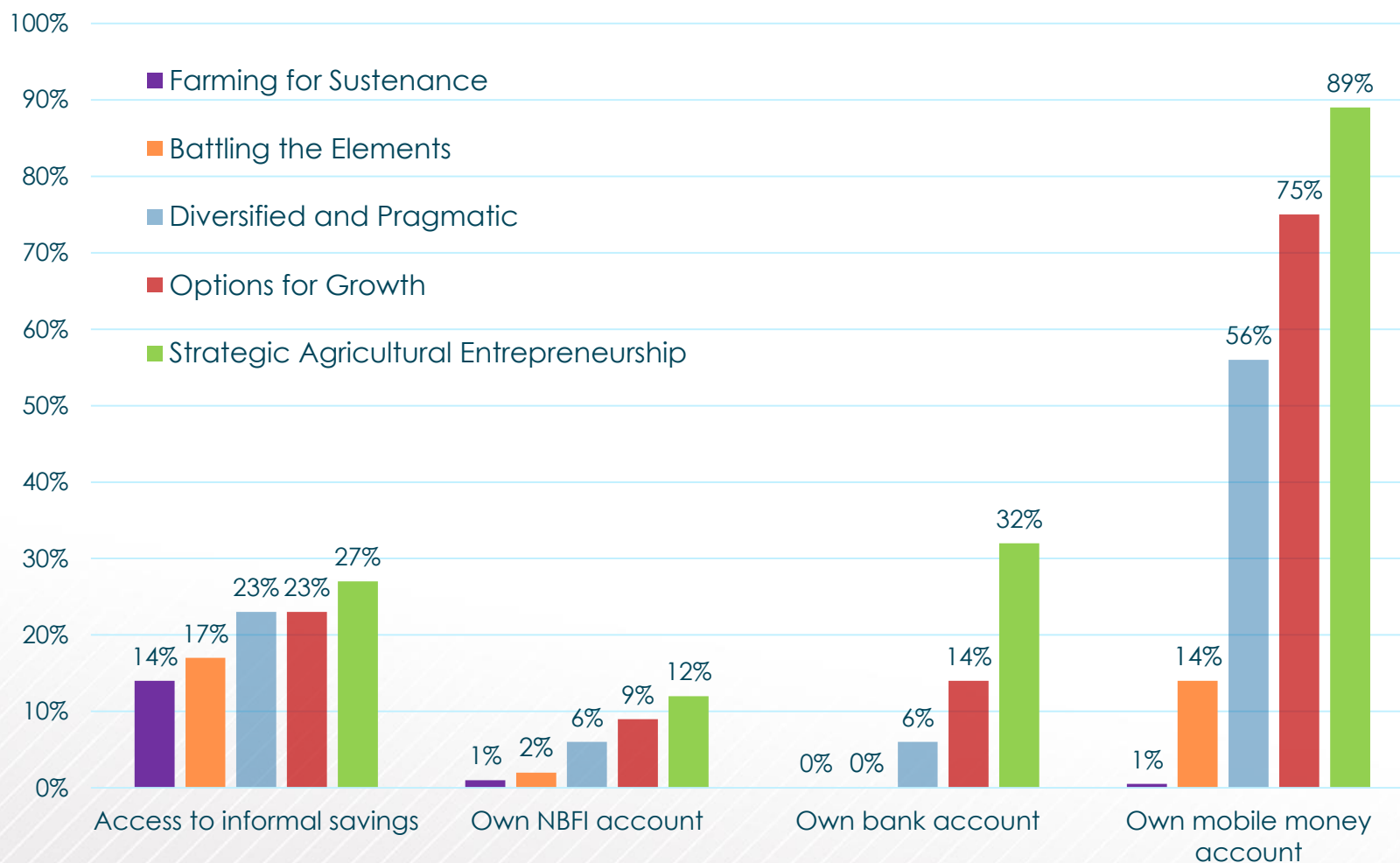
Sample: Smallholder farmers, n=2,795





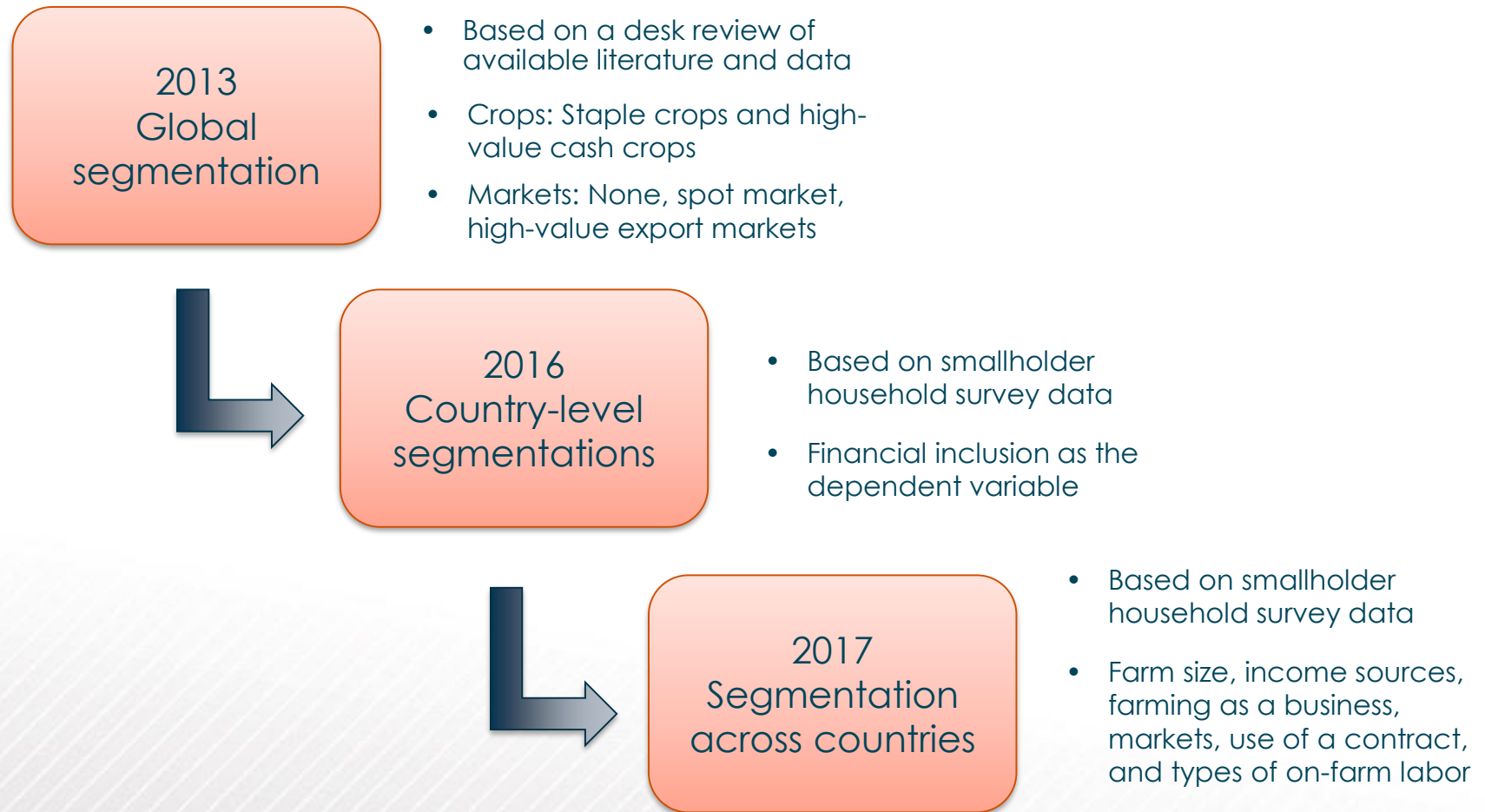
# Varied access to financial mechanisms across segments

CGAP National Survey of Smallholder Households in Tanzania



# Smallholder household data and segmentation journey

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# Six variables differentiate smallholder households

*CGAP National Surveys of Smallholder Households*

1. Farm size
2. Sources of income
3. Whether the household considers farming as a business
4. Contracts with sellers
5. Markets for agricultural outputs
6. Types of labor used on-farm

