

Characterisation of Fresh Produce City Supply: The Case of Lusaka in Zambia

By Munguzwe Hichaambwa

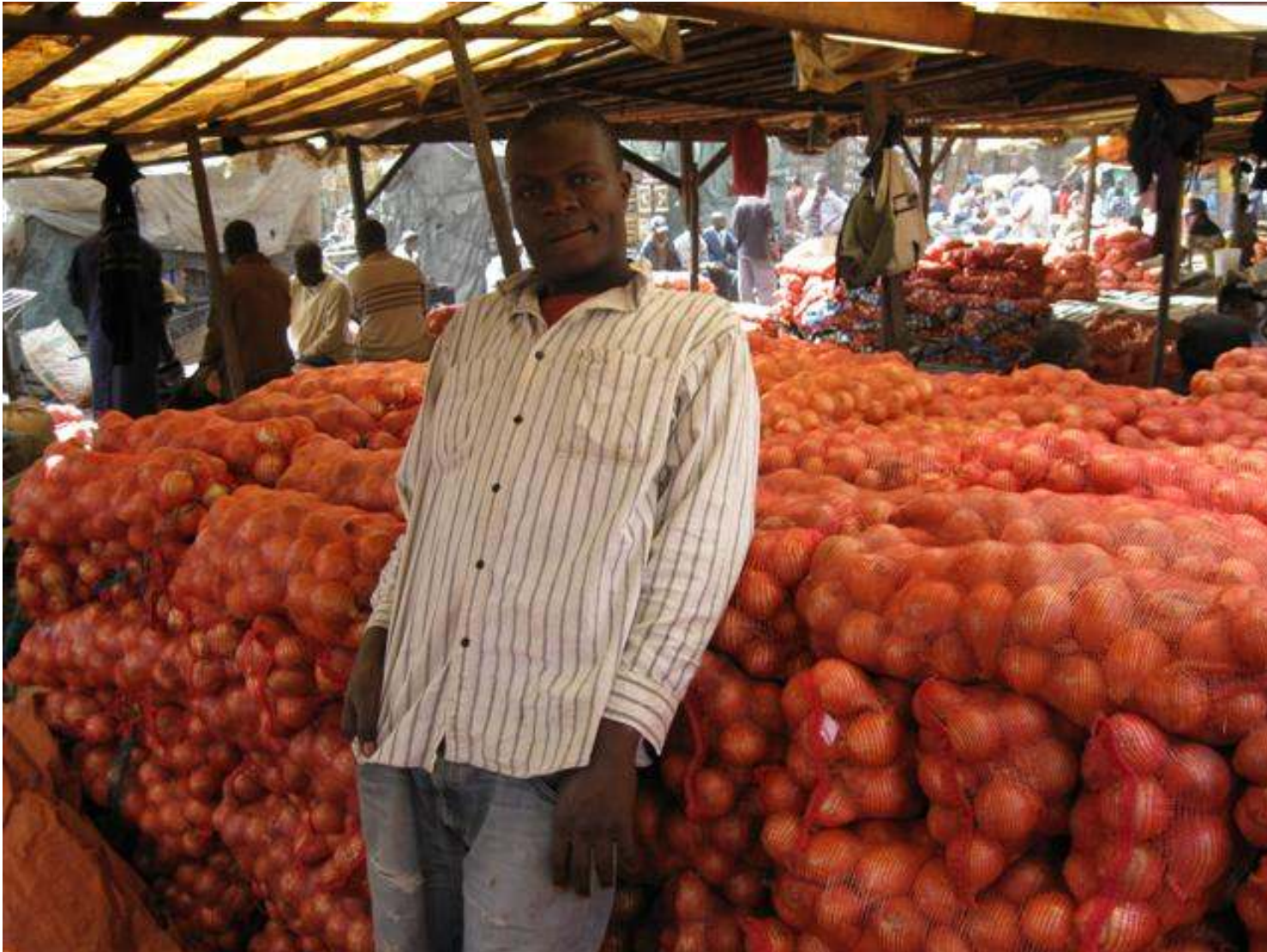
**Indaba Agricultural Policy Research Institute (IAPRI), *Formerly*
Food Security Research Project (FSRP)**

**Presented at the Workshop on Methodology for Fruit and
Vegetable City Supply in East and Southern Africa on 5-6
December 2011, in Nairobi Kenya**

Presentation outline

1. Lusaka households fresh produce budget shares
2. Lusaka households fresh produce market shares
3. Organisation of fresh produce supply markets
4. Current fresh produce supply characterisation work - Methodology
5. Examples of outputs from fresh produce supply characterisation work

