

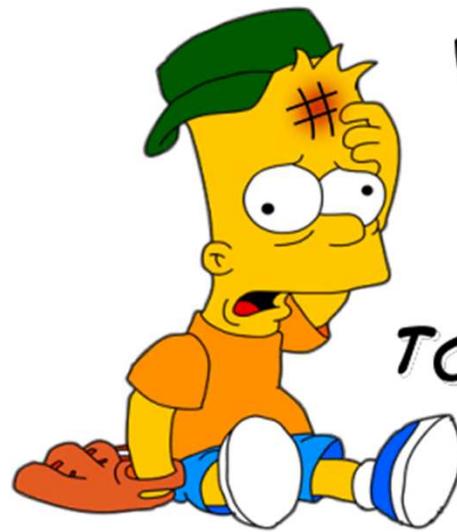
# USING POPULATION SURVEYS TO MEASURE AND MONITOR POVERTY : EYEWITNESS TESTIMONY

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APPLYING QUANTITATIVE ANALYSIS  
TO DEVELOPMENT ISSUES  
BIBLIOTHECA ALEXANDRINA  
(18-19 FEBRUARY 2018)

When you think about ending  
poverty.....



WHAT'S THE  
FIRST THING  
THAT COMES  
TO YOUR MIND?

**For many people, it is:**  
building schools and roads,  
developing effective safety  
net programs,  
improving health facilities,  
and so forth.....



## But

- How do we know where to build these roads and schools?
- How do we know where and which kinds of deprivation exist, in order to design safety net programs that actually work?
- How do we find out who needs health facilities?



# Objective

Provide a snapshot of:

- ▶ How HIECS and the Population Census produced by CAPAMS were used to improve our understanding about poverty related issues.

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Provide a snapshot of:

- ▶ How HIECS and the Population Census produced by CAPAMS were used to improve our understanding about poverty related issues.
- ▶ How this understanding helped the Egyptian policy makers to better design policies related to poverty during the last two decades

# Main Messages

- ▶ 1) The findings of studies using these datasets have better informed the public dialogue, and provided evidence-based justification of the needed policy changes.

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- ▶ 2) Without CAPMAS making these datasets accessible, and without software, like PovCal, PovMap, ADePT, etc., all these uses and their implications could not have been possible, and timely.

# Main Messages

- ▶ 1) The findings of studies using these datasets have better informed the public dialogue, and provided evidence-based justification of the needed policy changes.
- ▶ 2) Without CAPMAS making these datasets accessible, and without software, like PovCal, PovMap, ADePT, etc., all these uses and their implications could not have been possible, and timely.
- ▶ 3) There is still a lot to explore from these datasets.

# Outline

- 1) Measuring Poverty and Well-Being
- 2) *Who are the Poor?*
- 3) Distribution and Inequality
- 4) *Who benefit and How much of What?*

Targeting the poor

Diagnostic Tool

Policy Tool



The presentation is not about the evolution of poverty or inequality in Egypt, nor about the methodologies and methods of calculations  No focus or explanation of the numbers/evolution.

The presentation is about  
how CAPMAS surveys were used to help fighting poverty.

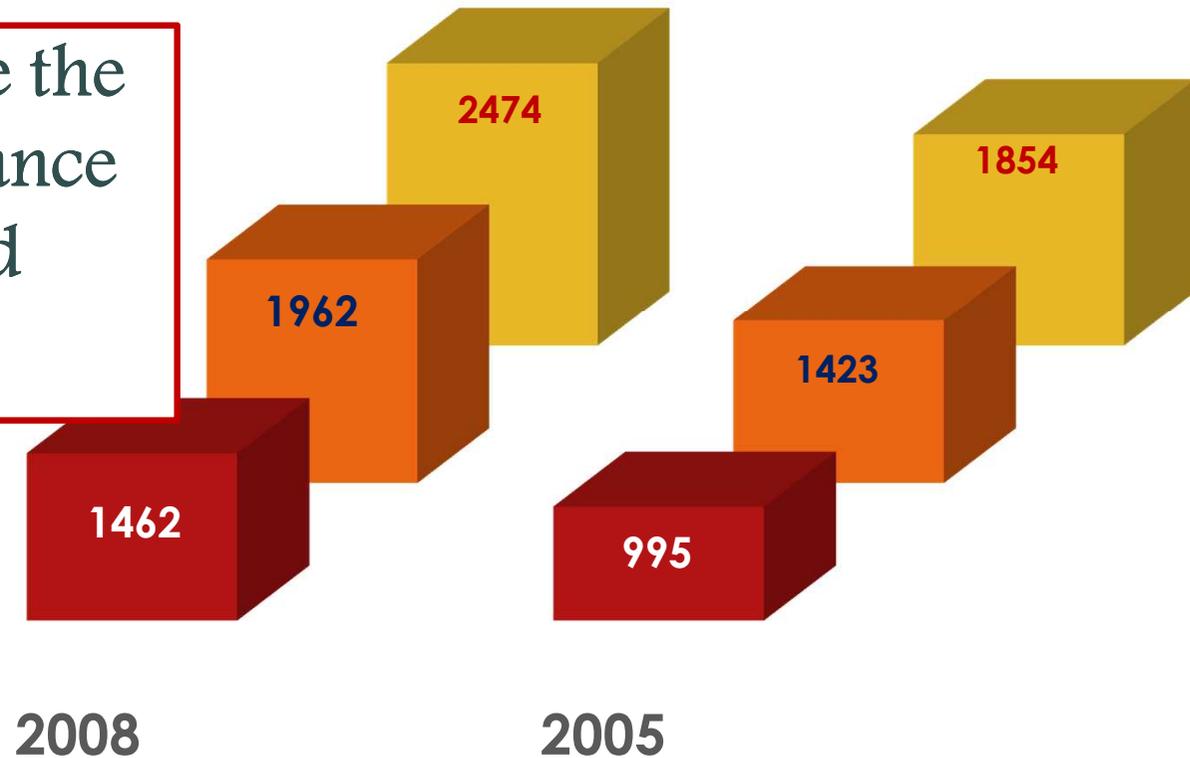
# Household surveys in Egypt

- ▶ Household Income, Expenditure and Consumption Survey (HIECS) (every five years between 2000 and 2008/2009, and every other year since then).
- ▶ Labor Market Survey (every quarter).
- ▶ Population Census (every decade).

# I- Measuring Poverty and Well-Being

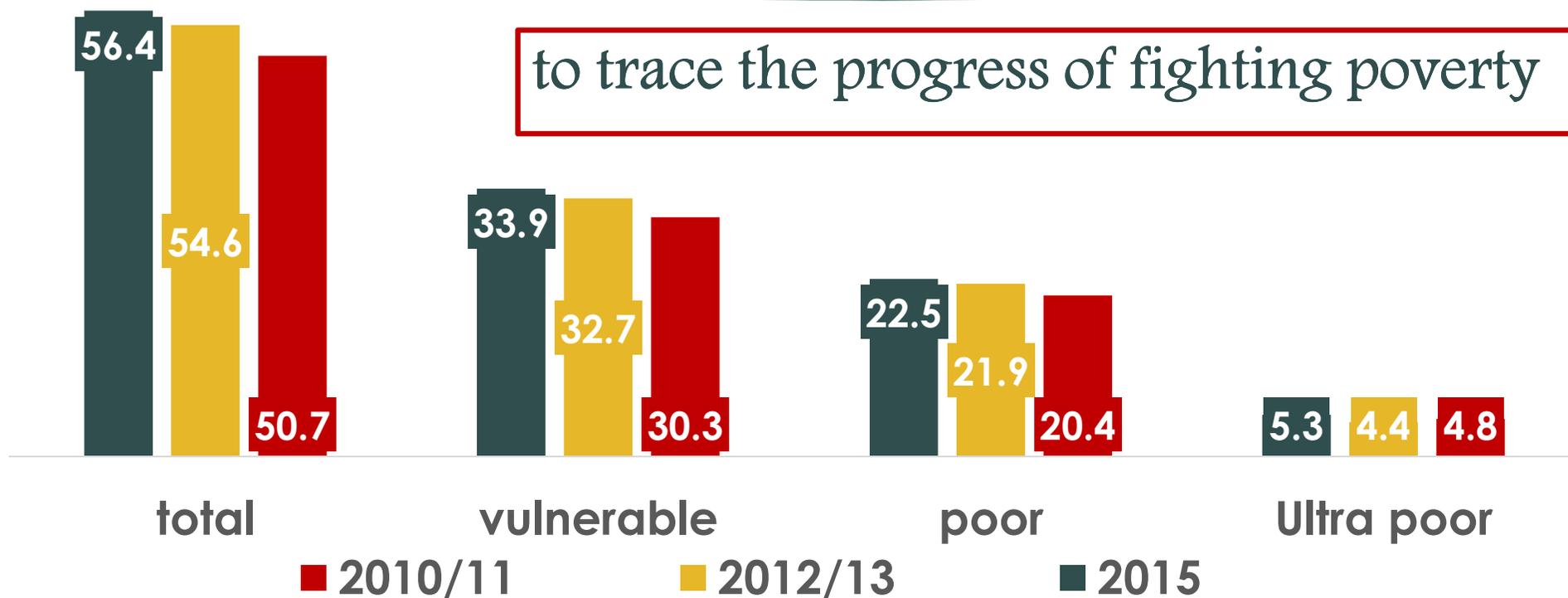
# 1) Poverty Lines in 2005 prices (LE)

v. Useful to determine the level of needed assistance for any of the targeted groups.



## 2) Poverty Rates (%)

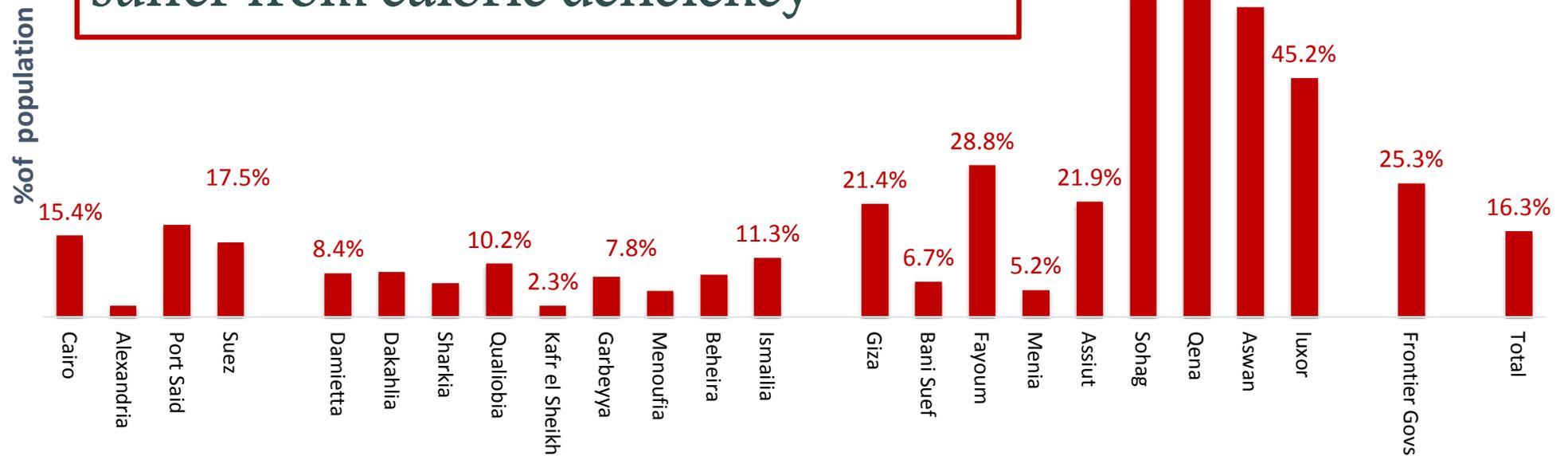
to trace the progress of fighting poverty



# 3) Food security status: Accessibility

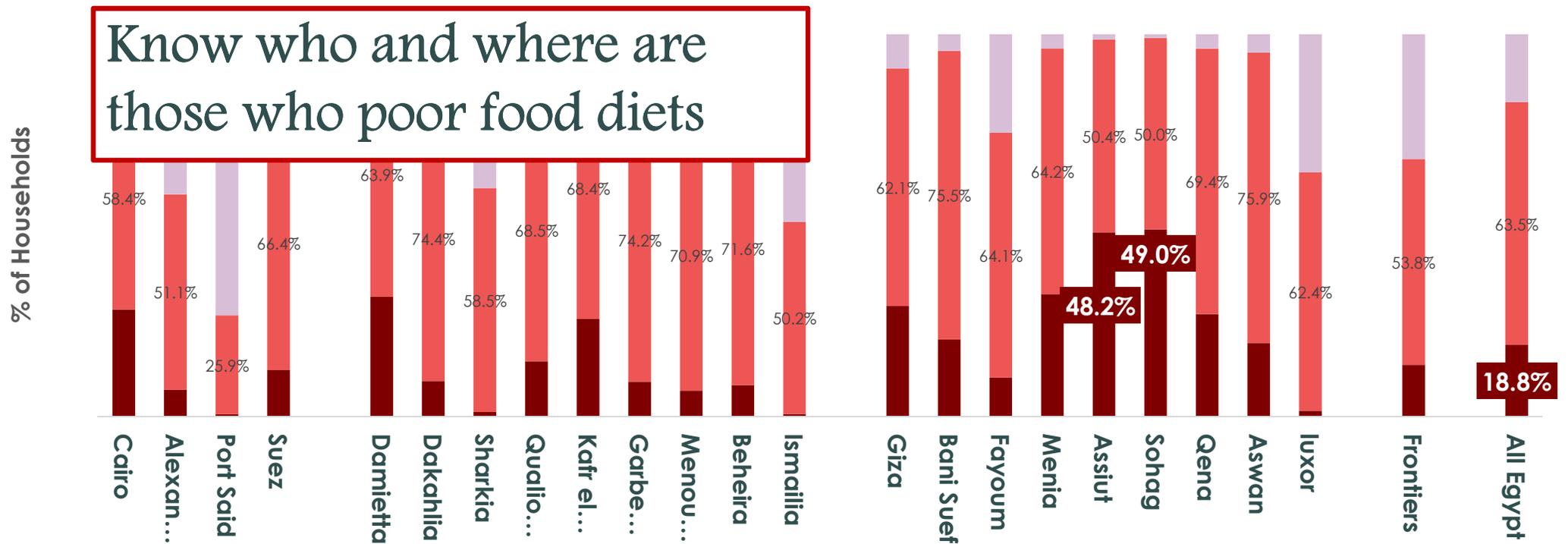
Prevalence of Daily Per Capita Energy Deficit - 2015

