











Consumption Patterns and Welfare Implications

of the Maize Policy in Swaziland

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Background

→ Consumption behavior is important in understanding household response to **price** and **income** changes

 \rightarrow This is instrumental for designing effective policies aimed at improving food security

ightarrow There is limited empirical evidence on food consumption patterns in Swaziland

Major objective: To analyse the food consumption patterns and

 \rightarrow An accurate assessment of the effects of policies on household welfare requires estimation of price and income

effects

→ This is important as the domestic food policy has been linked to high food prices, especially for maize

household welfare effects of maize policy changes in Swaziland

Methodological approach

Data and poverty status

- Data collected from 278 households in 2015
- Dertemined a poverty line through the Cost-of-Basic-Needs Approach
- Foster-Greer-Thorbecke poverty index used to decompose households into poor and non-poor through the poverty line

Demand analysis

- Derivation of price and expenditure elasticities
- A **QUAIDS** model controlled for zero expenditure and endogeneity employed

Welfare estimation

- The *Compensating Variation approach* was used to compute distributional welfare effects
- Both demand and supply responses taken into account (behavioral responses)
- Price changes were simulated from a partial equilibrium model

Findings



2. Household demand elasticities

	Expenditure elasticities		Price elasticities	
Food Items	Poor	Non-poor	Poor	Non-poor
Maize	0.856***	0.814***	-0.842***	-0.736***
Other cereals	1.088***	0.988***	-0.994***	-0.867***
Sugar	0.951***	0.923***	-0.898***	-0.885***
Meat	1.560***	1.243***	-1.213***	-1.108***
Dairy	1.150***	1.101***	-1.005***	-0.937***
Vegs & fruits	0.934***	0.862***	-0.979***	-0.959***
Pulses	0.883***	0.926***	-0.825***	-0.935***

3. Distributional welfare effects (% of food expenditure)

Policy scenario	Short-run effects	with behavioral responses
Partial deregulation		
Poor	5.2	3.4
Non-poor	3.4	2.5
Subsidy		
Poor	3.6	3.1
Non-poor	2.4	2.0

Source: Own computations.

1. Maize accounts for a siginificant share of household food budget.

2. Meat, dairy and other cereals for poor are luxuries as indicated by expenditure elasticities greater than one.

Note: *** refers to statistical significance at 1% level. Source: Own computations.

Own-price elasticities for meat, dairy are greater than one and are close to one for other cereals, vegs & fruits, indicating larger demand responses to food price changes.

Poor households are more responsive to price and expenditure changes.

3. Households gain welfare from policies associated with maize price decline, with the welfare gains more pronounced for poor households.

Conclusions

→ Raising income can be effective in improving consumption patterns in Swaziland as expenditure elasticities are larger than own-price

→ Policies should focus more on encouraging production and diversification of production activities to reduce reliance on market purchased food and improve household income