1. Fresh produce budget shares



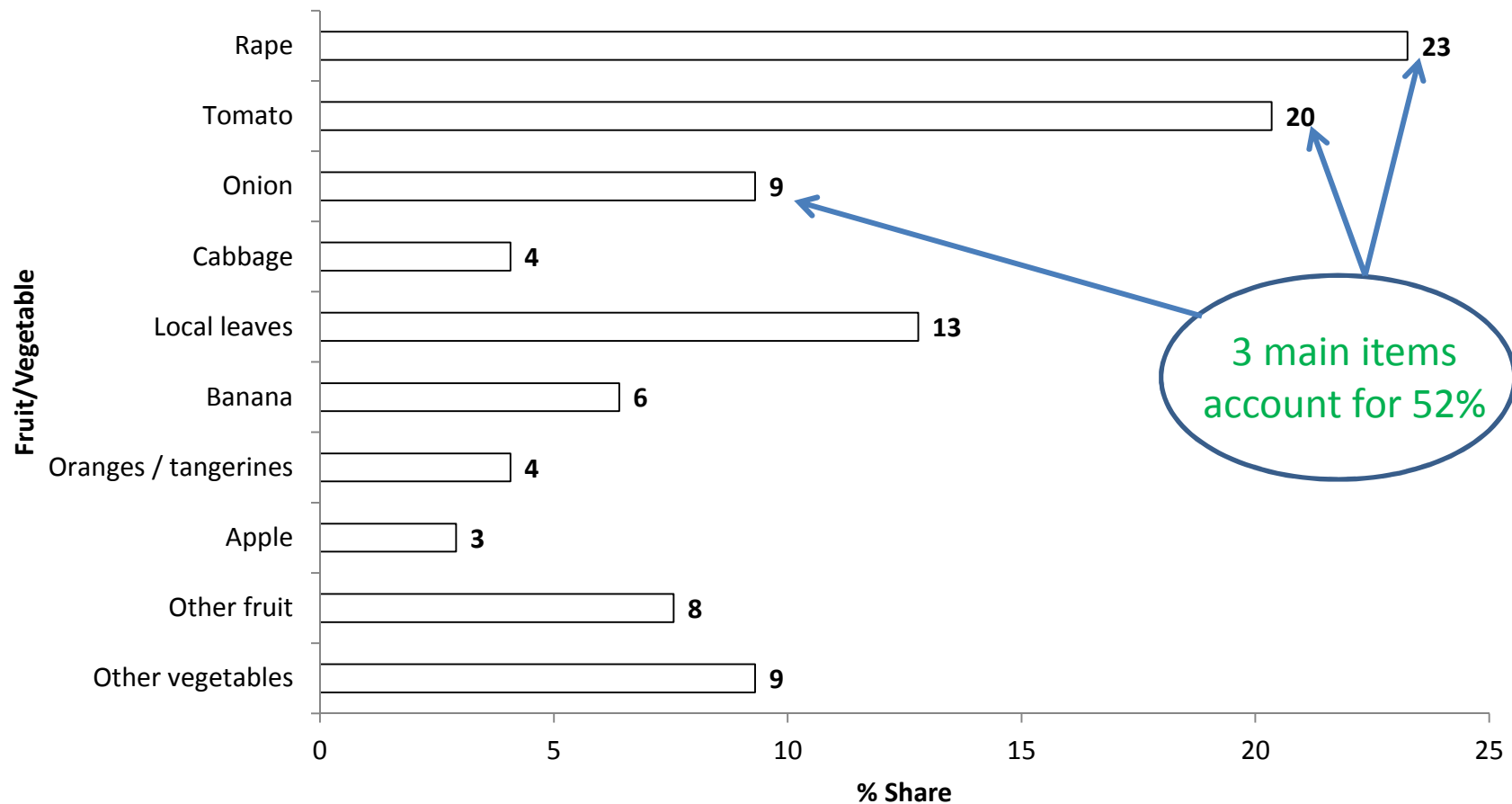
Lusaka household expenditure shares of food types per adult expenditure equivalent

Food Items	% of Food Expenditure
Cereals and staples	24.1
Dairy items	5.2
Meat & eggs	16.8
Fish	7.6
Vegetables	13.7
Fruits	3.6
Legumes	3.7
Sugar and oils	7.9
Other foods	4.7
Tobacco and alcohol	5.3
Food away from home	7.3
Total	100.0