Know who and where are those who suffer from calorie deficiency



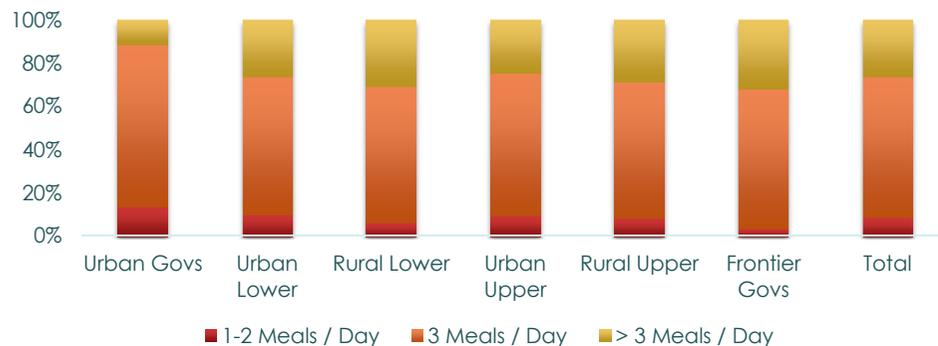
# 3) Household Dietary Diversity (2015)

■ Poor ■ Moderate ■ High

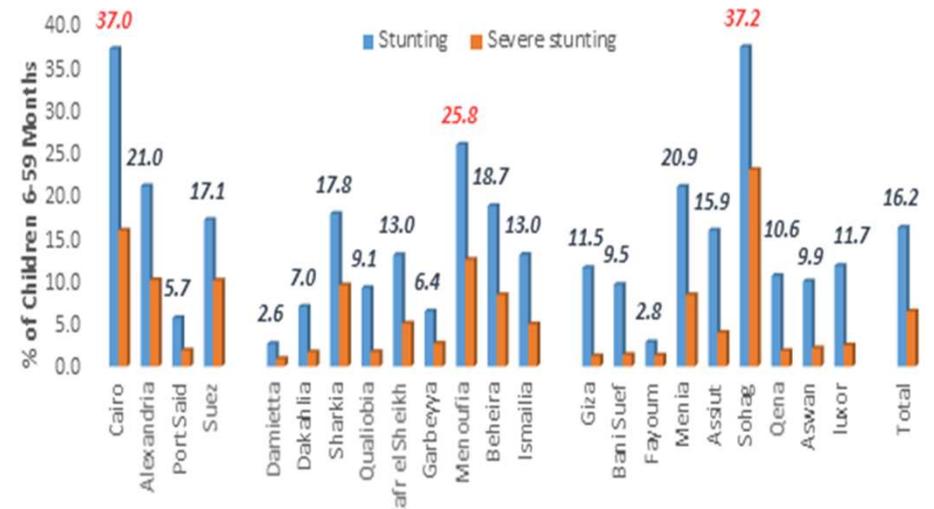


# 3) Malnutrition amongst children

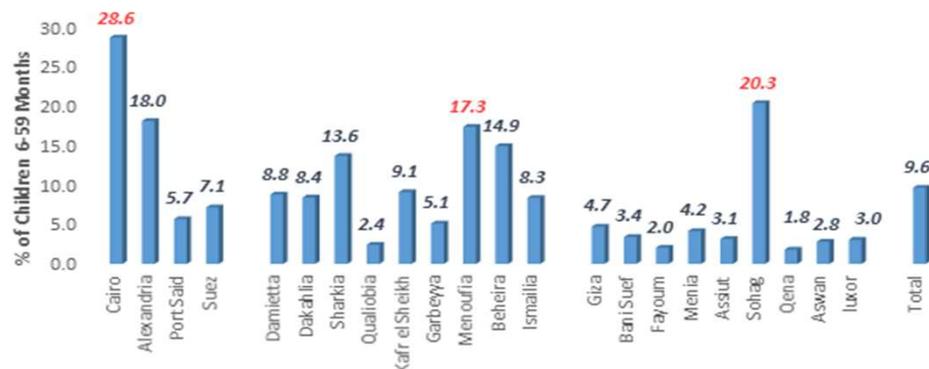
Average # of Daily Meals for Children 6-59 Months



Stunting Amongst Children 6-59 Months, 2015



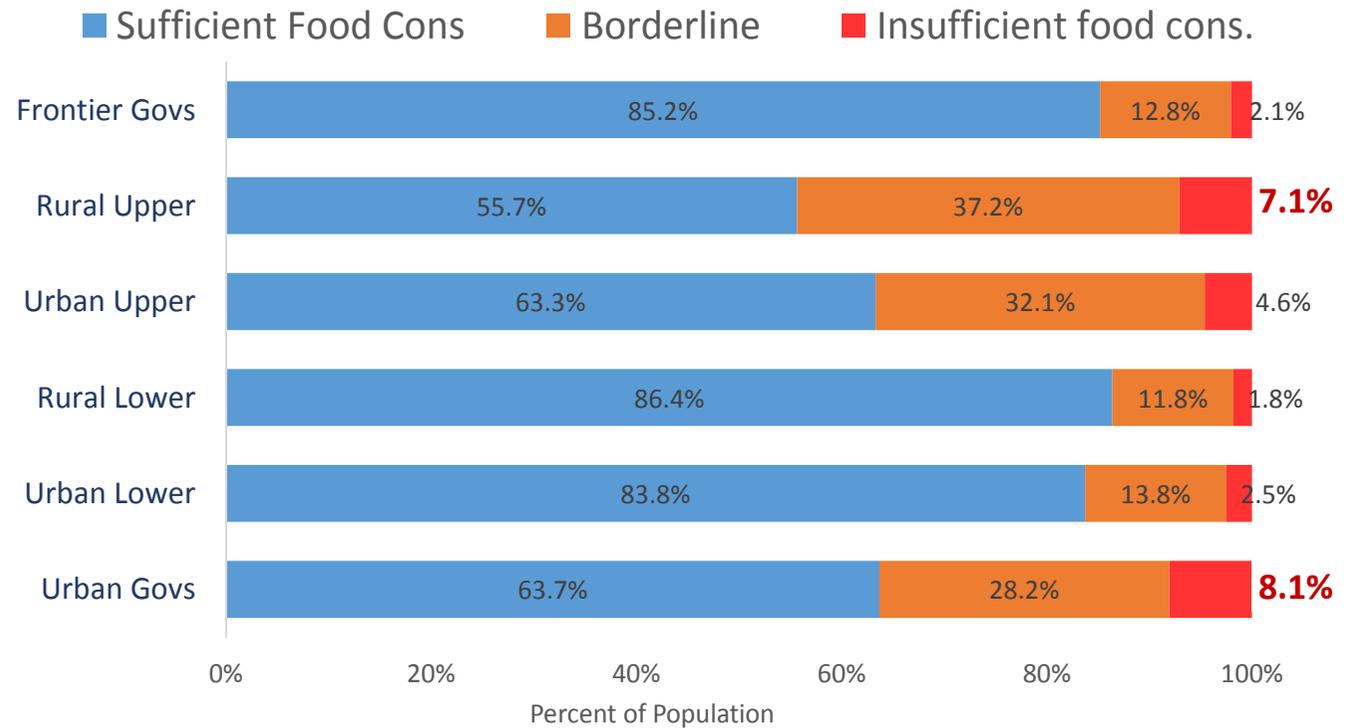
Obesity Amongst Children 6-59 Months, 2015



Know # of daily meals for children, and obesity and stunting among them, by governorate

### 3) Household perceptions on sufficiency of food consumption

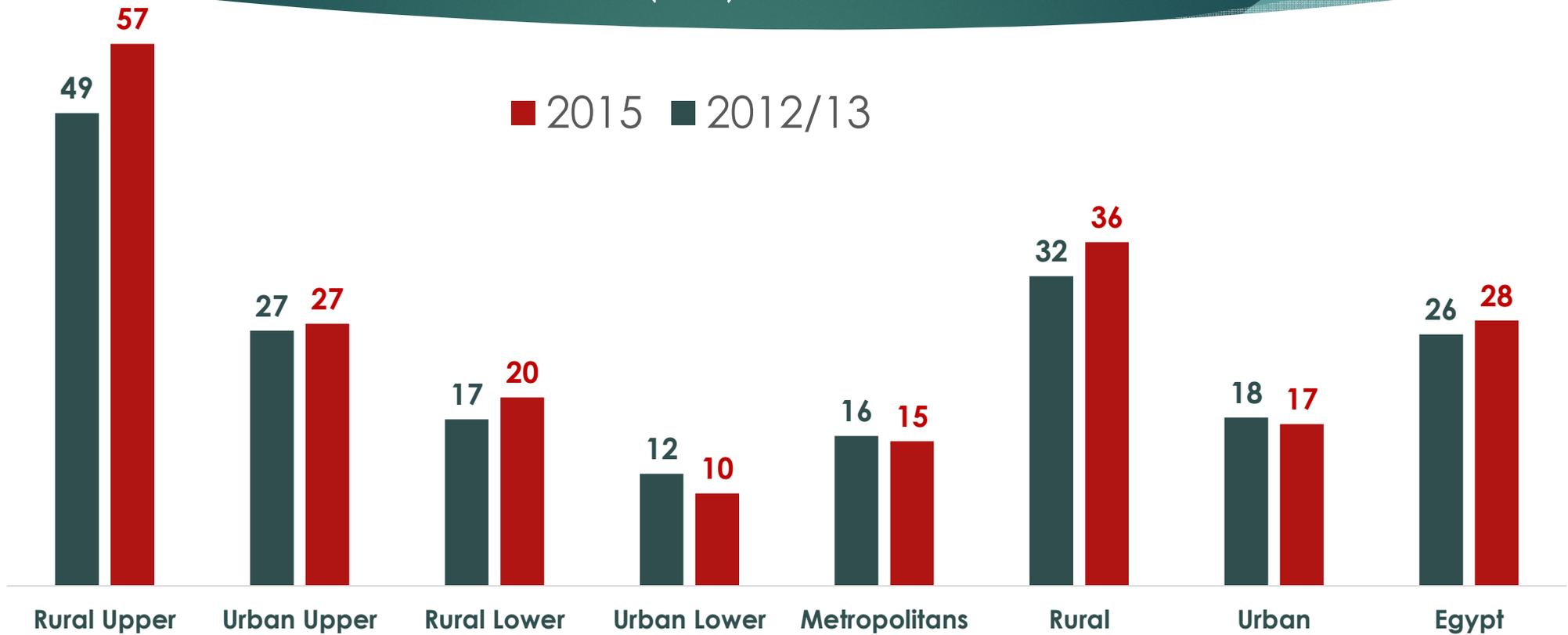
Urban governorates and Rural Upper Egypt have the highest prevalence of households reporting insufficient food consumption in 2015 (8.1% and 7.1% respectively).