# Segmentation of smallholder households

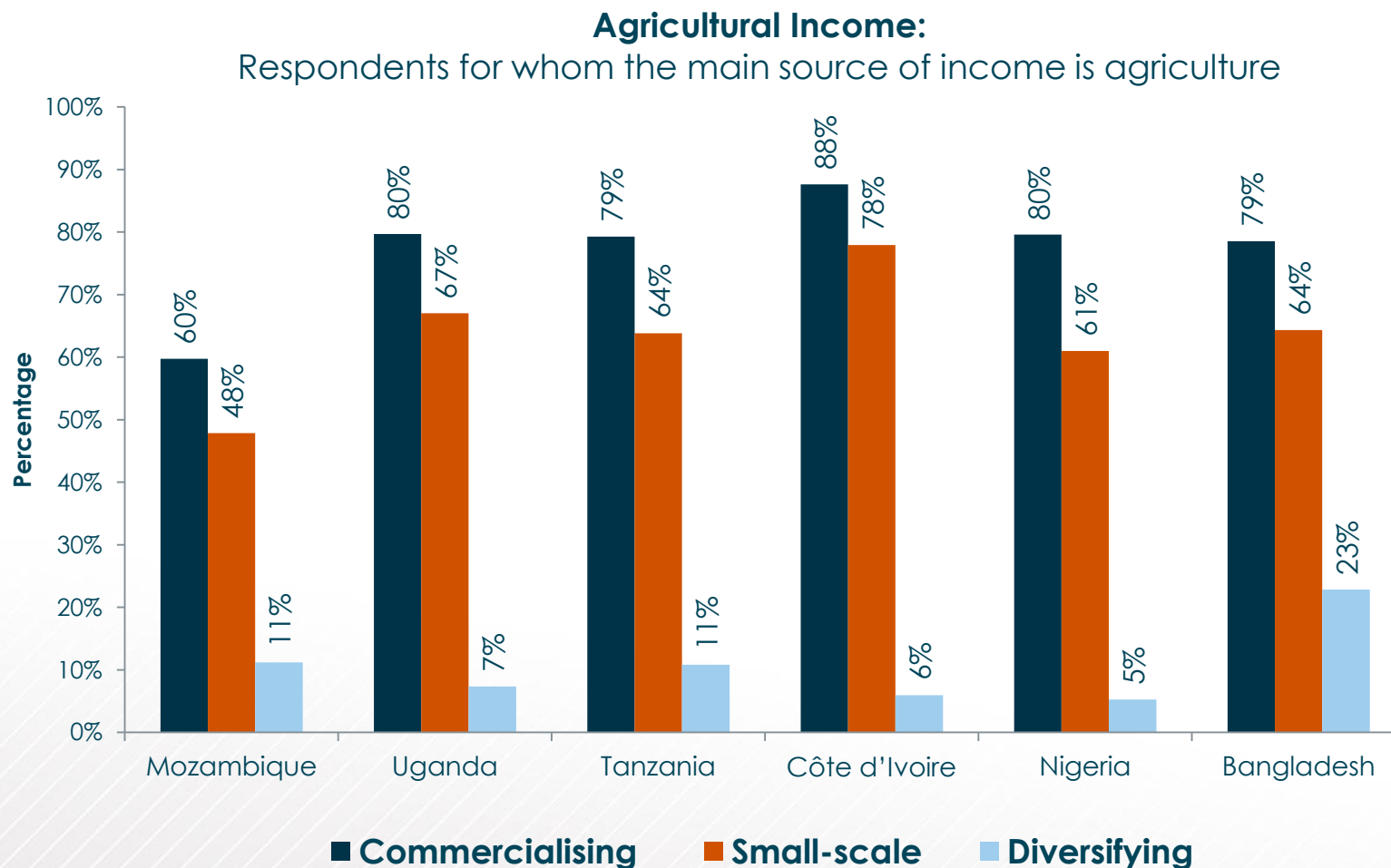
CGAP and Nathan Associates (2017)