Fruits & vegetables (17.3%)
only second to cereals/ staples

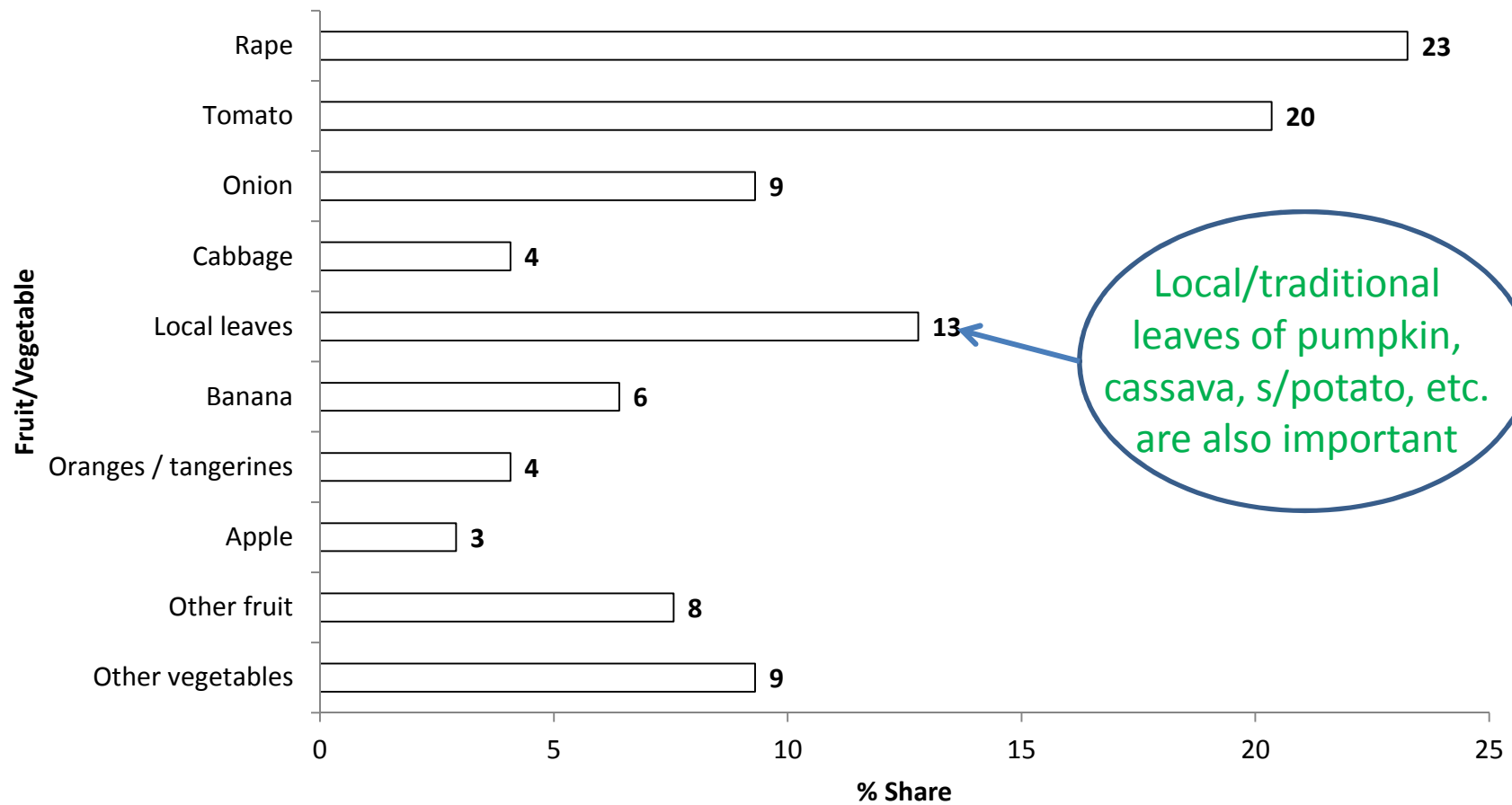
Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

Budget share (%) of Lusaka urban households' monthly expenditure on fresh produce



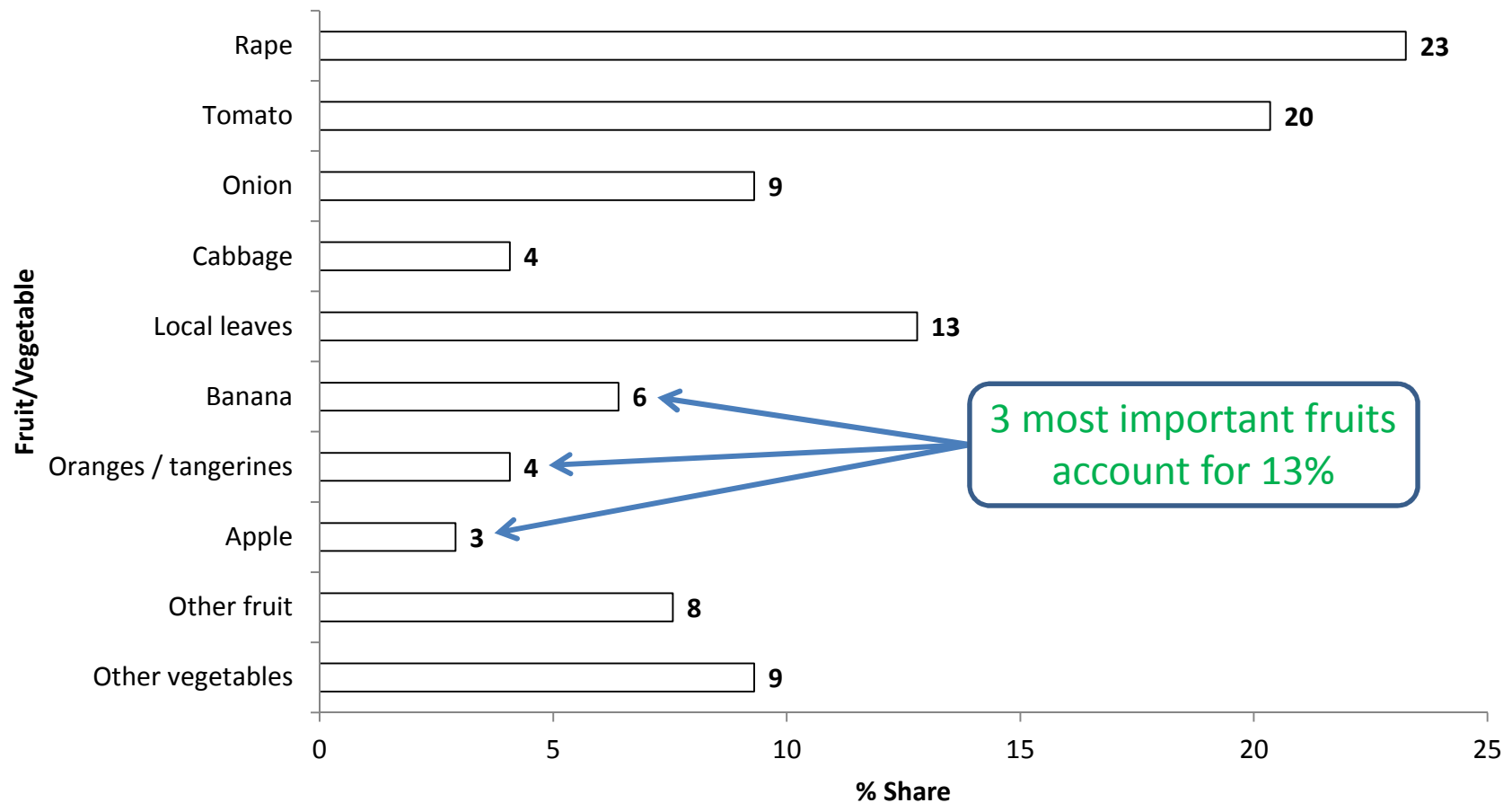
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2. Fresh produce market shares