# II- WHO ARE THE POOR IN EGYPT?

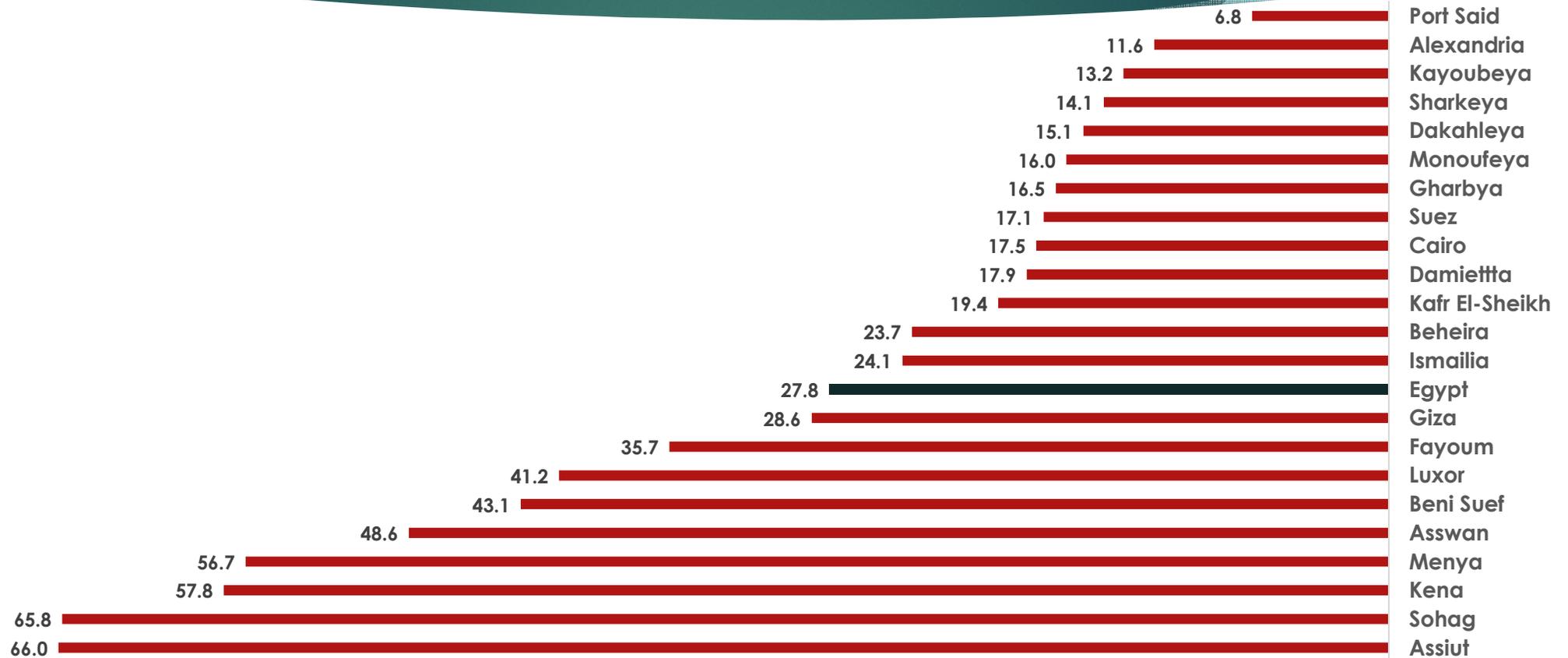
POVERTY PROFILE AND DETERMINANTS

# 1) Where are the poor? Poverty Rates (%) – *by region*

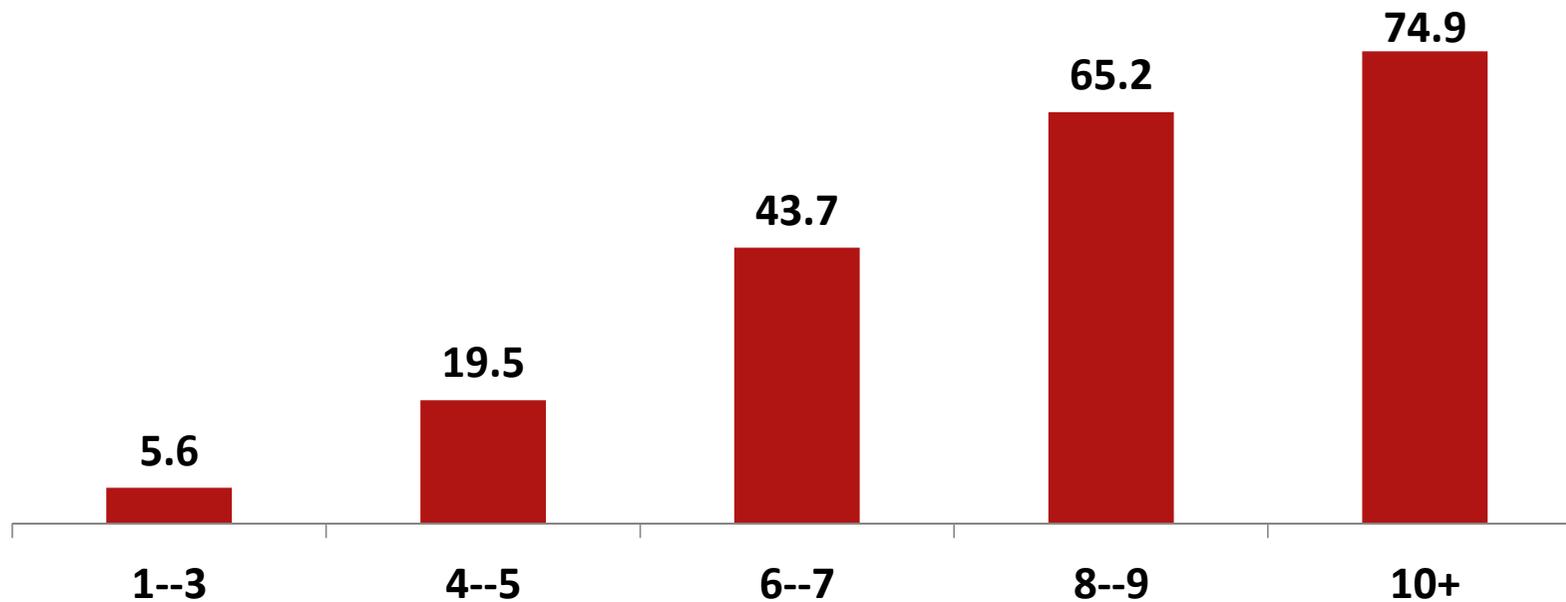


# 1) Where are the poor?

## Poverty Rates (%) – *by governorate*



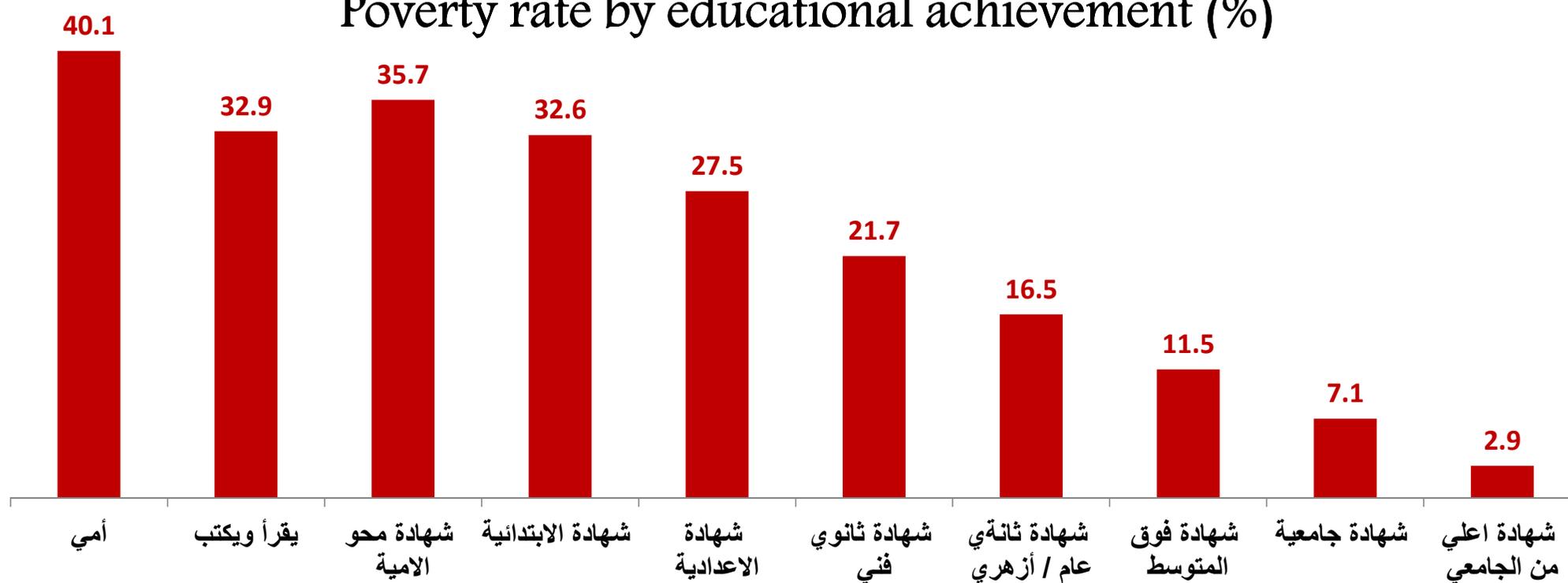
## 2) Larger households are at a higher risk of poverty



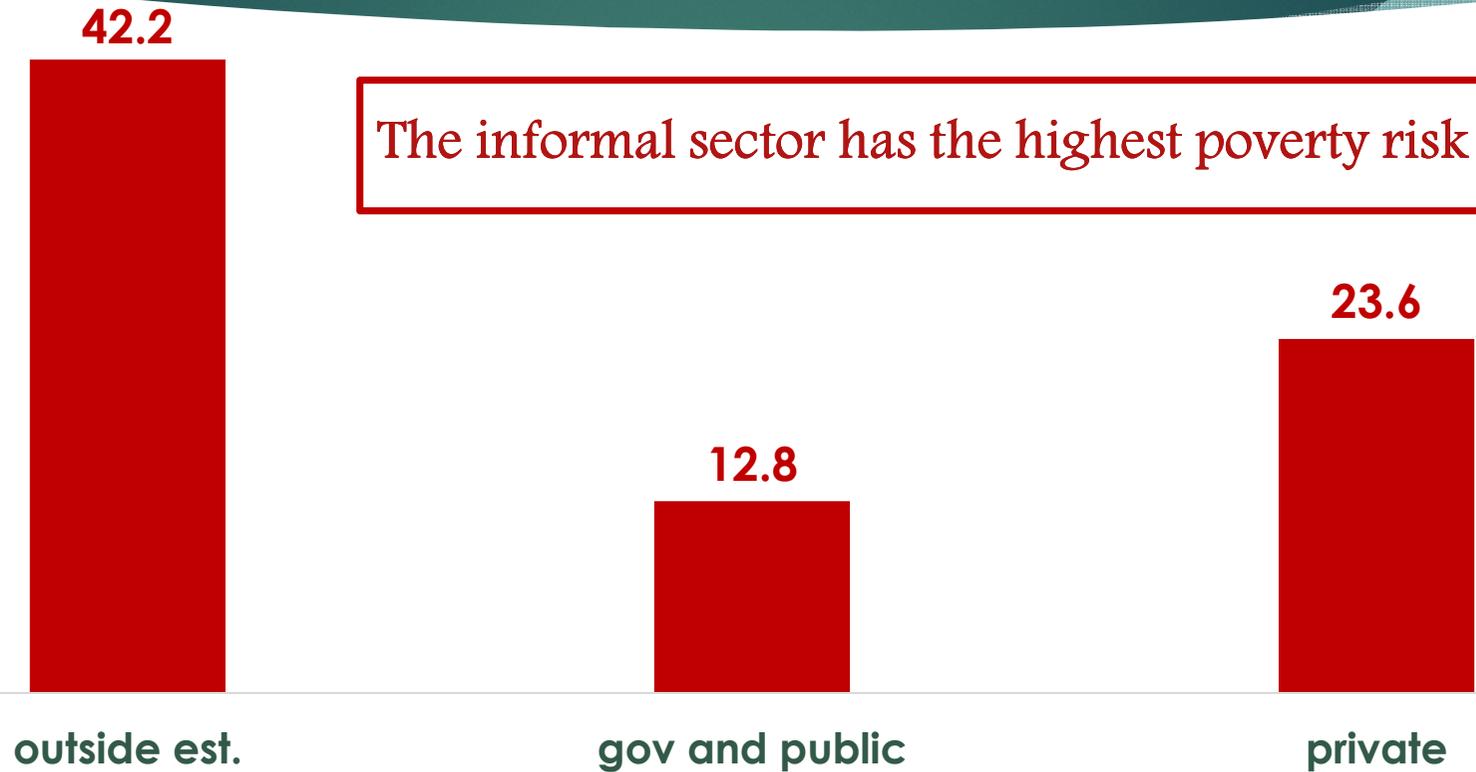
### 3) Low educational attainment is a key determinant of poverty

25

Poverty rate by educational achievement (%)

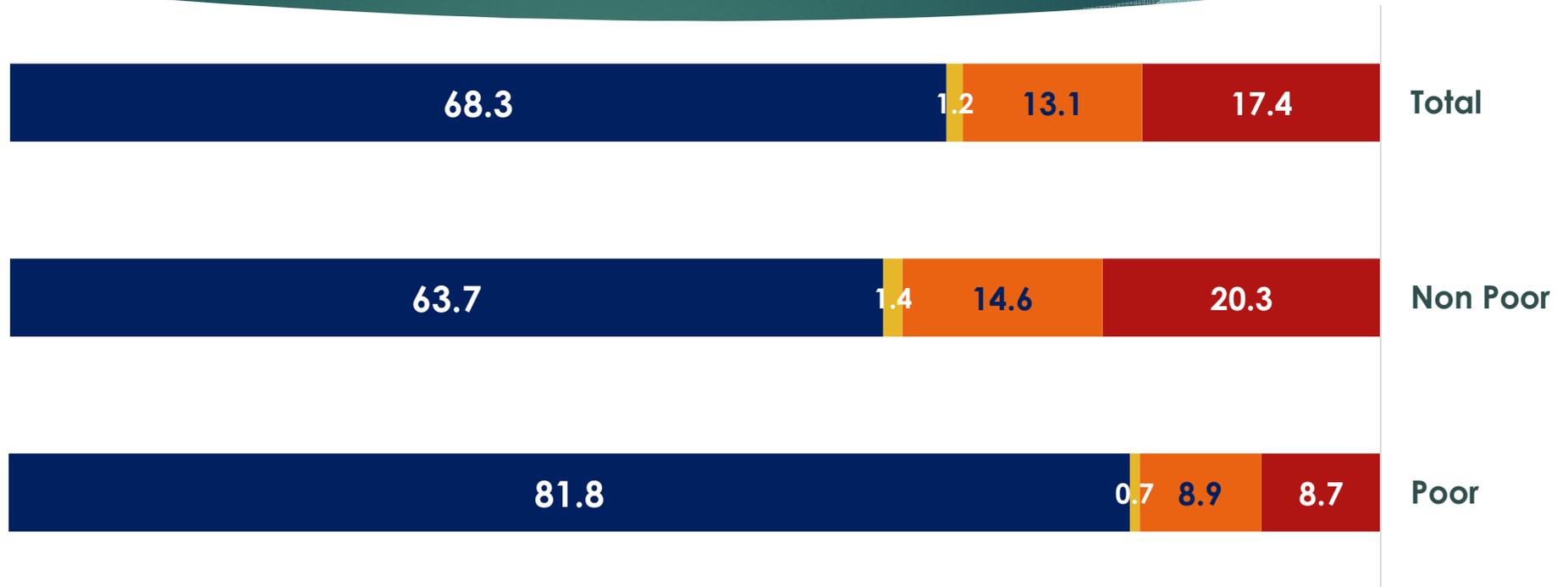


## 4) Where Do Poor Work?



# 5) How insured are the jobs of the poor?

Chart Title

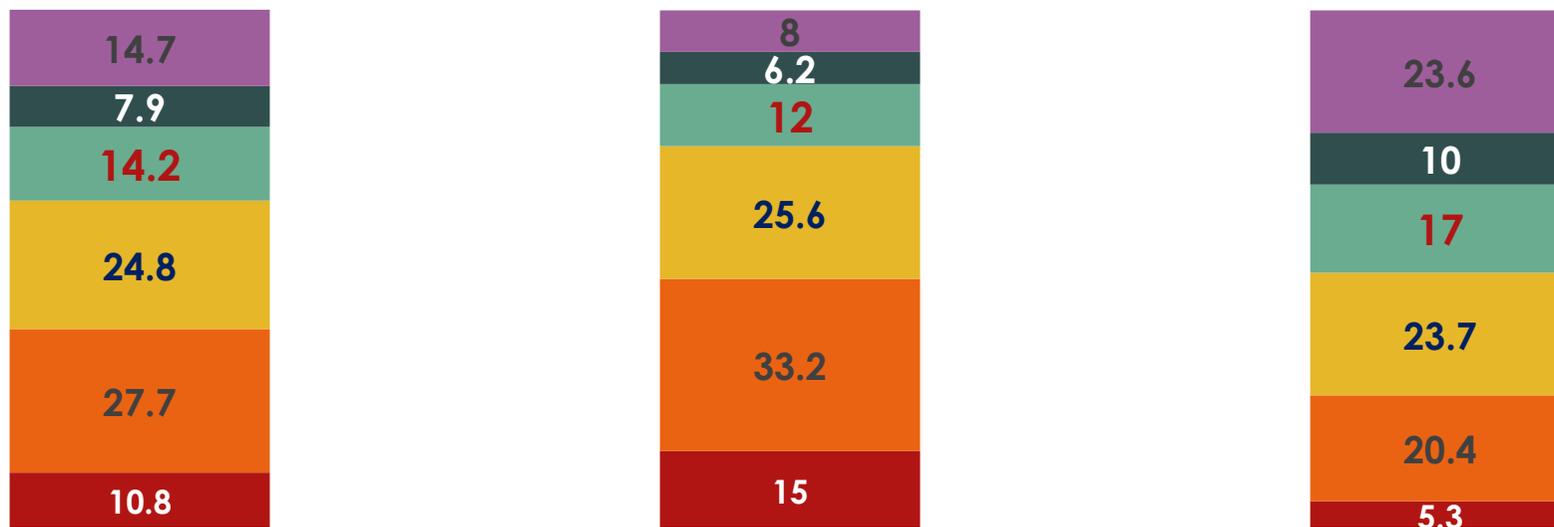


■ contributor ■ beneficiary ■ contributo and beneficiary ■ non-contributor and non-beneficiary