Commercializing smallholder households	Small-scale households	Diversifying smallholder households
<ul style="list-style-type: none"><li>• Rural</li><li>• Larger smallholdings</li><li>• Higher income: Mainly agricultural income</li><li>• Cash crops for sale</li><li>• Often a formal contract: Sales to wholesalers or processors</li></ul>	<ul style="list-style-type: none"><li>• Rural</li><li>• Small to med-size smallholdings</li><li>• Low income: Ag and casual employment income</li><li>• Consumption, with some surplus for sale</li><li>• No contracts: Sales to public or through a co-op or middleman</li></ul>	<ul style="list-style-type: none"><li>• Urban, peri-urban, and rural</li><li>• Smallest smallholdings</li><li>• Higher income: Regular or casual employment, own business, some ag</li><li>• Consumption crops</li><li>• No contracts: Crops sometimes sold locally</li></ul>
<ul style="list-style-type: none"><li>• Informal and formal financial tools</li></ul>	<ul style="list-style-type: none"><li>• Some informal financial tools</li></ul>	<ul style="list-style-type: none"><li>• Mostly formal financial tools</li></ul>



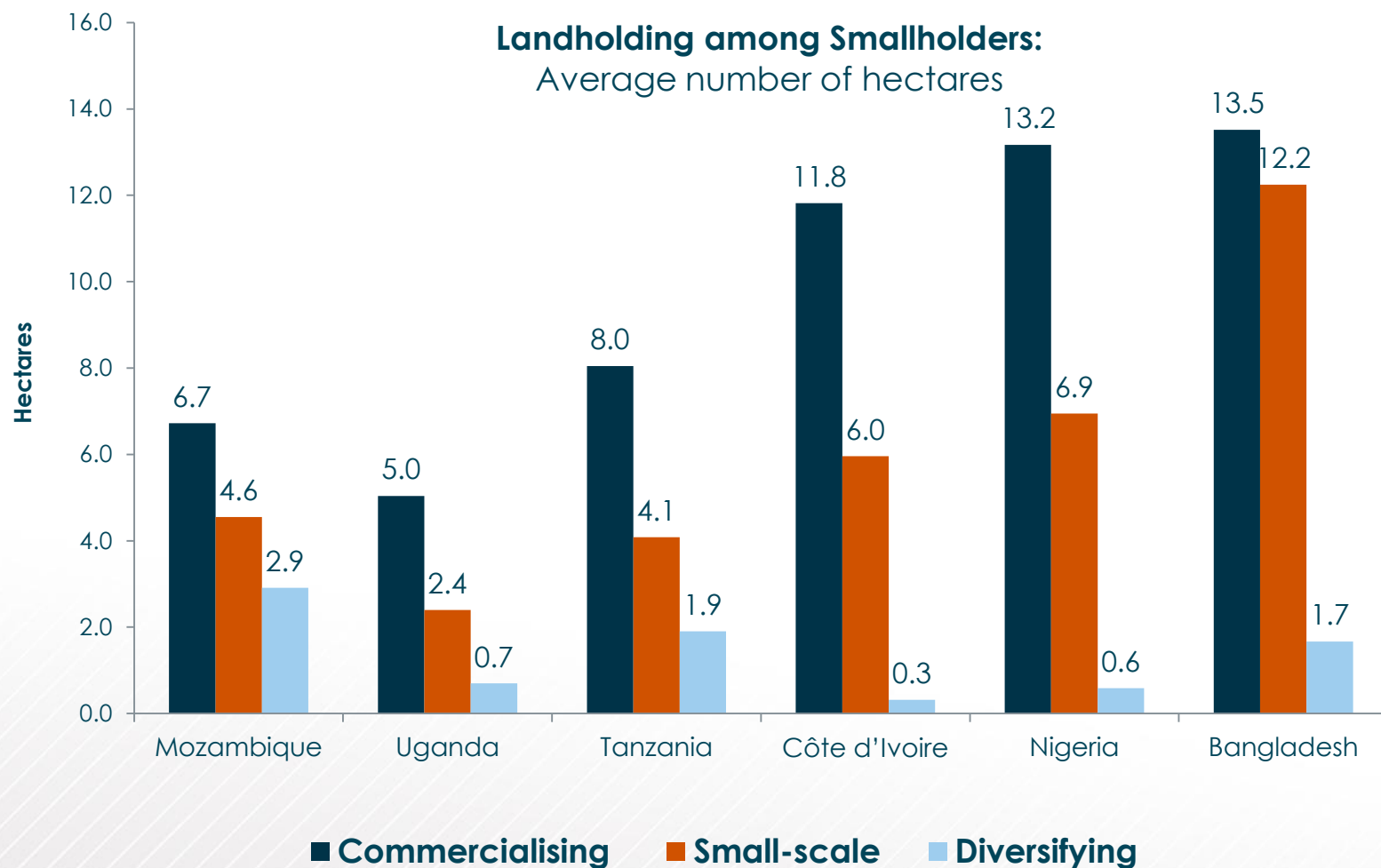
# Cleavages between the segments: Agricultural income