Share of retail channels used for fresh produce purchases

Retail Channel	% Share
Market stand/stall	68.04
kaSector	26.58
Grocery shops	0.35
Mini-mart/small supermarket	0.49
Large supermarket, independent	0.24
Large supermarket, chain	2.46
Private household	1.82
Other	0.01
Total	100.00

The market and kaSector have the largest share (95%)

Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

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Includes mobile/street vendors, kashop or kiosk, katable/kantemba (rudimental make shift structures)

Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

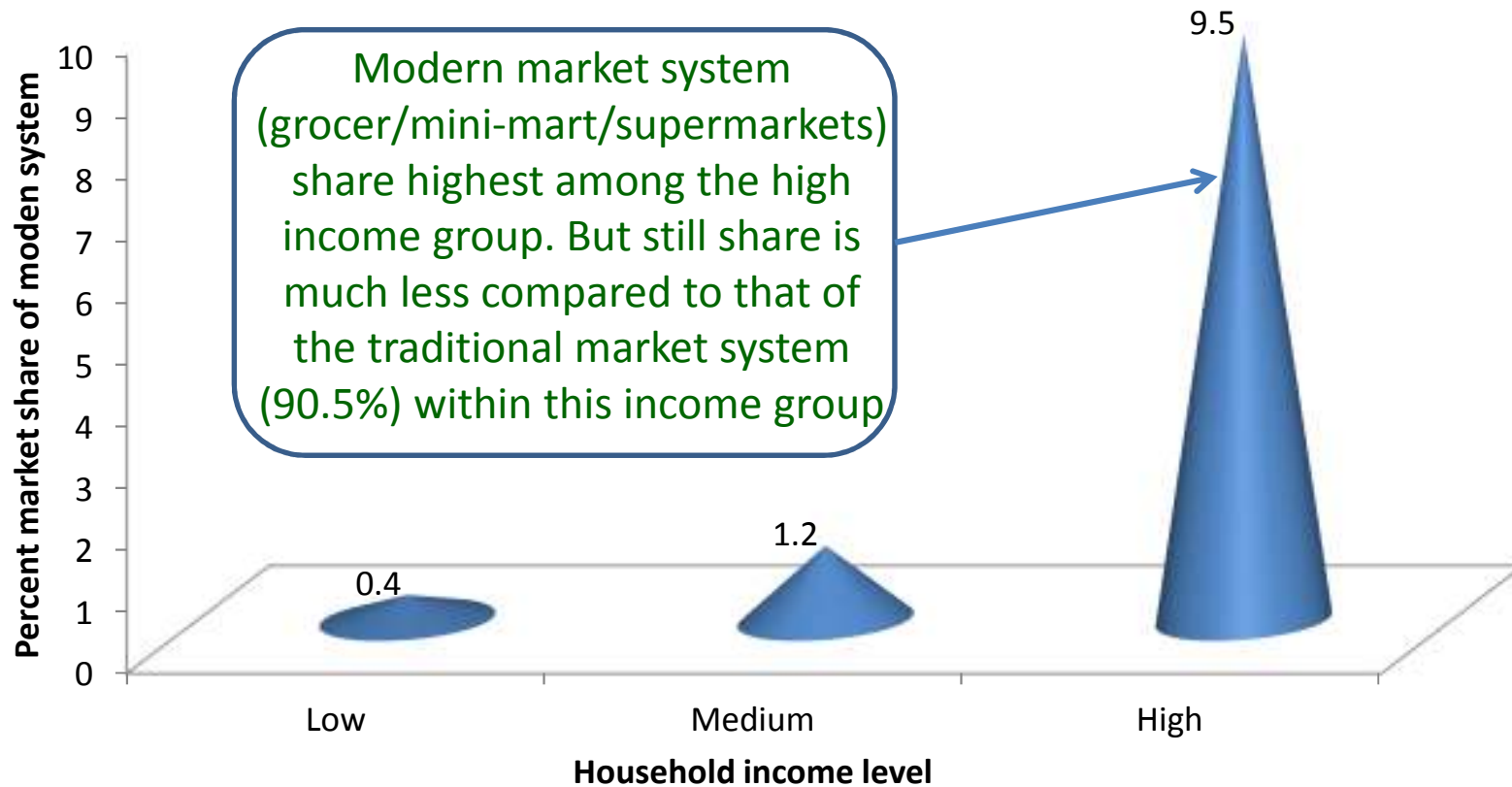
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Supermarkets or the modern market system accounts for <4%

Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

%Share of modern market system by household income level



Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

%Share of modern/formal market system of selected items

Item	% Share
Apples	25.2
Watermelons	14.3
Bananas	13.6
Green beans	10.6
Oranges/tangerines	7.1
Pumpkin leaves	4.1
Cabbage	2.7
Sweet potato leaves	2.6
Onion	2.4
Tomato	2.0
Rape	0.6

Apples have largest share and is largely imported from South Africa

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The fresh produce items with more than 10% share of modern market system are by and large fruits, except green beans

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Very small share for the main consumed items (tomato, rape & onion). Comparable to that of local/traditional leaves

Source: CSO/MAL/IAPRI Urban Consumption Survey, 2007/8

3. Organisation of supply markets



The traditional system

- The main wholesale market is Soweto supplying the bulk of fresh produce to mainly retail traditional markets & kaSector
- Two other smaller wholesale markets (Ngoma & Bauleni)
- Soweto, Ngoma & Bauleni also serve fresh produce retail functions as well
- In addition, there are about 17 retail markets located mostly in neighbourhoods within the city

The modern system

- Supermarket presence and share has increased since last survey (2007/8). In addition to Shoprite:
 - Spar has opened more outlets
 - Pick and Pay has so far opened 2 large stores in the city
- These have registered preferential suppliers
- Sometimes these suppliers select good quality produce from Soweto to supply the supermarkets

4. Current Supply characterisation work



At Wholesale market level (Soweto)

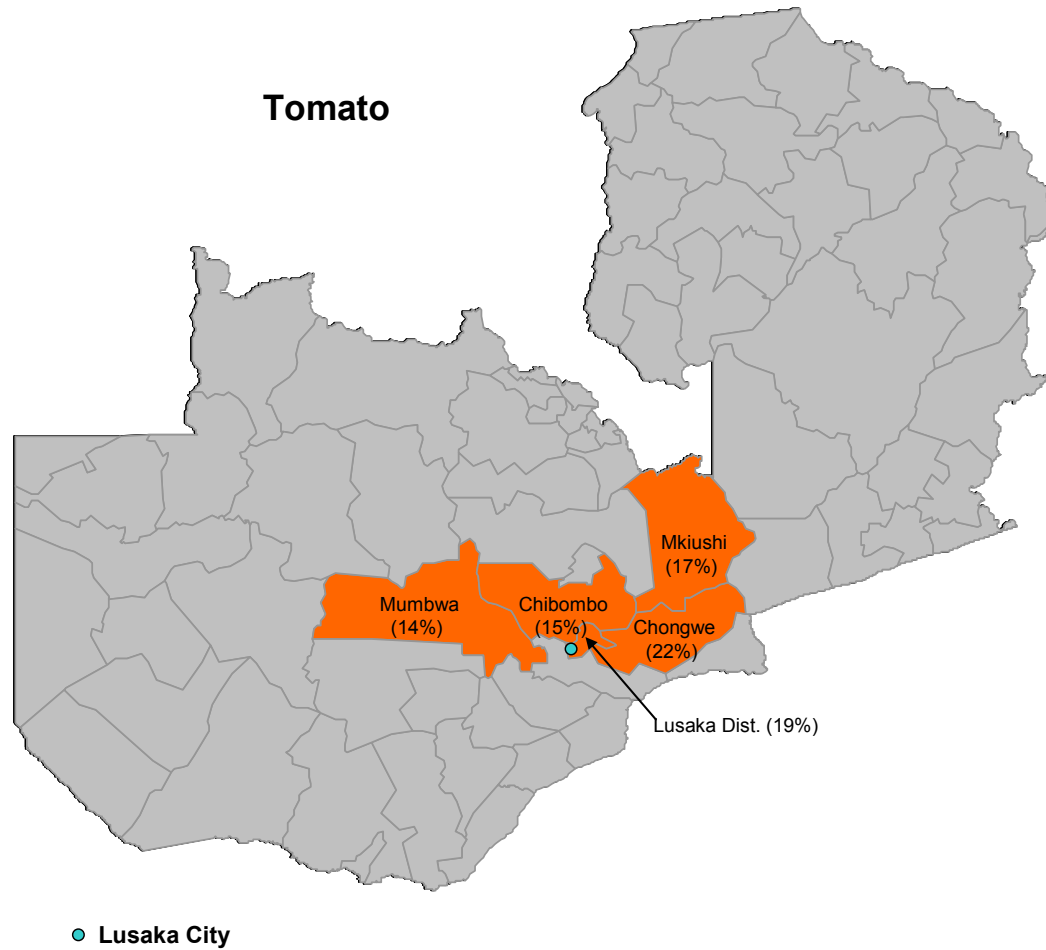
- Main objectives of the characterisation is understanding the structure & behaviour of fresh produce markets (tomato, rape & onion)
 - Tracking trade volume flows
 - Tracking both first sellers' (equivalent of wholesale) and retail prices
- For each lot of the product capture quantity, source (province, district, specific area or village) among others 3 days a week since January, 2007.
 - Have a SPSS trade flow database of 73,968 cases
 - Hourly first sellers prices database of 31,804 cases
- Also track retail prices at 1 retail market and 3 selected supermarkets (database has 20,909 cases to date)
- Employs 2 full time data collectors/entering