# III- Distribution and Inequality

# 1) How individuals are distributed according to their per capita expenditure?

29



Egypt

Rural

Urban

■ <4000

■ 4000-

■ 6000-

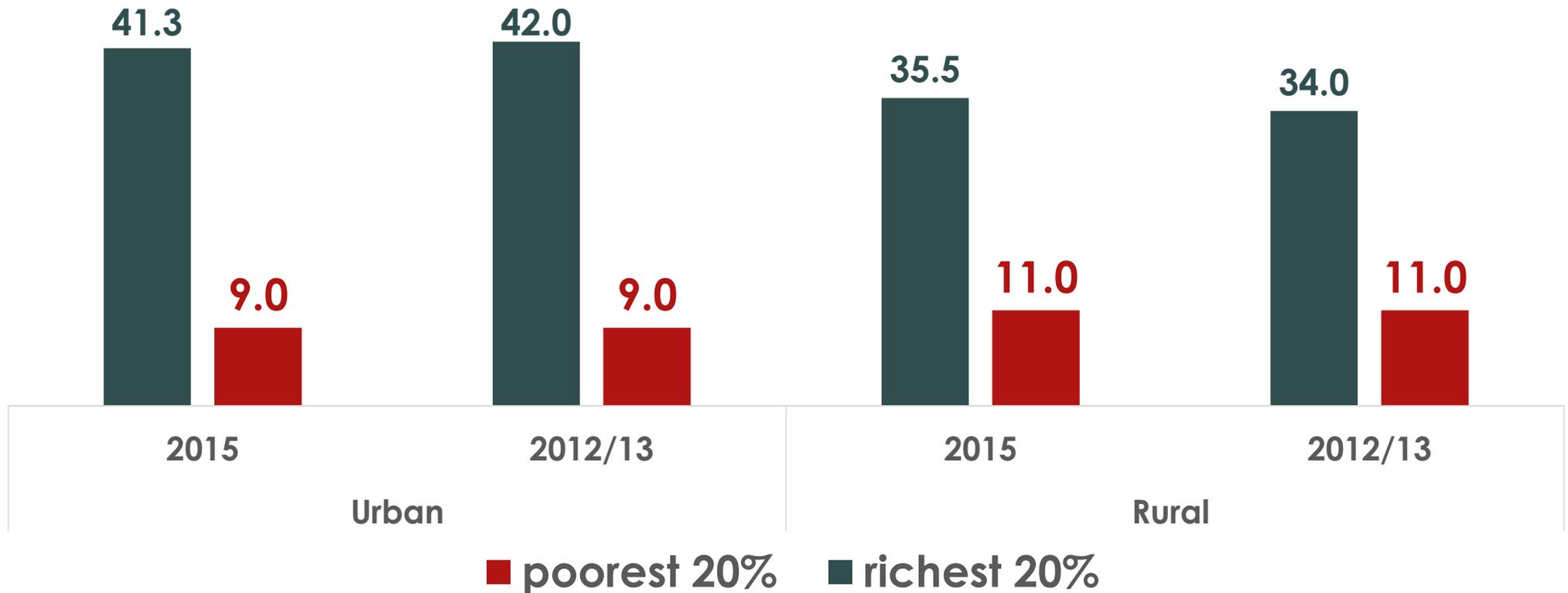
■ 8000-

■ 10000-

■ >12000

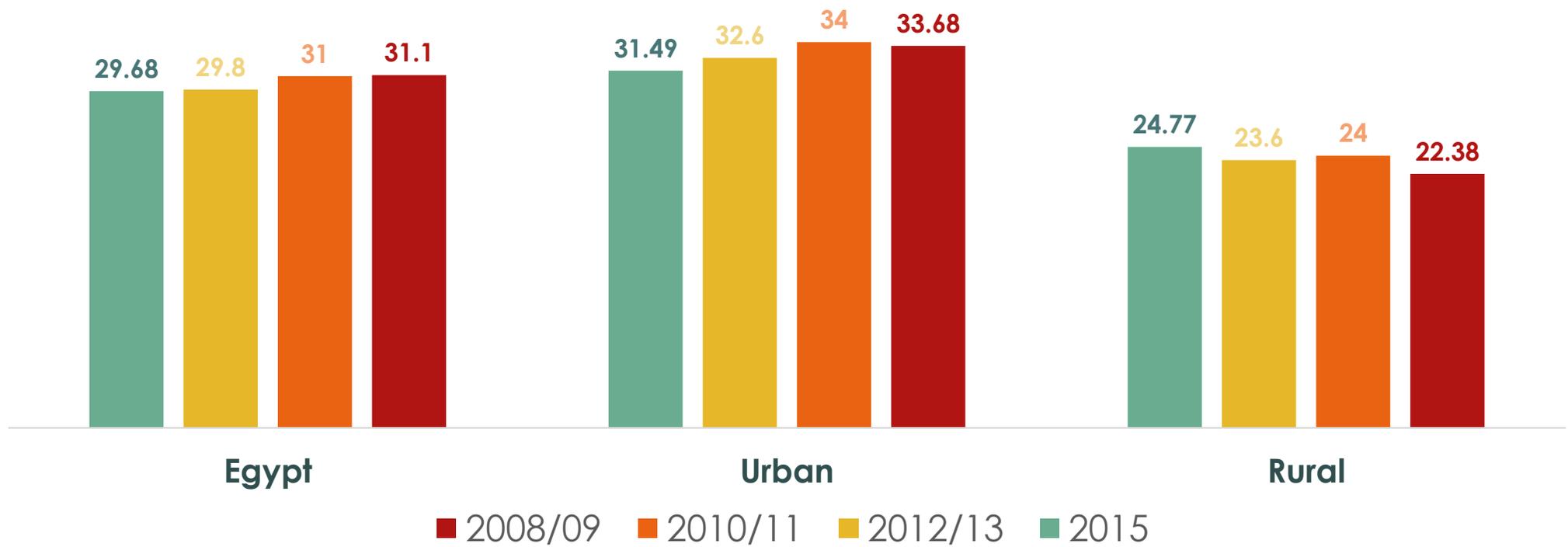
## 2) Share in Total Consumption (%)

30



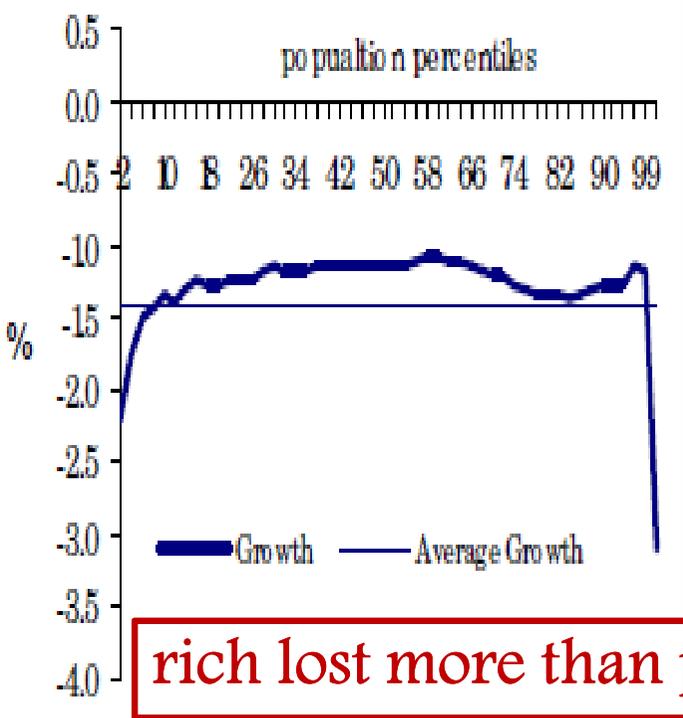
# 3) Gini Coefficient

31

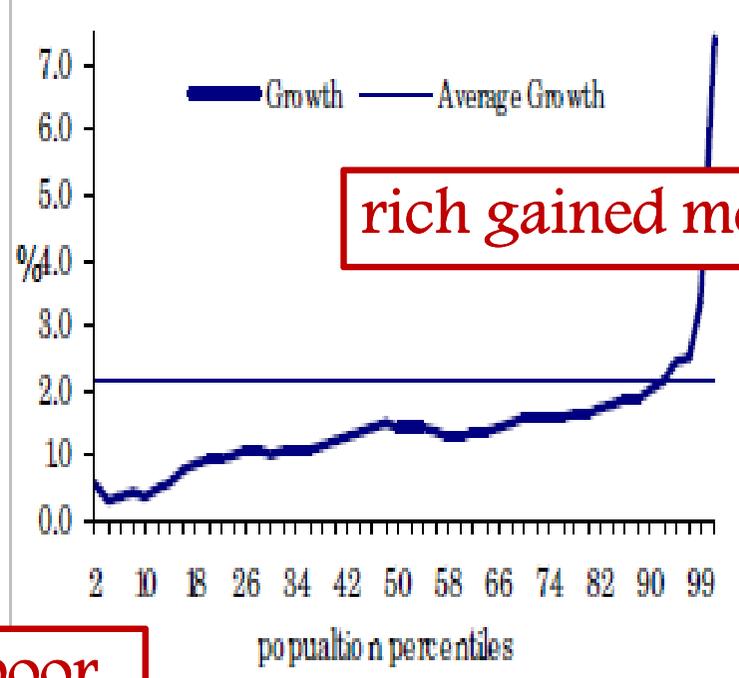


# 4) How pro-poor was economic growth?

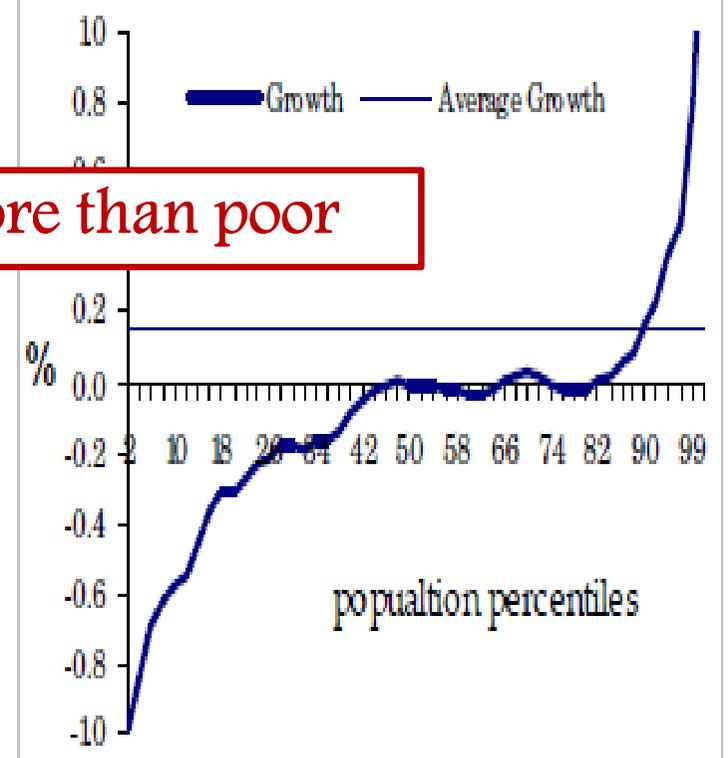
2000-2005



1996-2000



1996-2005



## 5) Measuring Inequality of Opportunities

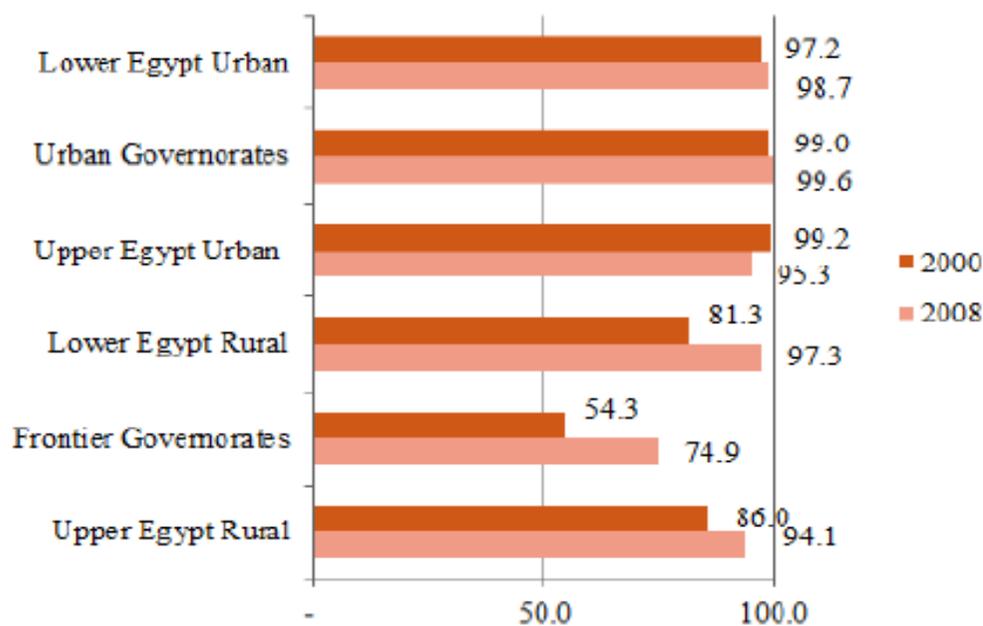
The HOI measures how child's circumstances (i.e. place of residence, gender and education of household head) can affect his/her access to basic goods and services (such as water, education, electricity and sanitation. ), affecting that affect the human capital.