CGAP National Surveys of Smallholder Households



# Cleavages between the segments: Average landholding

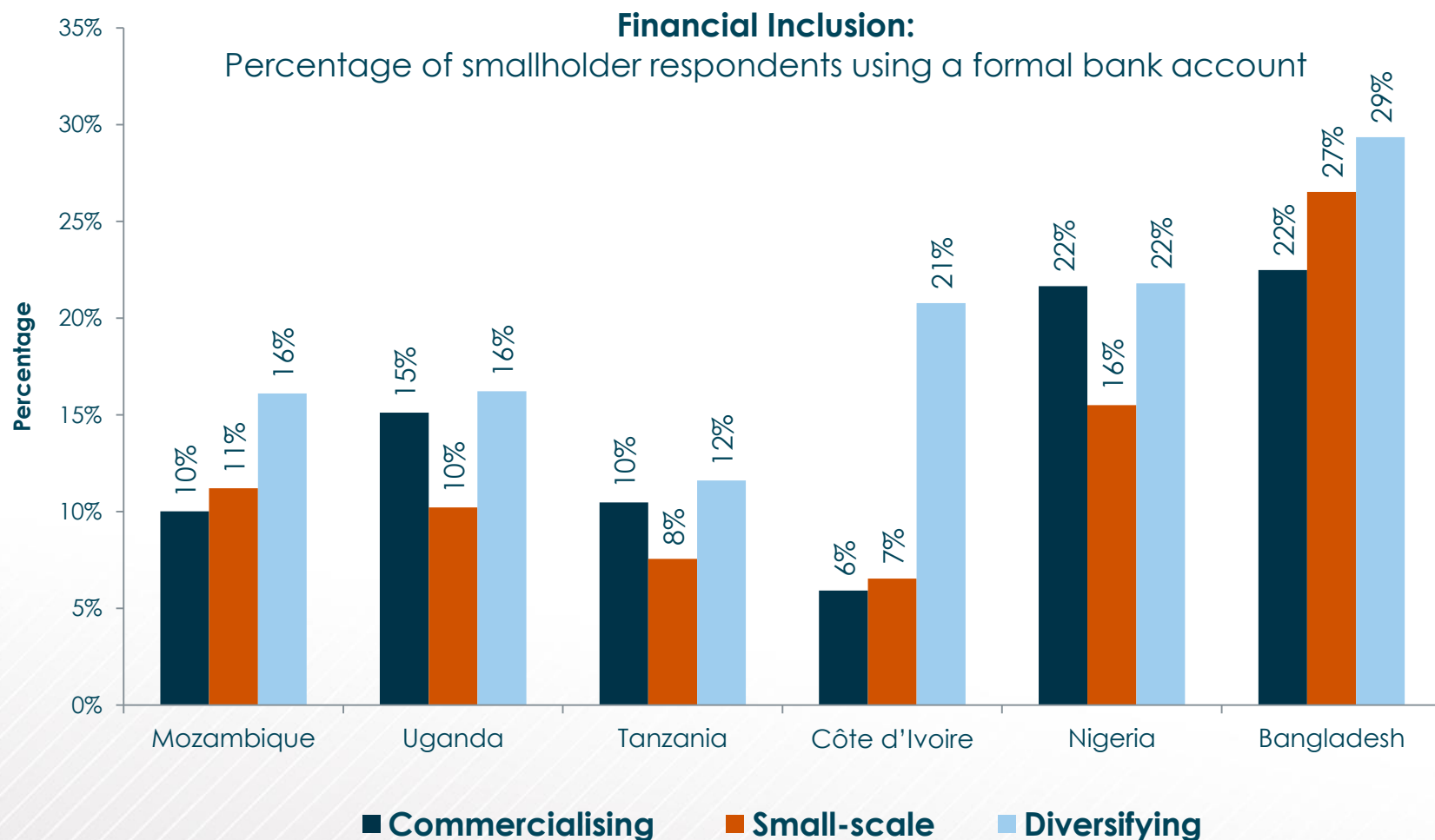
CGAP National Surveys of Smallholder Households