Retail markets mapping

- Sample of 10 traders of each product in all retail markets (except Soweto and City market)
- Use one page questionnaire capturing sources of produce sold at time of interview, during the hot-wet, hot-dry and cold-dry seasons
- Possible sources are Soweto, other wholesale markets, at farms or farmers delivering directly
- Specific areas of direct farm sources are captured
- Scores out of 10 are used to estimate proportion of produce from different sources and specific areas
- All traders in each market for each produce are counted for weighting purposes
- Captures produce not sourced through the main wholesale markets (Soweto)
- Conducted over a 3-5 days period and labour costs about US\$1,000 including data entry

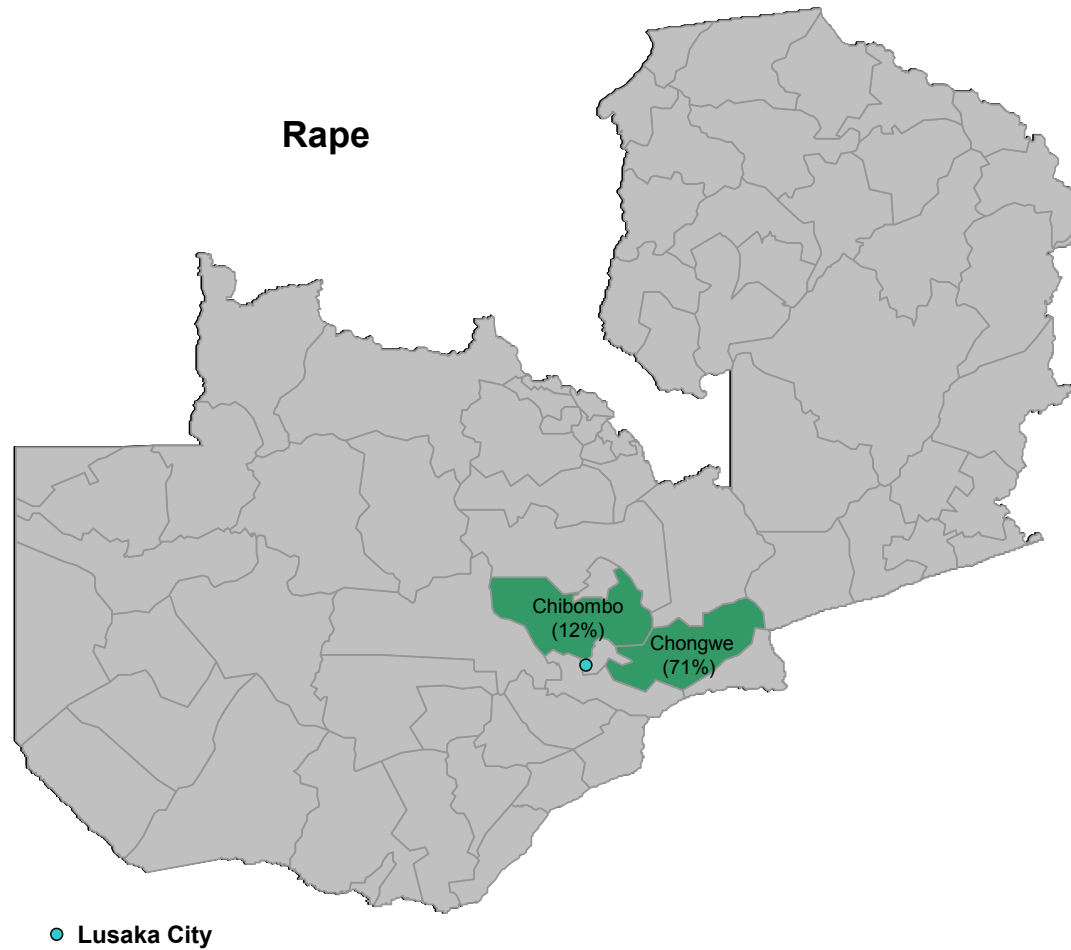
5. Sample characterisation:

(a) Market Sheds



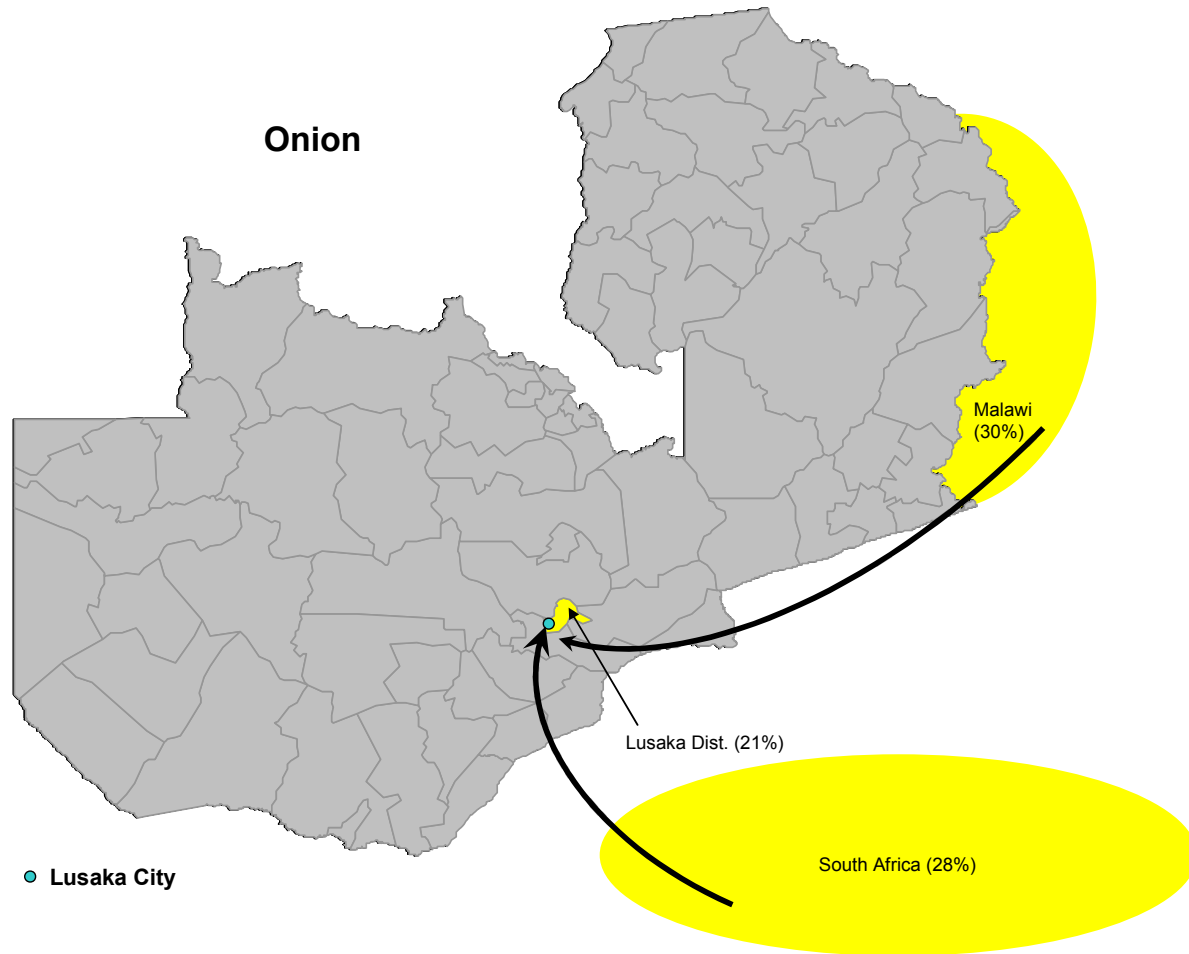
Source: Tschirley and Hichaambwa, 2010

Market Sheds (cont'd)