**Equality of opportunities is seen as part of the development process itself**

# 5) Measuring Inequality of Opportunities

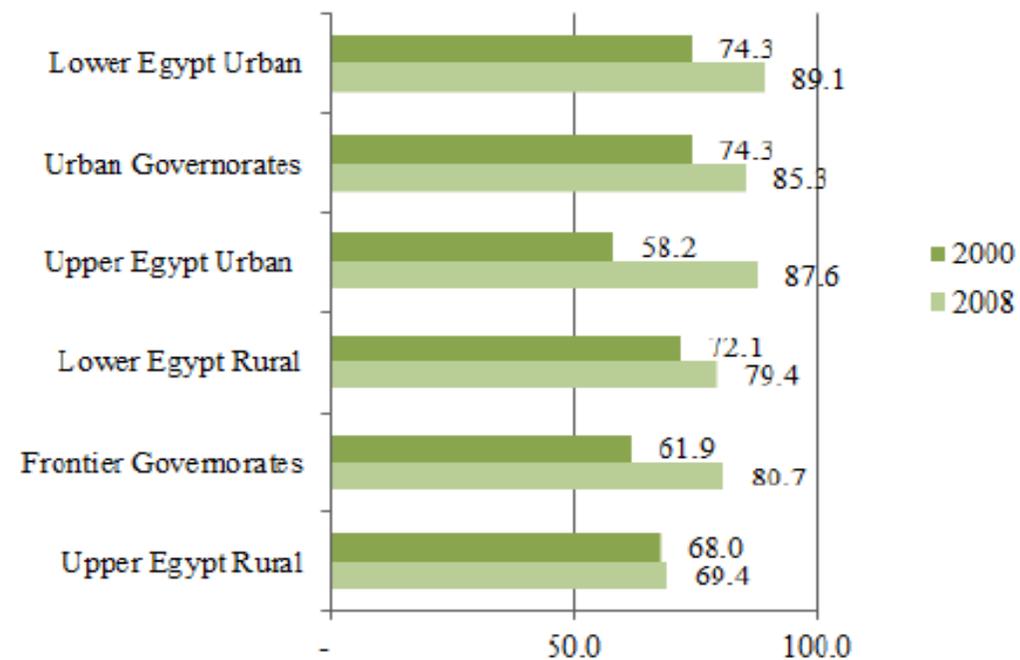
## Basic Services

### Access to improved water



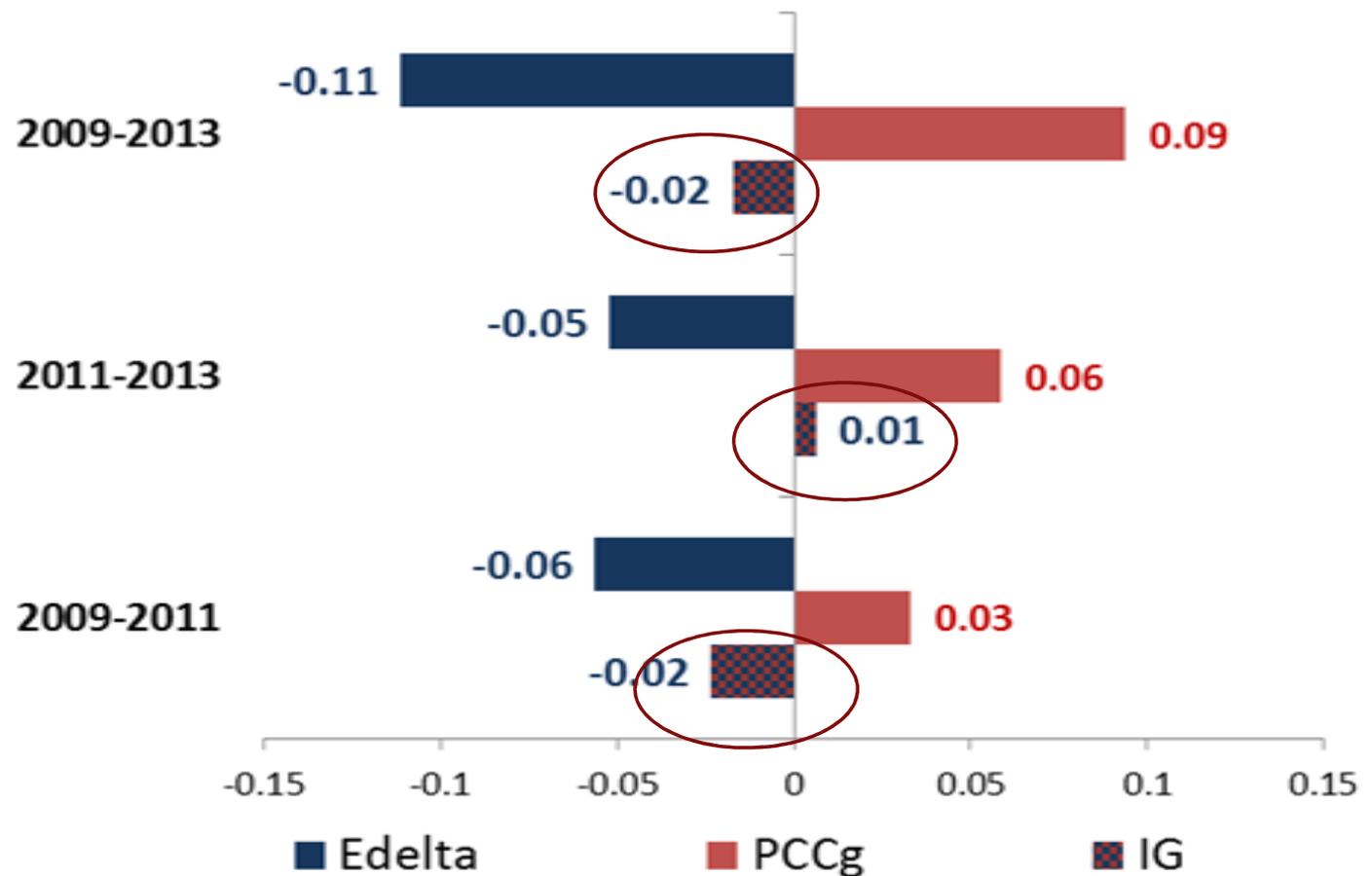
## Educational Enrollment

### Completing 6th grade on time



## 6) Examining whether growth is inclusive

By decomposing inclusive growth into welfare growth and change in equity, we can portray the evolution of inclusive growth and the relative contributions of growth and equity



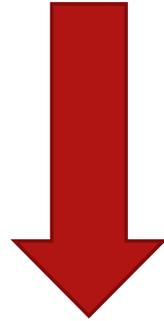
# 7) Examining Social Mobility- Panel Data

Deciles of modeled consumption in 2008

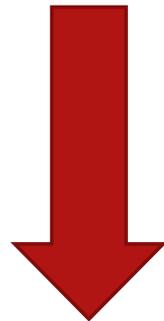
Deciles		1 <sup>st</sup>	2	3	4	5	6	7	8	9
Decile modeled consumption 2005	1 <sup>st</sup> poorest	32	21	15	13	7	6	4	2	1
	2	23	15	15	14	10	10	7	4	1
	3	13	16	16	13	15	11	7	5	3
	4	12	12	14	14	11	13	11	8	4
	5	7	12	11	15	17	12	14	7	4
	6	5	9	10	11	12	11	14	14	10
	7	3	5	6	8	13	12	17	17	12
	8	2	4	5	5	8	14	14	20	16
	9	2	2	3	3	4	7	9	17	31
	10 <sup>th</sup> richest									21

How high/low is mobility of Egyptians between different steps of the social ladder?

Good diagnostics

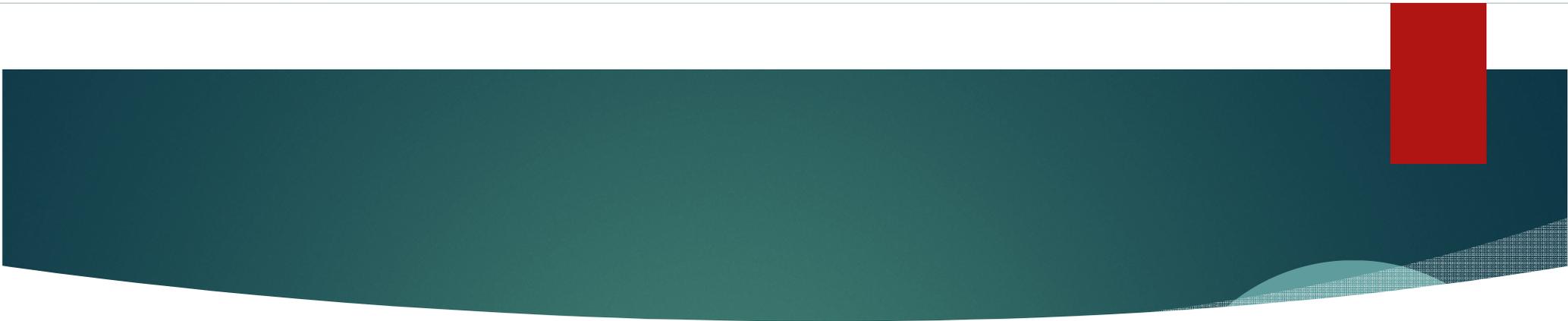


Good Planning



Effective Poverty Reduction Strategy

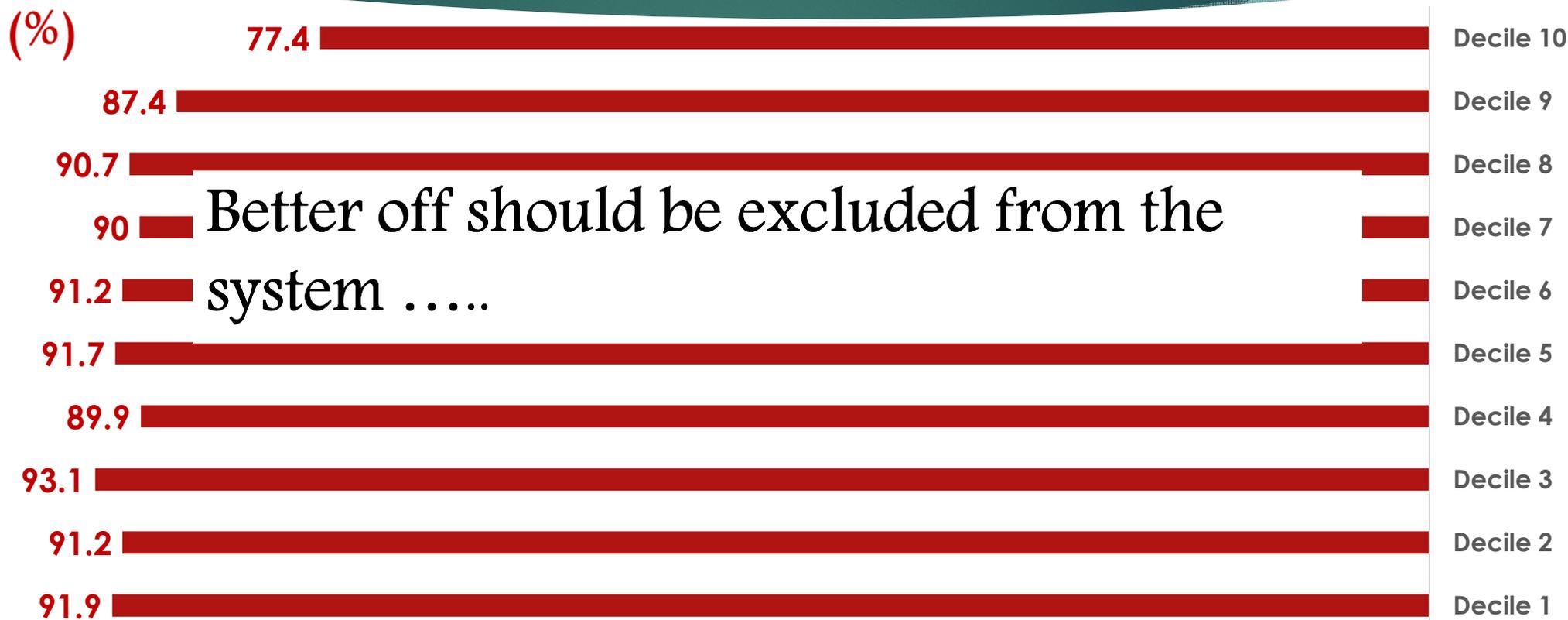
# IV- Who benefit and How much of What? Benefit Incidence



