## What are Agricultural Subsidies Doing for Smallholder Agriculture in Zambia?

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#### **Evidence-Based Policy-Making**

"Evidence-based policy helps people make well-informed decisions about policies, programmes and projects by putting the best available evidence from research at the heart of policy development and implementation." (Davies, P.T., 1999)

#### **Presentation Outline**

Smallholder agriculture in Zambia:

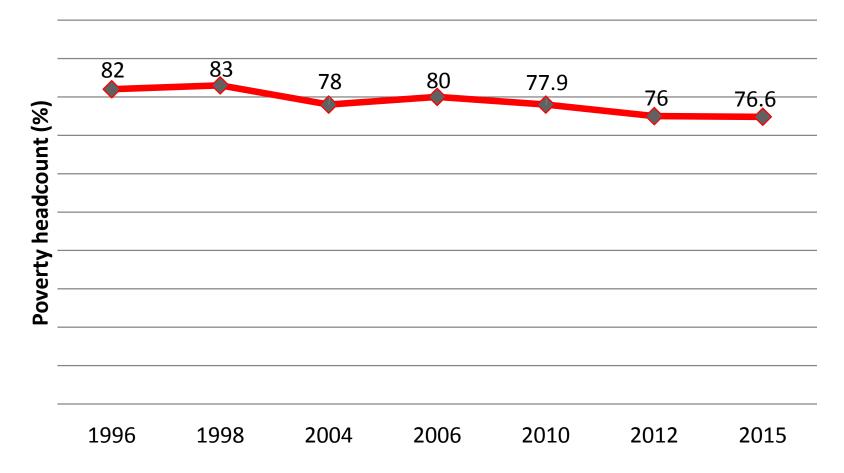
Context

Agricultural Subsidies in Zambia Facts About Subsidies: Research Evidence

Policy Options

1. Smallholder Agriculture in Zambia: Context

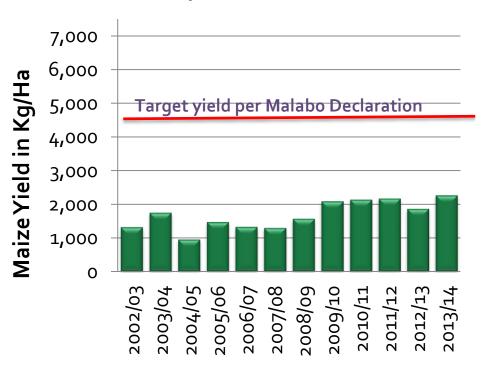
# High Rural Poverty Rates (National level)



Source: GRZ's Central Statistical Office and RALS 2012 and 2015

### Persistently low productivity

#### Maize yields



#### **Production Year**

Sources: MAL/CSO Crop Forecast Surveys, 2006/07 - 2013/14

#### Groundnuts

- Yield: below 0.5 MT/ha
- Potential yield: 2 MT/ha
- Soyabeans
  - Yield: below 1 MT/ha
  - Potential yield: 2 MT/ha
- Cotton
  - Yield: 600 900 kg/ha
  - Potential yield: >1500kg/ha

#### Land constraints

## Many smallholder households are <u>land constrained</u>

- More than 25% have less than 1 ha of land
- 58% indicate there is no unallocated land in village

### 2. Agricultural Subsidies in Zambia

#### Farmer Input Support Programme (FISP)

- 1<sup>st</sup> Wave Fertiliser Support Programme (02/03 – 08/09)
  - Obj: to improve input access, private sector participation, national food security
  - Fertiliser and hybrid seed, 1ha pack
  - Subsidy rate (50%), 60% in 2006/7
  - 9 11% of Zambian smallholders benefitted each year
- 2<sup>nd</sup> Wave FISP (09/10 14/15)
  - Obj. remained the same

- Fertiliser and hybrid seed, half hectare pack
- Subsidy rate (50%), 75% in 2010/11 for fertiliser only
- 30% of smallholders benefitted
- 3<sup>rd</sup> Wave FISP + e-voucher (15/16 date)
  - Emphasis placed on targeting and diversification
  - **7** 13 districts, 241,000 farmers
  - Electronic VISA card platform
  - More inputs
  - MAL, ZNFU and Agrodealers