# Cleavages between the segments: Formal accounts

CGAP National Surveys of Smallholder Households





**What does this mean for providers?**



# Implications for providers by segment

CGAP National Survey of Smallholder Households

## Farming for sustenance

- Graduation and other approaches to build livelihoods and resilience
- Savings products for shocks and consumption smoothing
- Government led social protection programs

## Battling the elements

- Need for risk mitigation strategies, e.g. improved seeds, ag methods
- Financial solutions for family needs: e.g. health, education, energy
- Better access to informal financial tools

## Diversified and pragmatic

- Financial tools to save, purchase over time, and possibly borrow
- Financial solutions bundled with non-financial services, e.g. information, extension
- Aggregation services

## Options for growth

- Formalized connections value chains to increase access to financial services
- Post-harvest storage and financing solutions

## Strategic agricultural entrepreneurship

- Digitized links to value chains
- Relationships that build credit and facilitate access to formal FSPs
- Credit for investments in assets to increase productivity



# RESOURCES



Customer Segmentation: [Toolkit](#)

Digitizing Value Chain Finance for Smallholder Farmers: [Paper](#)

Financial Diaries with Smallholder Families

- [Executive summary](#)
- [Full paper](#)
- Mozambique: [Data](#)
- Tanzania : [Data](#)
- Pakistan: [Data](#)

National Surveys and Segmentations of Smallholder Households

- Mozambique: [Paper](#) | [Data](#)
- Uganda: [Paper](#) | [Data](#)
- Tanzania: [Paper](#) | [Data](#)
- Bangladesh: [Paper](#) | [Data](#)
- Cote d'Ivoire: [Paper](#) | [Data](#)
- Nigeria: *Forthcoming*



# THANK YOU! QUESTIONS?

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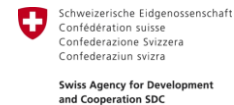
[www.CGAP.org](http://www.CGAP.org)







Advancing financial inclusion to improve the lives of the poor



[www.cgap.org](http://www.cgap.org)



## ADDITIONAL INFORMATION



# National surveys and segmentations of smallholder households

## Methodology and sample design

### Example: Tanzania

- Nationally representative survey of 3,000 smallholder households from February to March 2016
- Results at national level and for regions (groups of zones in Tanzania)
- Sample designed by InterMedia in collaboration with the Tanzania National Bureau of Statistics



### Three-stage sampling Stratified multi-stage design

#### Enumeration areas

- 2012 National population census
- 212 enumeration areas randomly selected
- Stratified by urban and rural

#### Households

- Household listing in all selected EAs
- Identify relevant smallholder households according to study parameters
- Provide frame for the second stage of sampling
- Second sampling stage: 17 smallholder households selected in each EA

#### Household members

- All members of household that participate in agriculture and income activities
- and -
- Randomly selected household member