# Food and Fuel Subsidies

# Who benefit from Ration Cards? (2015)

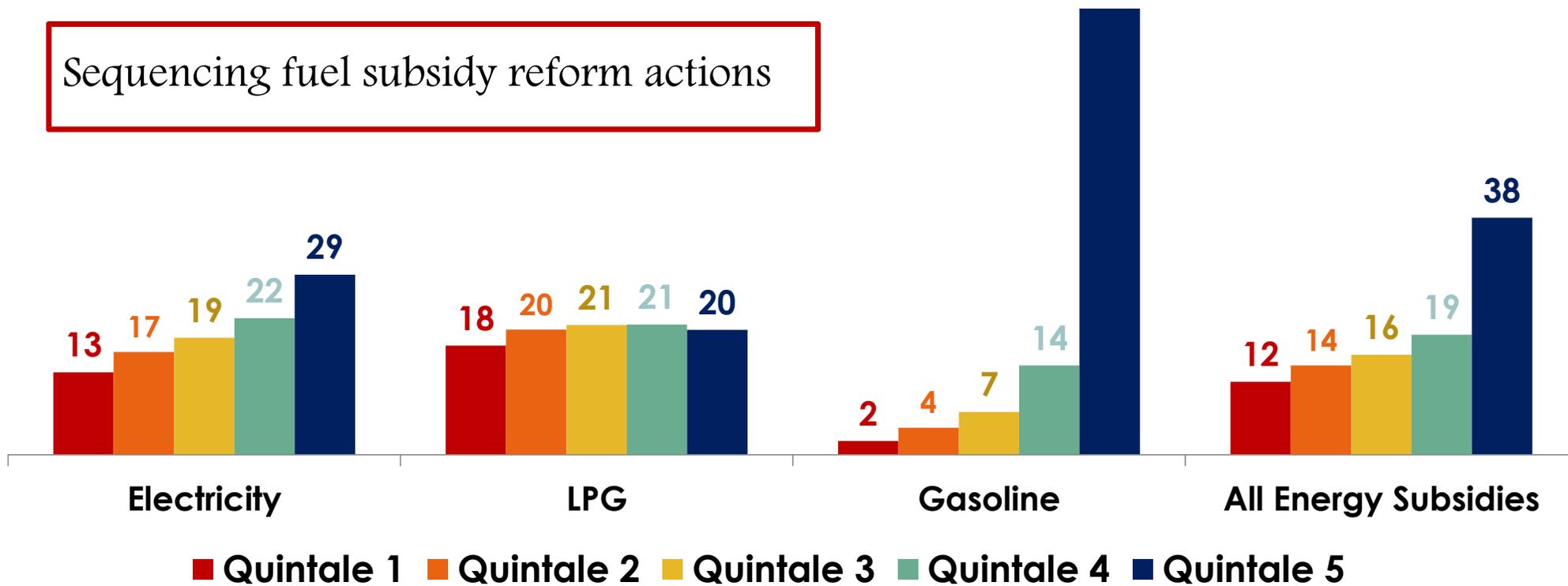
40



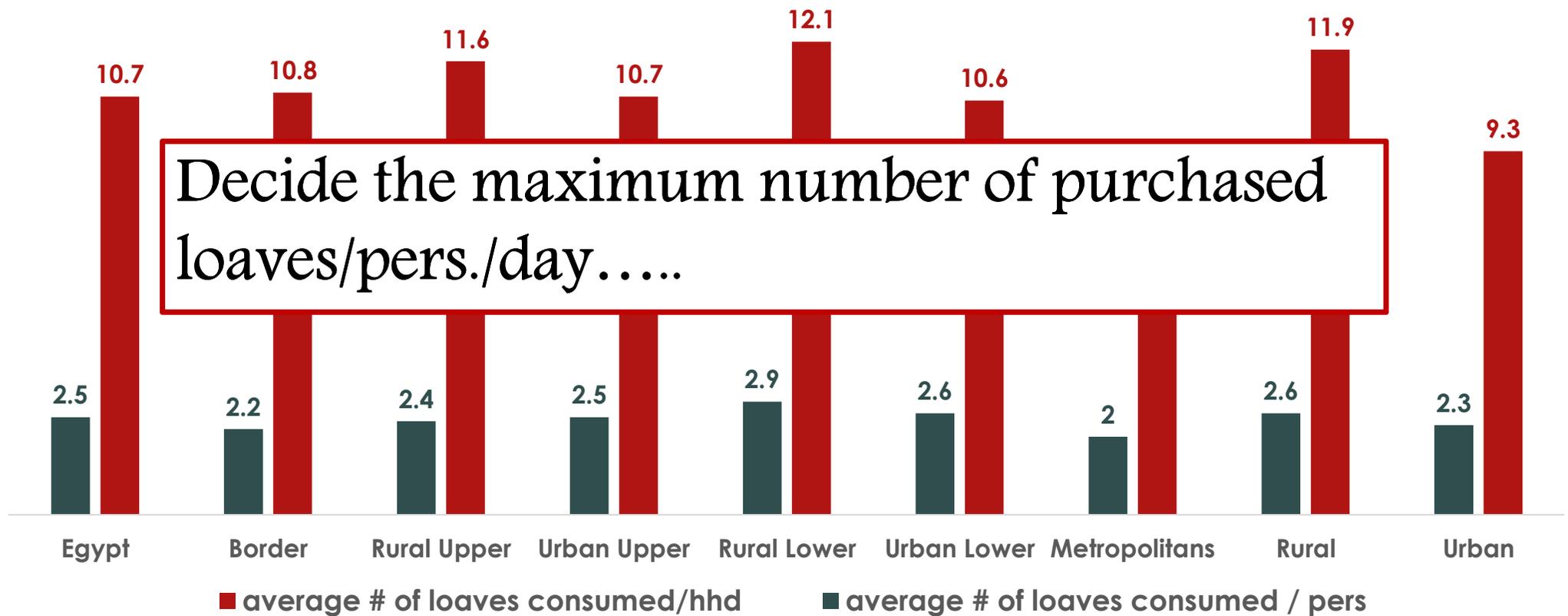
# Who Benefit from Fuel Subsidies?

Distribution on Energy Subsidies by Quintiles 72

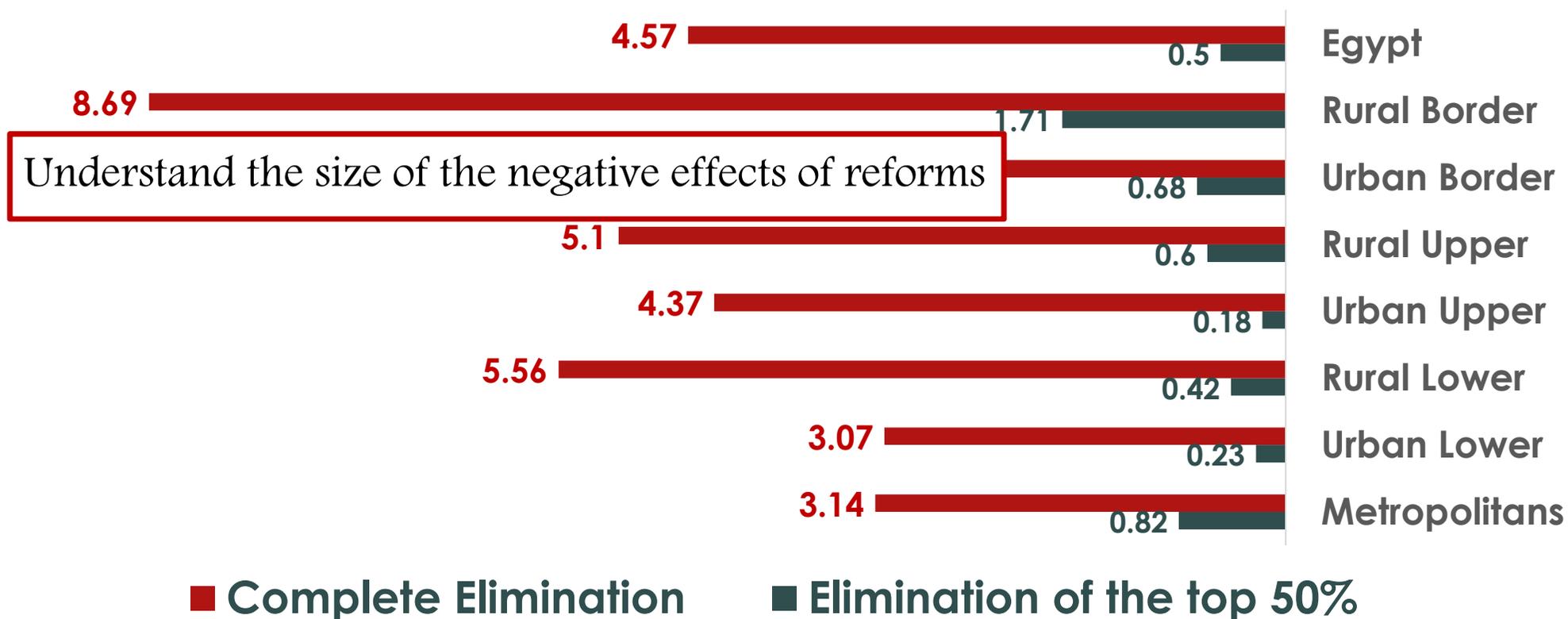
Sequencing fuel subsidy reform actions



# Number of Consumed subsidized Loaves

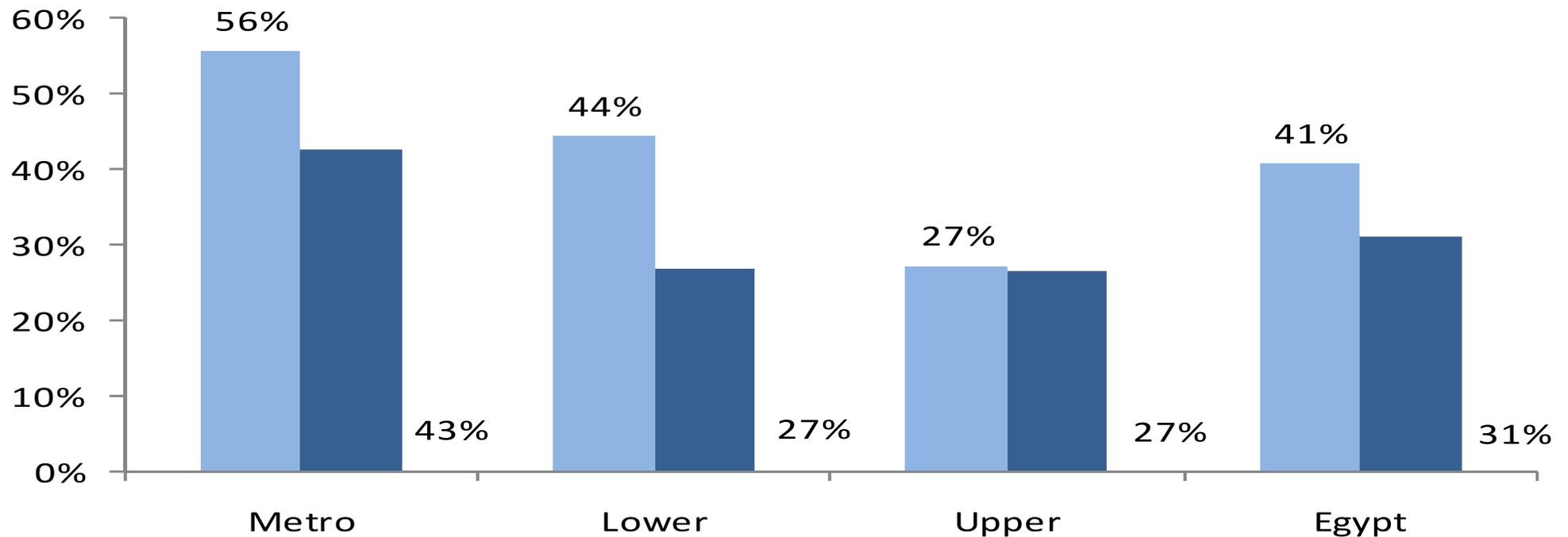


# Poverty Impact of Food Subsidy Elimination



# How much of food subsidies are leaked?

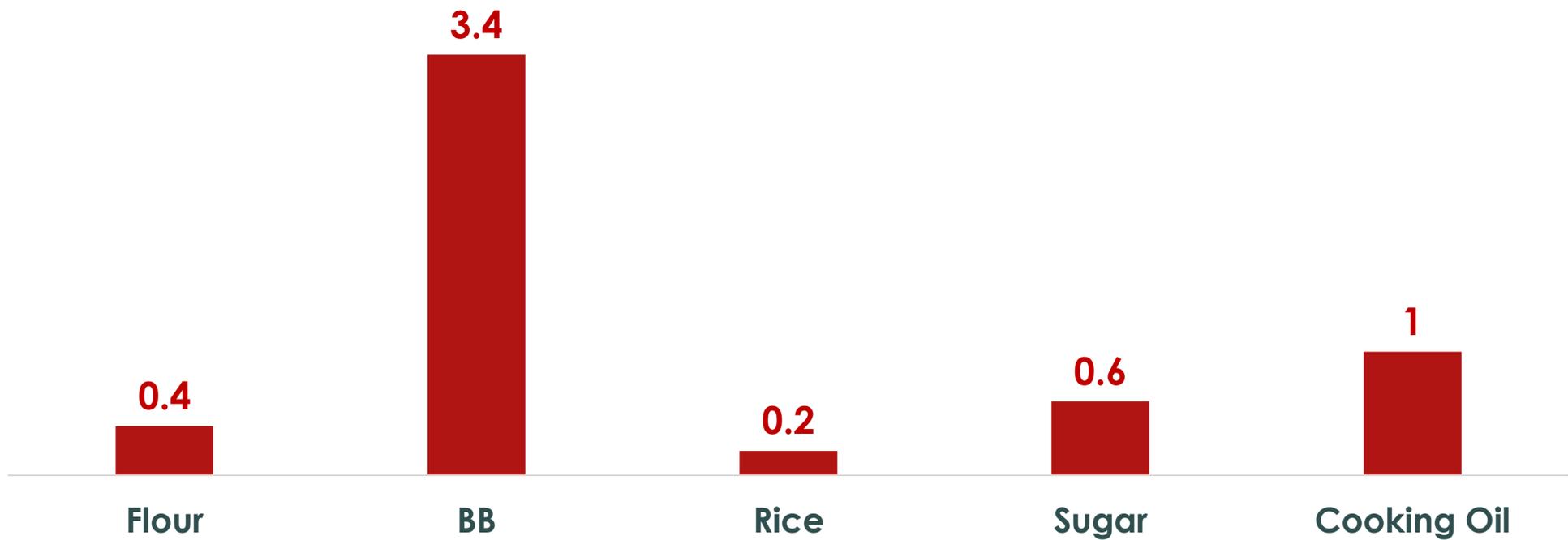
44



Almost one third of FSs was diverted away from their intended uses in 2008/09

# What is the fiscal cost of subsidy leakages? <sup>45</sup>

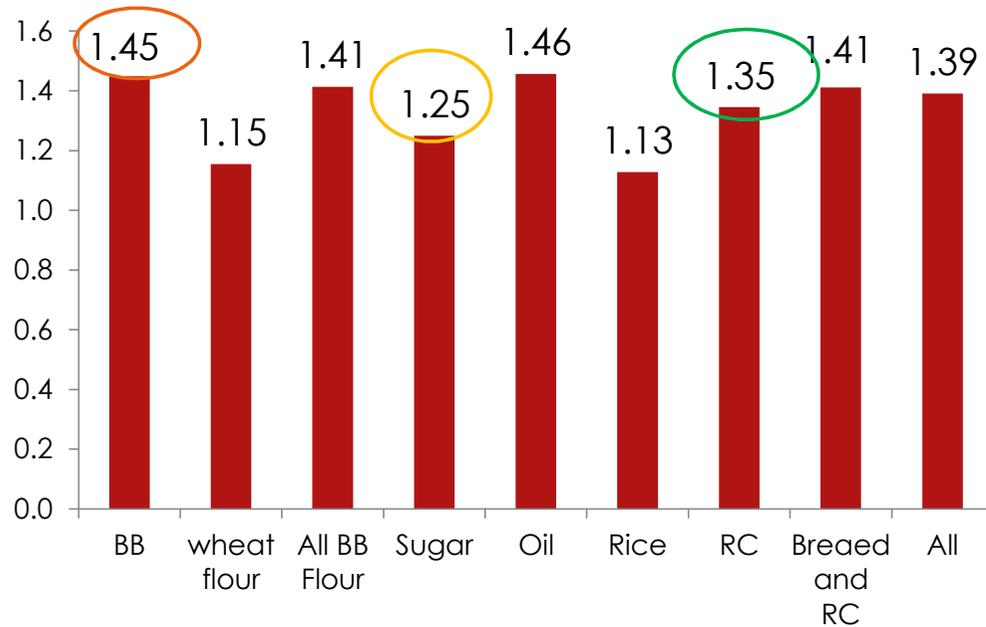
(Billion LE)