### Food Security Pack (FSP)

- 1<sup>st</sup> wave (2000/01 09/10):
  - Targeted towards "vulnerable but viable" HHs
  - Ministry of Community Development, Mother and Child Health (MCDMCH)
  - Intended target 20% of "vulnerable but viable" HHs → 200,000 HHs
  - Cereal, legume, Cassava cuttings or sweet potato vines, fertilizer and lime

- 2<sup>nd</sup> wave (09/10 date)
  - Expanded FSP
  - E-voucher system intended to improve the traditional FSP
  - Minimum of 27,000 HHs
  - Strengthened the role of agro dealers



### Food Reserve Agency

- Established in 1996 following enactment of Food Reserve Act of 1995
- To establish and administer a national food reserve
- **7** 1<sup>st</sup> Wave (96/97 − 97/98)
  - Purchased maize through private traders at market price
  - Minimal market share
- 2<sup>nd</sup> Wave (98/99 01/02)
  - No FRA Purchases

- **3** 3<sup>rd</sup> Wave (02/03 − 04/05)
  - Direct purchase from smallholders
  - Market share increases but not a dominant player
- **7** 4<sup>th</sup> Wave (05/06 − date)
  - Act amended to give FRA maize marketing mandate
  - Dominant player



"Securing National Food Reserve & Taking Wealth to Rural Zambia"

3. Facts About Subsidies: Research Evidence

#### Zambia's Economic Achievements

- Zambia
  - **♂** GDP growing at 6% per annum
  - Agricultural growth rate at 7% above 6%CAADP Goal

BUT, Rural poverty has remained high!!!!!



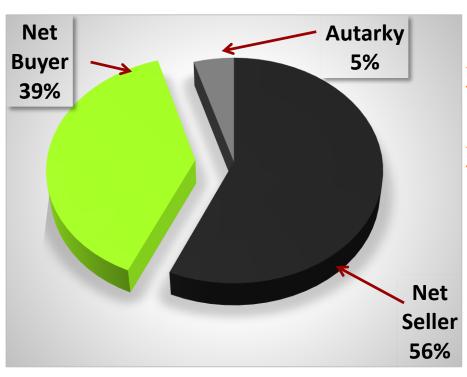
#### Fact #1 – Late Delivery of Inputs

- FISP recipients reported to have received fertilizer late:
  - 22% in 2010/11 (RALS 2012)
  - □ 35% in 2013/14 (RALS 2015)
- Late receipt of inputs was associated with:
  - Reduction in input use efficiency by 4.2%
  - Yield losses → reduction in national maize output by 85,000MT
  - ☐ Farm-level income losses
- HH and individual characteristics have influence on timely receipt of fertilizer
  - Landholding size, value of assets, kinship relations

# Fact # 2 -FISP is benefiting mostly the larger and relatively already well off HHs

Total area cultivated	Number of farms	% of farms	Poverty Rate (%)	% of farmers receiving FISP fertilizer	kg of FISP fertilizer received per farm household
	(A)	(B)	(C)	(D)	(E)
o-o.99 ha	515,415	34.1	83	18	28.7
1-1.99 ha	503,656	33.3	80	39	83.24
2-4.99 ha	408,169	27.0	68	50	143.3
5-9.99 ha	70,822	4.7	35	61	229.17
10-20 ha	14,316	0.9	25	50	227.54
Total Social Protection Week Seminar	1,512,378	100.0	75	36	89.07

#### Fact # 3 – Rural farm HHs are maize net buyers



- Nearly 39% of rural farm HHs are net buyers of maize
- Net Buyers Negatively affected by high FRA maize prices