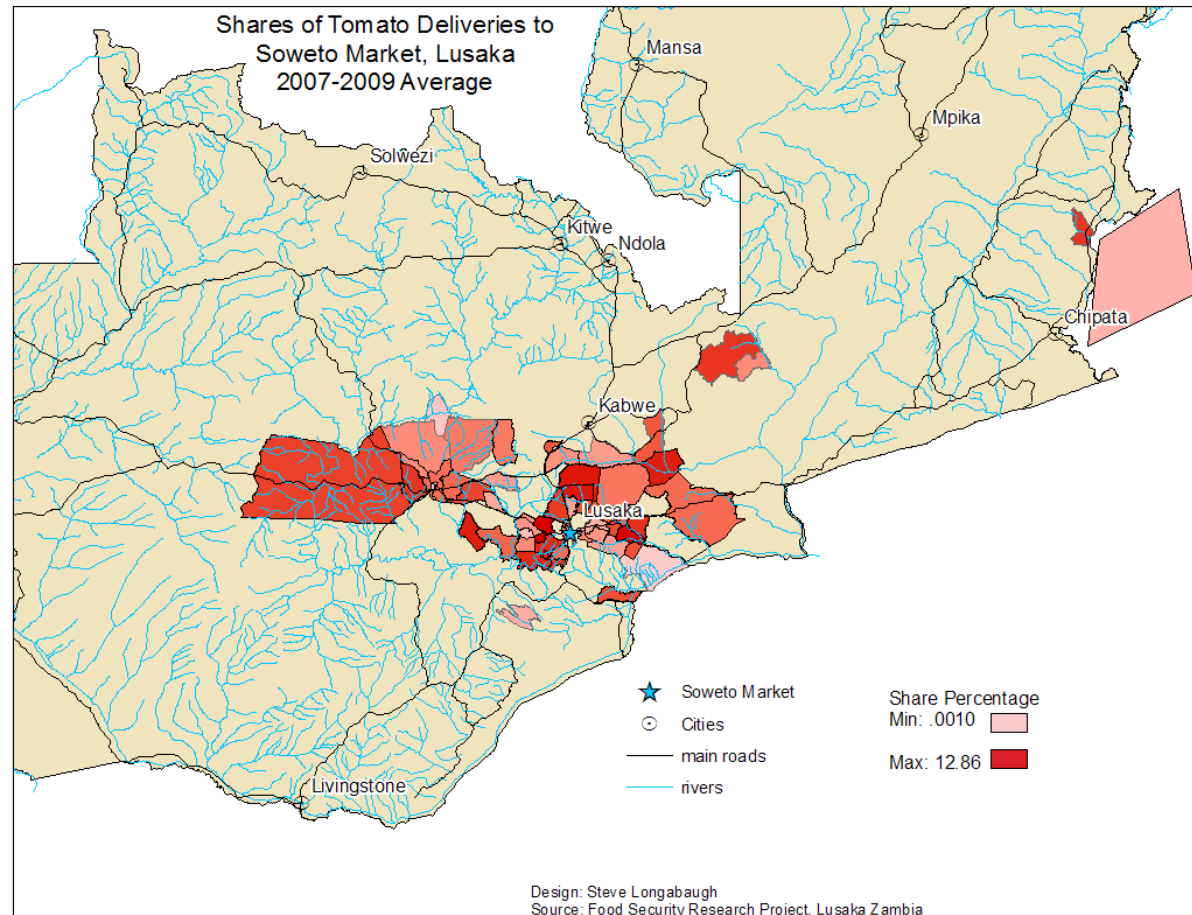
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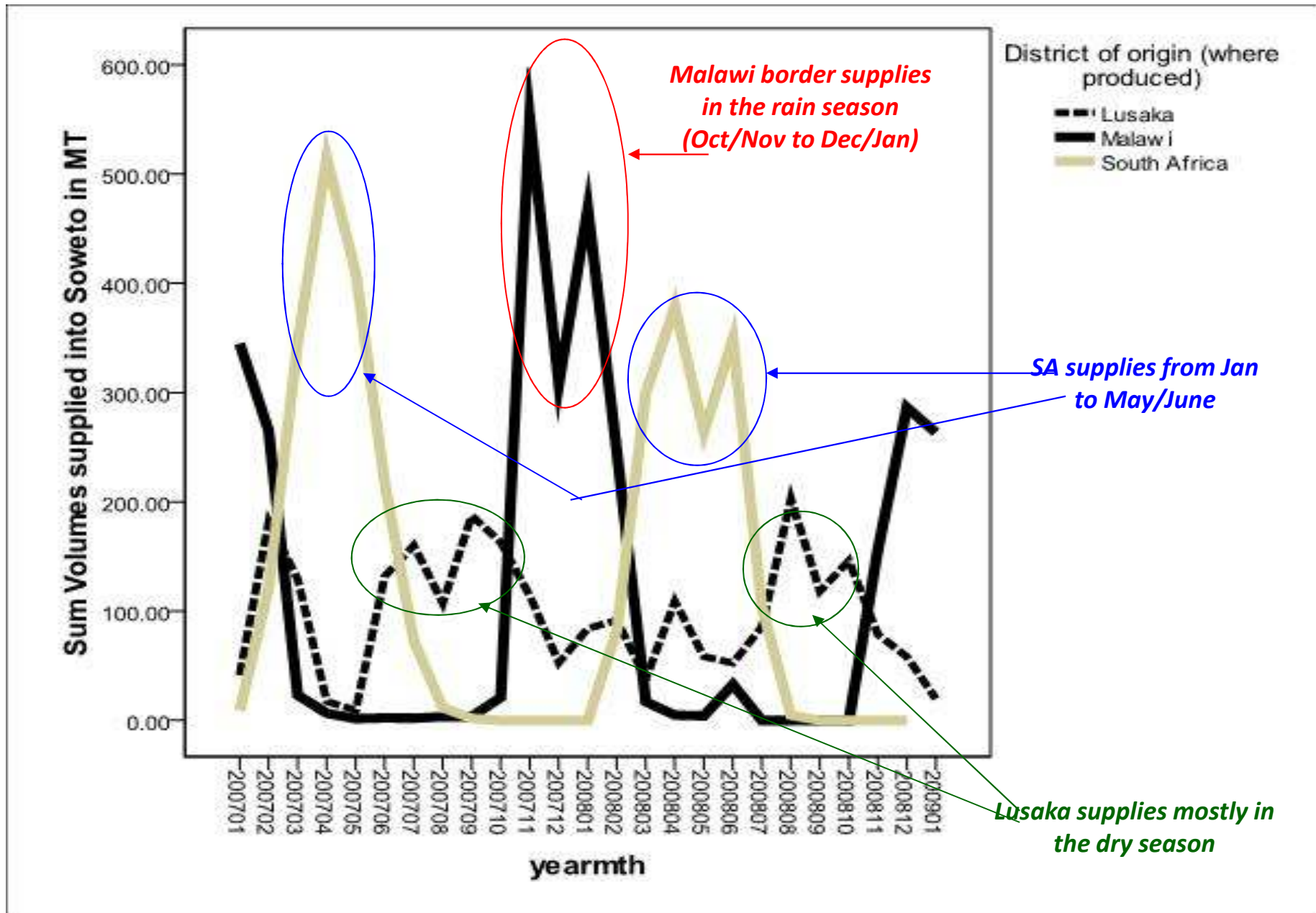


Source: Tschirley and Hichaambwa, 2010

(b) Supply by wards



(c) Seasonality of supply: e.g. onion from the 3 main supply districts





Thank You for Your Attention