# National surveys and segmentations of smallholder households

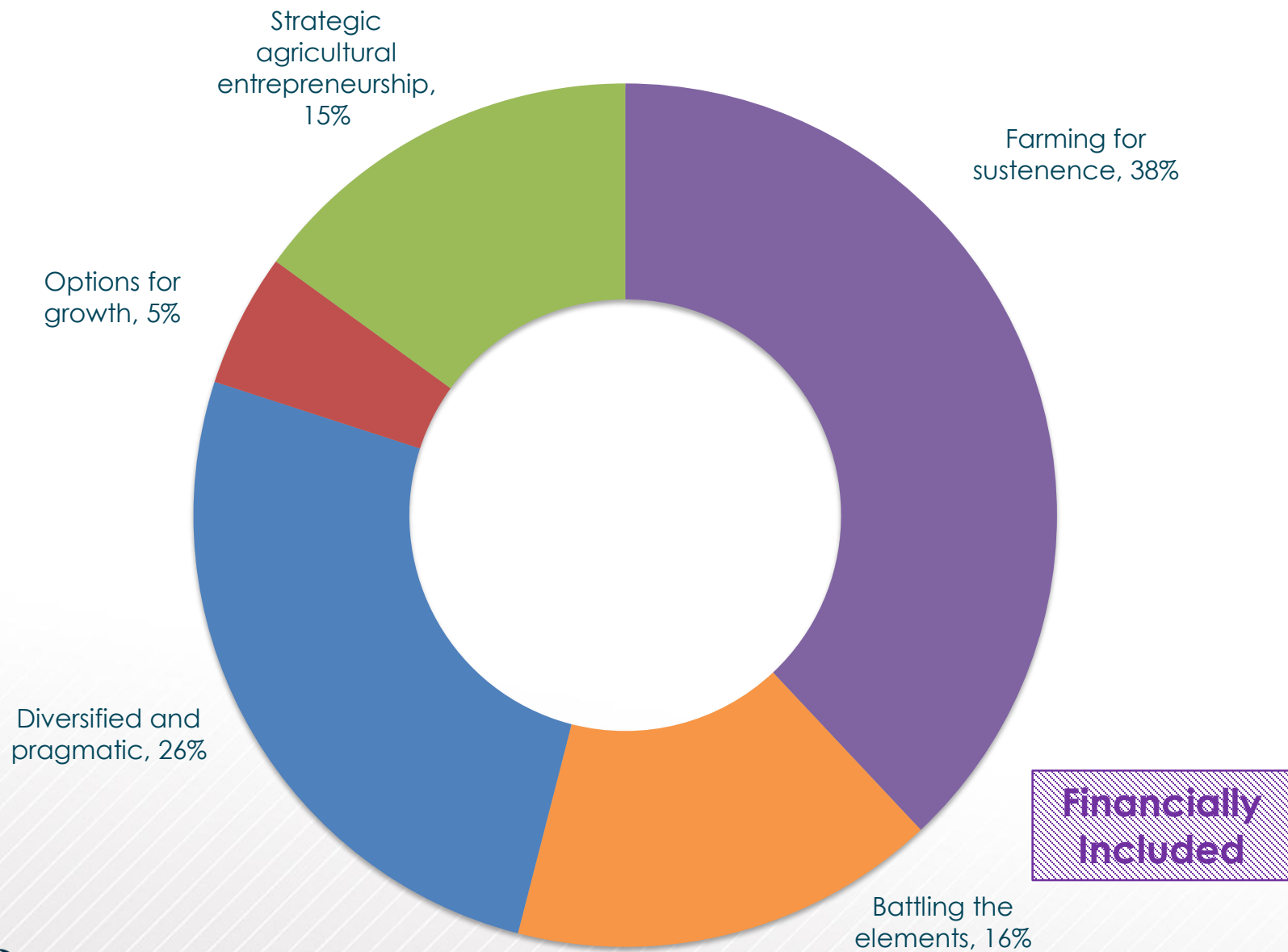
*Identification of relevant smallholder households for sample*

## Listing criteria for the national survey of smallholder households

Land and livestock measures		Measures of self-perception
Household with up to: <ul style="list-style-type: none"><li>• 5 hectares of land</li></ul>	AND	Agriculture provides a meaningful contribution to the household: <ul style="list-style-type: none"><li>• Livelihood,</li><li>• Income, or</li><li>• Consumption</li></ul>
OR		
<ul style="list-style-type: none"><li>• 50 heads of cattle;</li><li>• 100 goats, sheep, and pigs, or</li><li>• 1,000 chickens</li></ul>		