Source: RALS 2012

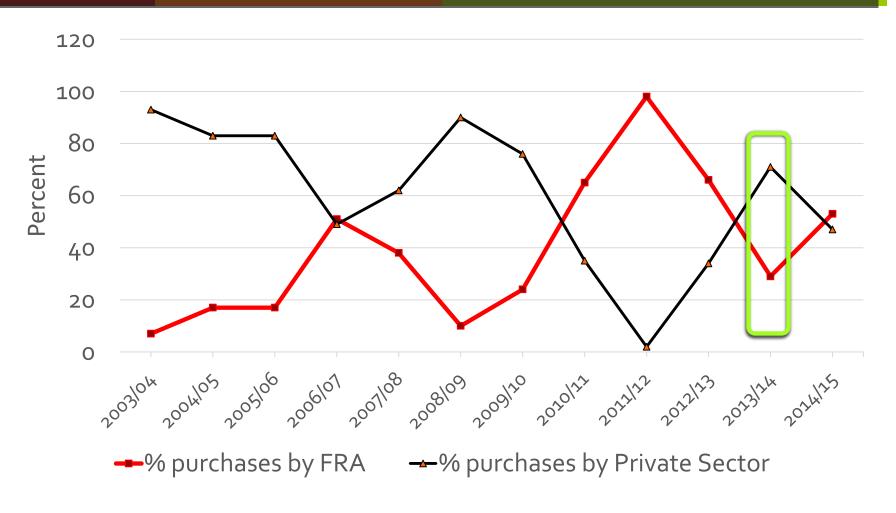
# Fact # 4: Highly concentrated patterns of maize surplus production, Zambia

	House	holds	Land cultivated	Maize Sold
	Number	Percent	Hectare	50kg Bags
Maize sellers	690,885	52.5	2.56	60
Top 50% of maize sales	59,961	4.6	6.87	345
Rest of all other maize sales	630.924	47.9	2.15	33
Non maize sellers	625,562	47.5	1.38	0

**Social Protection Week Seminar** 

Source: RALS 2015

# Fact #5 -Excessive FRA participation in the maize market reduces private sector participation



### Fact# 6: Maize centric policy environment

- Policies are oriented towards achieving mainly maize self-sufficiency
  - 57% of 2016 agricultural budgetary allocation to maize subsidies
  - **7** 89.4% farmers grow maize
  - Area under maize 54%



### What are the policy options?

- Input markets
  - Address the bottlenecks of the e-voucher
  - Lessons from FAO
- Output markets
  - Enhancing the role of the private sector
- Vulnerable HHs
  - Improve effectiveness of social protection initiatives

Source: RALS 2015

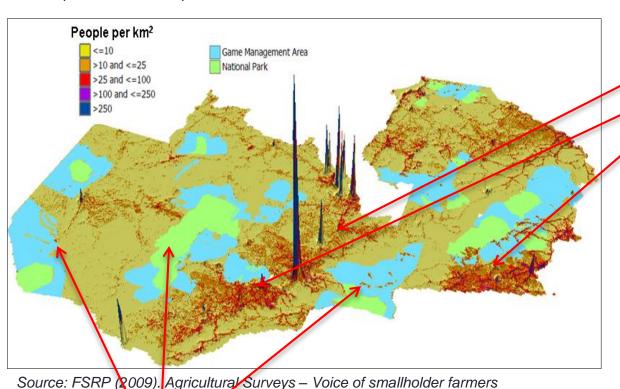
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# Why are Zambia Farmers land constrained?

Population Density and Distribution in Zambia, 2007



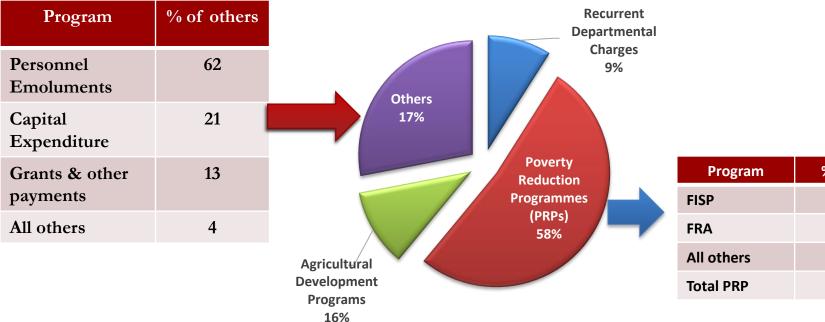
Settlements concentrated on areas with infrastructure

Hence, the land constraints in a land-abundant country is not a paradox

Considerable land is covered by water, national parks, GMA

## 2015 Zambia Agriculture **Budget Allocation**

- FRA and FISP taking too much
- Staff receive salaries but delayed release of operational funds



Program	% of PRPs		
FISP	56		
FRA	42		
All others	2		
Total PRP	100		