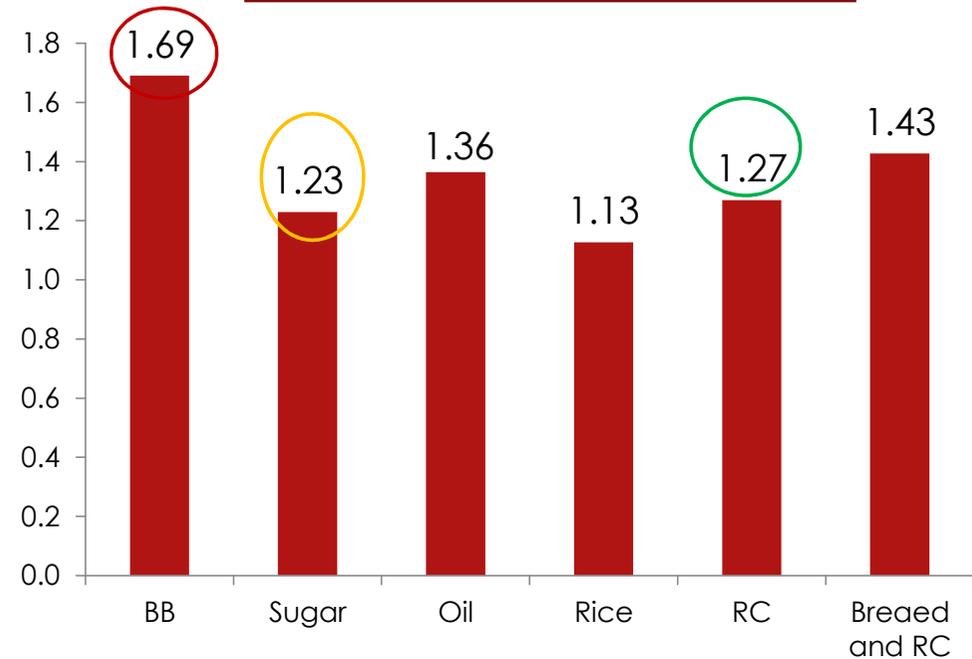
# How much does it cost to deliver LE 1 of food subsidies to consumers over time?