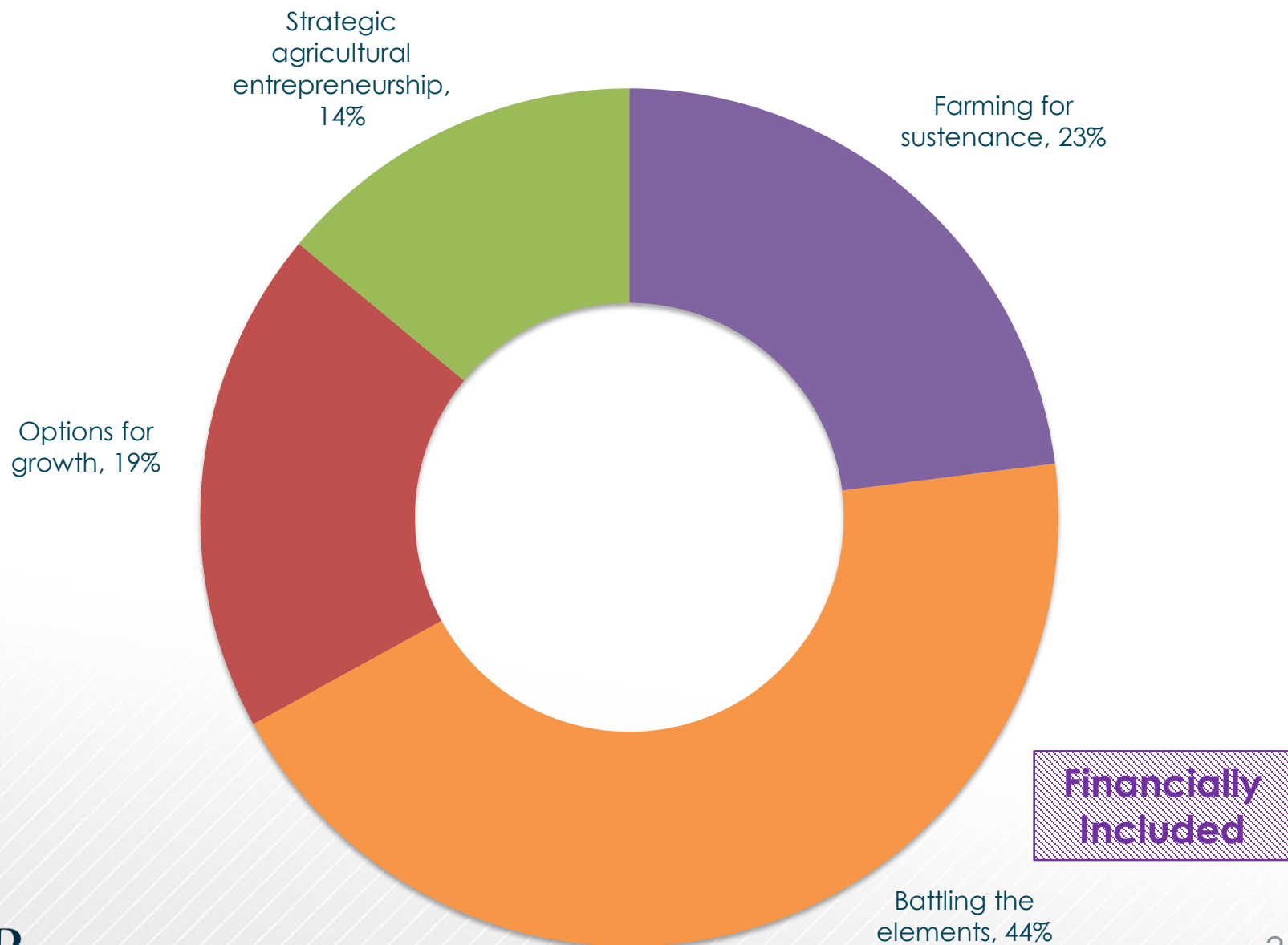
# Five segments of smallholder households: Cote d'Ivoire

CGAP National Surveys of Smallholder Households



# Five segments of smallholder households: **Nigeria**

CGAP National Surveys of Smallholder Households





# Five segments of smallholder households: **Bangladesh**

CGAP National Surveys of Smallholder Households