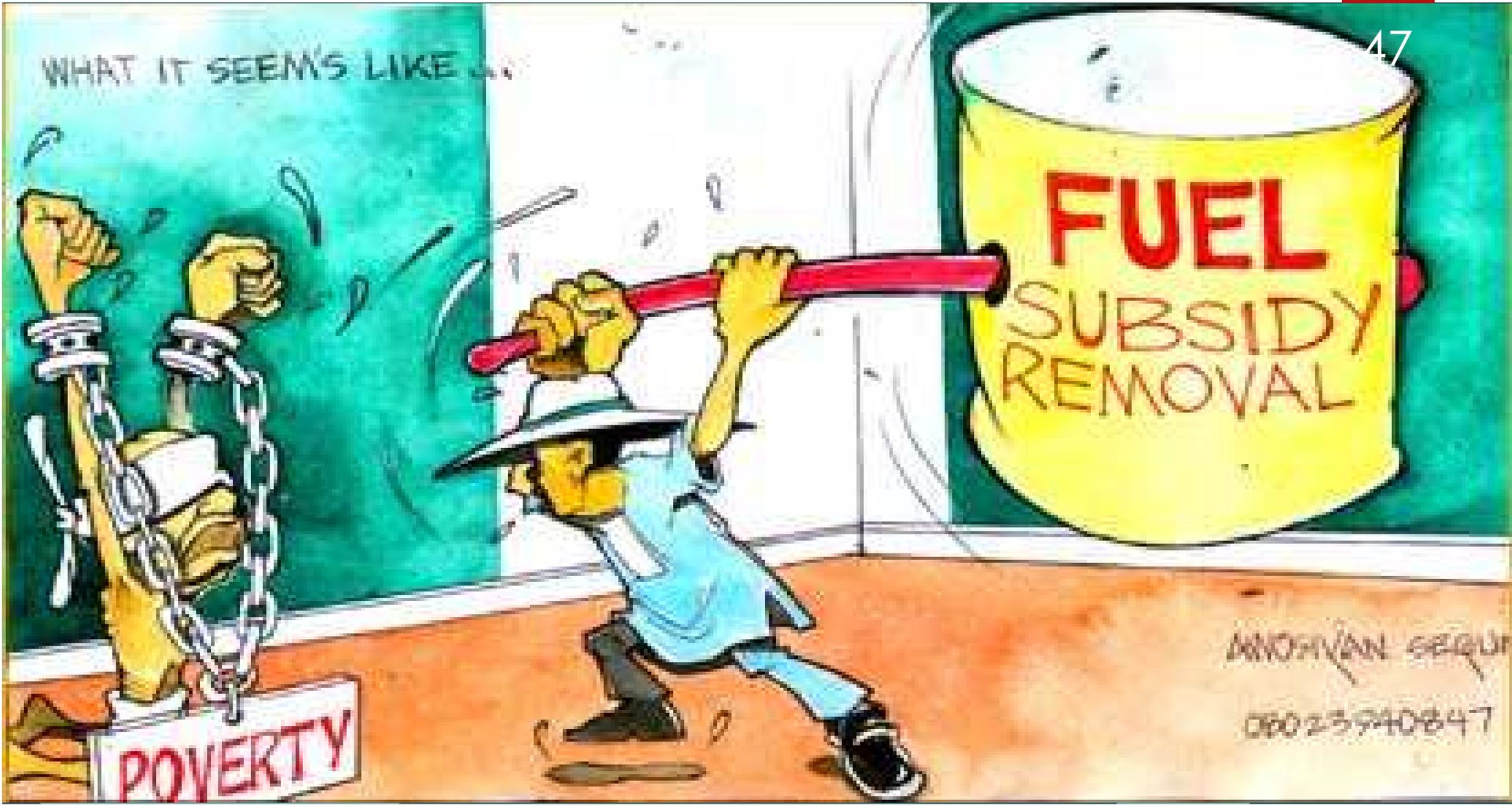
46

2008/09



2004/05

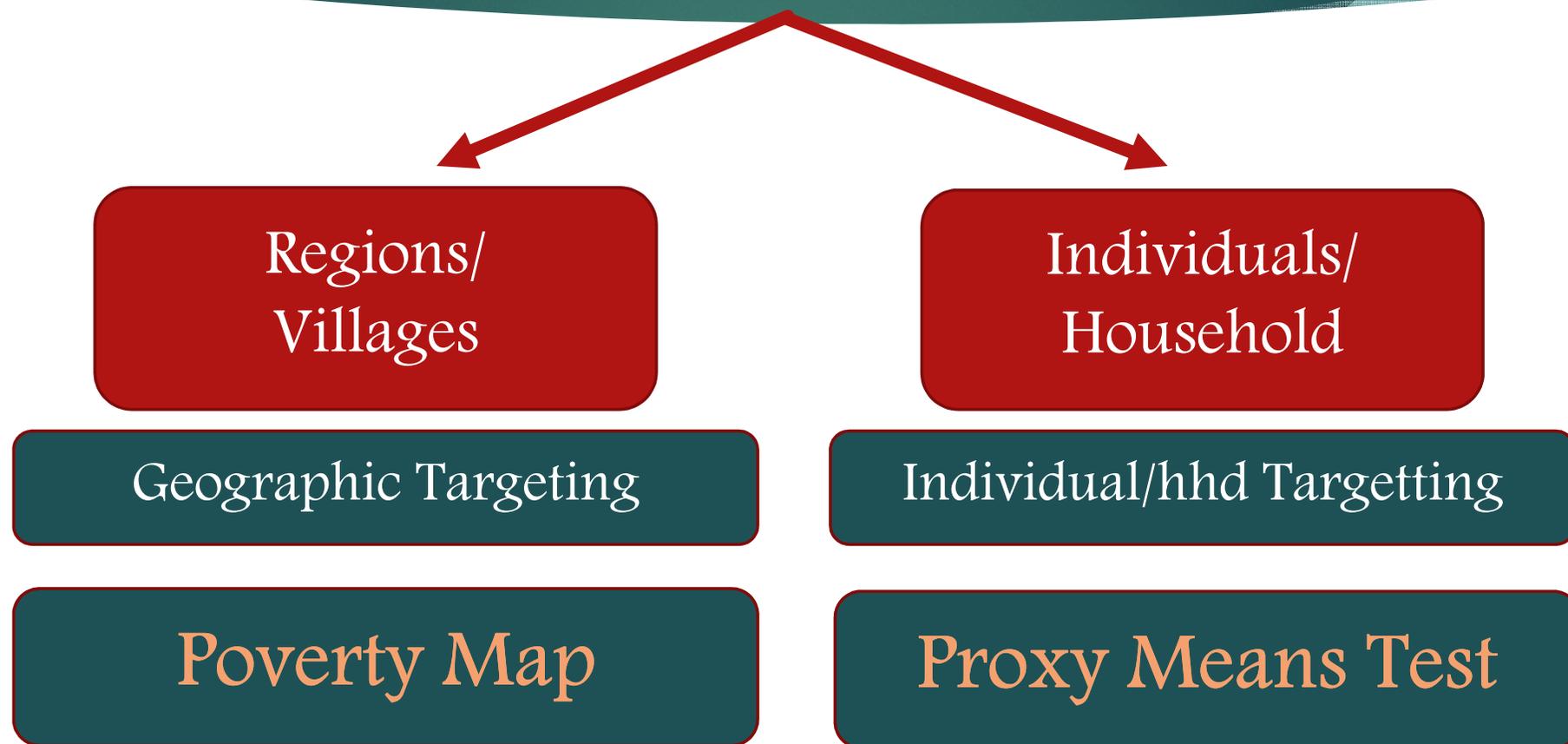


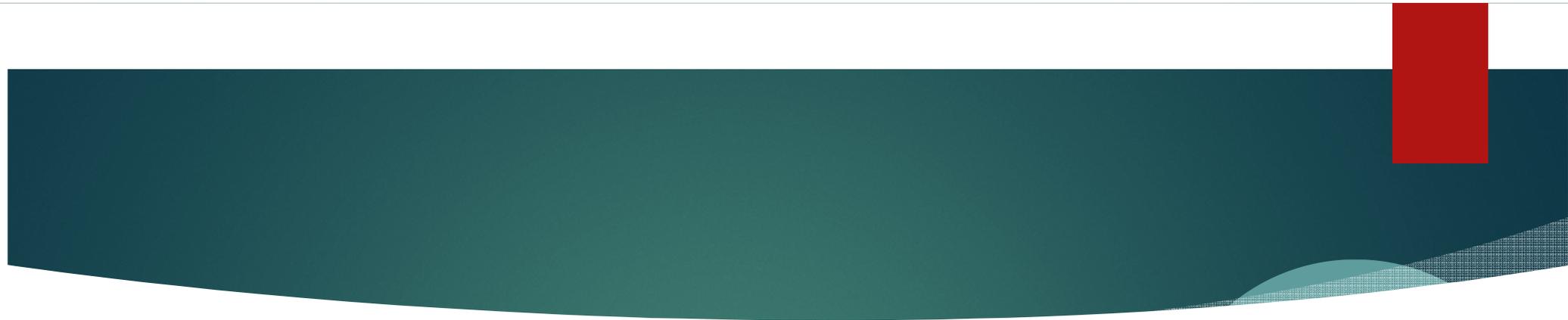




# V- Targeting the Poor

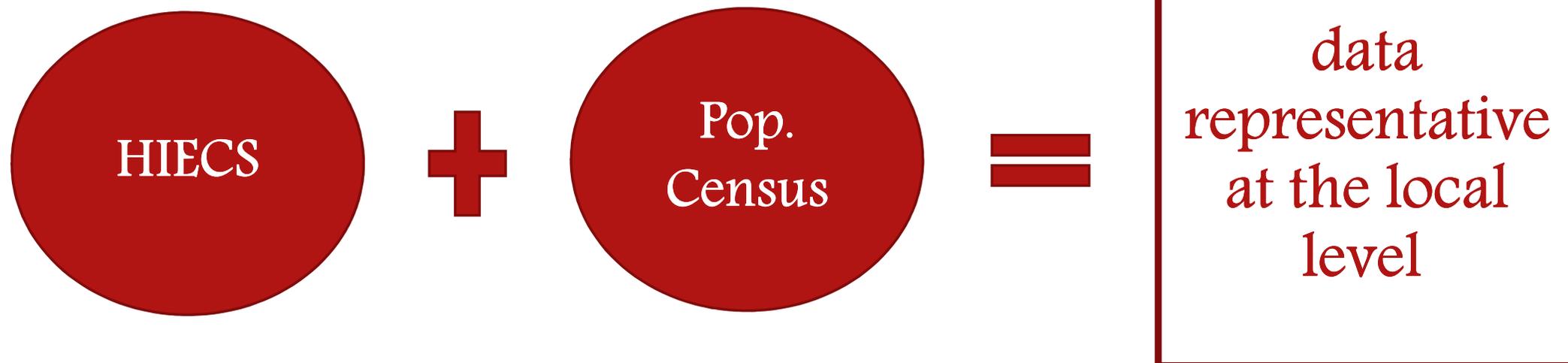
# Targeting the Poor



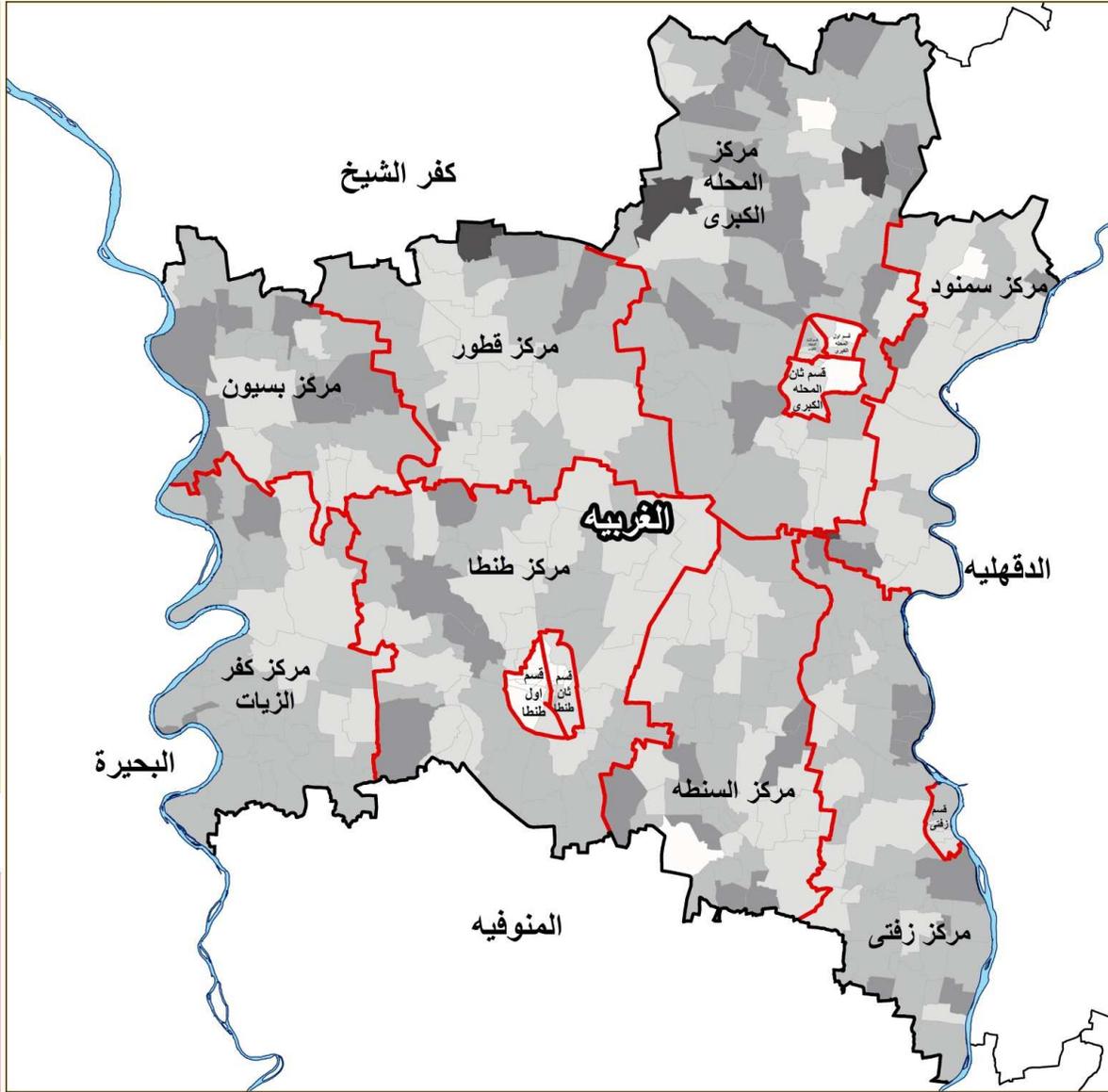


# Poverty Map

# Poverty Mapping to Reach the poorest regions (How?)



# محافظة الغربية

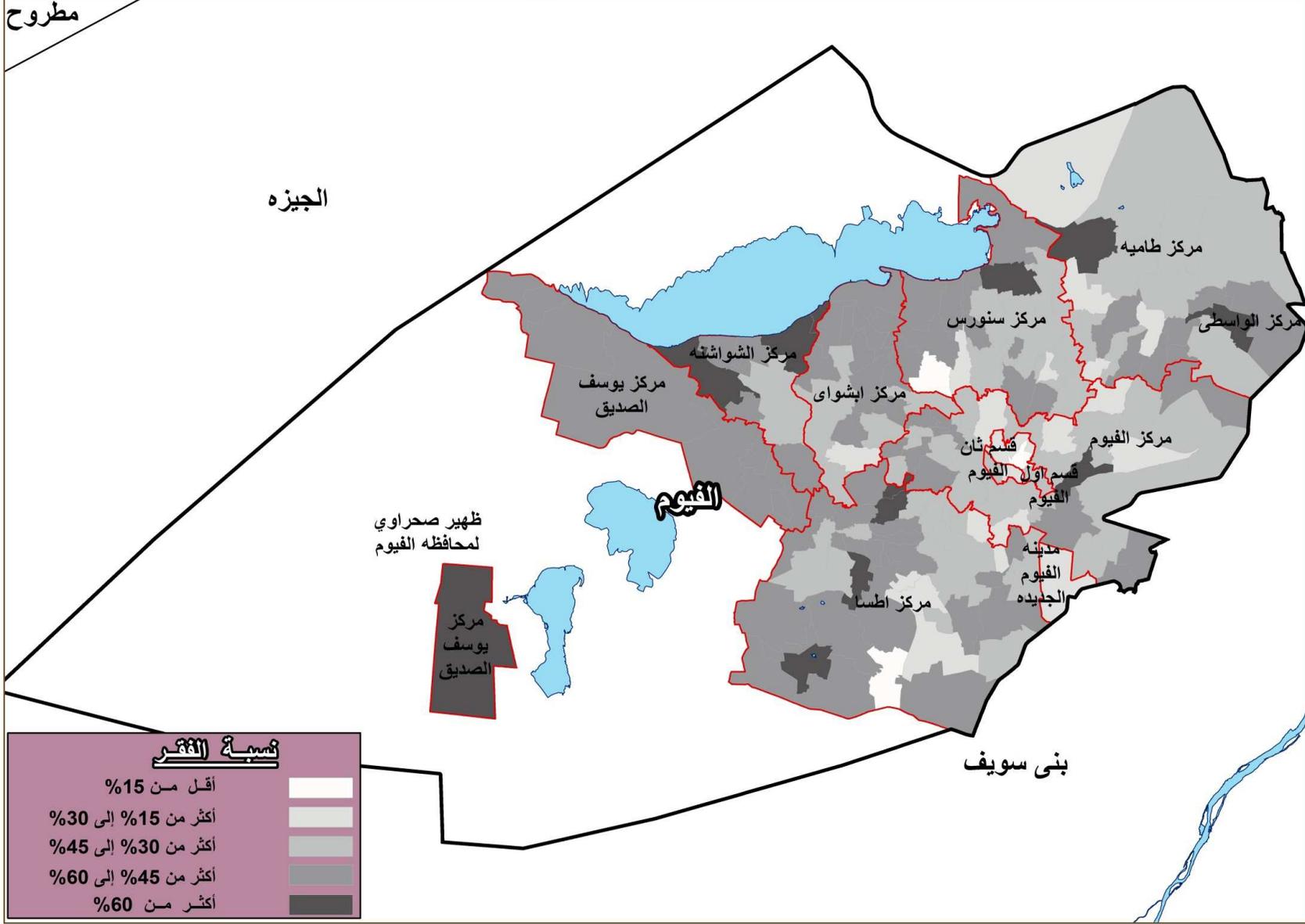


# محافظة الفيوم



مطروح

الجيزه

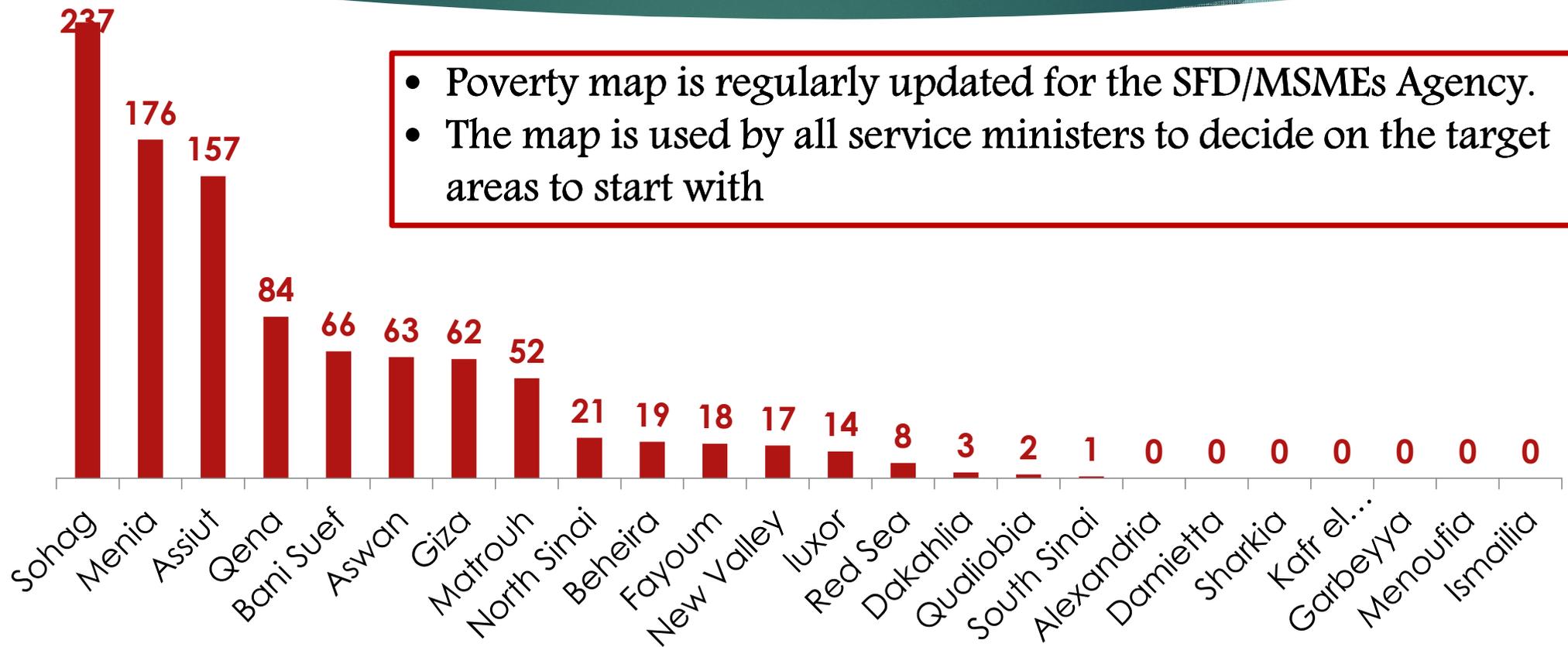


## نسبة الفقر

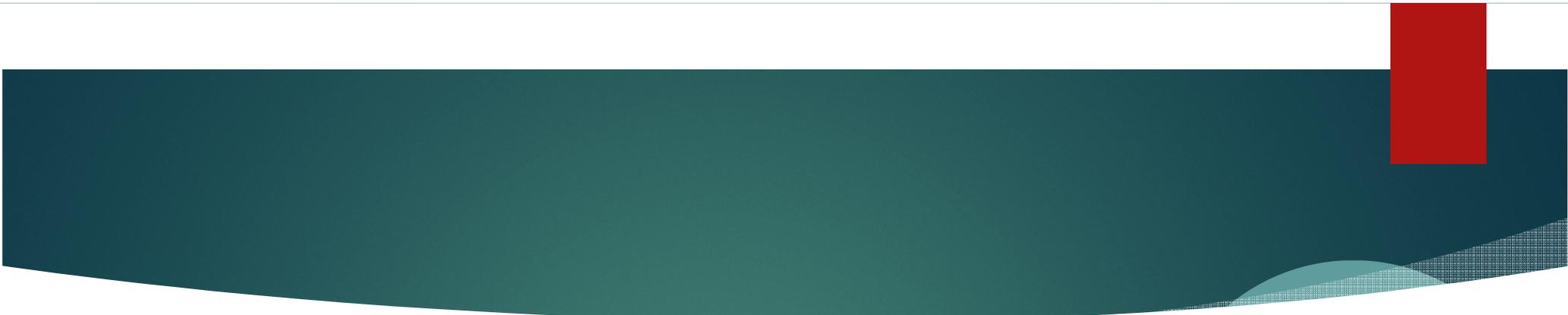
أقل من 15%	□
أكثر من 15% إلى 30%	□
أكثر من 30% إلى 45%	□
أكثر من 45% إلى 60%	□
أكثر من 60%	□

بنى سويف

# Where are the poorest 1000 villages?



- Poverty map is regularly updated for the SFD/MSMEs Agency.
- The map is used by all service ministers to decide on the target areas to start with



# Proxy Means Test

Using **easily observable** but **not easily manipulated** household characteristics (from the profile) to **estimate** household income or consumption, when other income data (salary slips, tax files, etc..) are not available or easily accessible

# HIECS is used to Determine PMT Variables and Weights

There are six criteria sets to identify and target groups.

1) community location (residence: urban area/region)

2) household head characteristics

3) Family members characteristics

4) Remittances and financial flows to family members

5) Housing conditions

6) Ownership of durables

# PMT has been used in identifying the illegible hhds for Takafol and Karama CT Progrmas



2.75 beneficiary  
households  
=  
7.5 million  
individuals

5.068 registered  
households  
=  
20.6 million  
individuals

## To Wrap Up

- 1) There is a wide range of uses of CAPMAS household data.

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- 1) There is a wide range of uses of CAPMAS household data.
- 2) Many of the important implemented policy reforms were data-driven decisions.
- 3) CAPMAS needs to keep its strong commitment to open access to data, and to improve its quality.
- 4) There is still a lot to explore from these datasets. So, researchers have to investigate all the relevant questions, and provide evidence base, interpretable findings, and implementable recommendations.

*Thank You!*