

# Child Poverty using Multiple Overlapping Deprivation Analysis (MODA)

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# How is child poverty different? Why should we focus on child poverty?

- Different because
  - Indicators of child well-being are different than those for adults
  - Children are dependent on others and less mobile, so their environment is especially important
  - Children do not control income, income may not be spent in ways that benefit children, must therefore measure their welfare directly
- Important to focus on children because
  - Poverty can have lasting effects, alter a child's life forever
  - Children are the basis for the future productivity of the country, but policy-makers can be 'short-sighted' and focus on present, ignoring future

# UN Definition of Child Poverty

- *“Children living in poverty are deprived of nutrition, water and sanitation facilities, access to basic health-care services, shelter, education, participation and protection, and that while a severe lack of goods and services hurts every human being, it is most threatening and harmful to children, leaving them unable to enjoy their rights, to reach their full potential and to participate as full members of the society”*
- “Les enfants vivant dans la pauvreté sont privés de nutrition, d'eau et d'assainissement, d'accès aux services de santé de base, au logement, à l'éducation, à la participation et à la protection, et que, même si un manque sévère de biens et services fait mal à chaque être humain, mais il est plus menaçant et dangereux pour les enfants, qui les empêche de jouir de leurs droits, d'atteindre leur plein potentiel et de participer en tant que membres à part entière de la société’
- **Deprivations and money (‘lack of goods...’); participation, ‘full potential’; ‘rights’**

# Multiple Overlapping Deprivations Analysis (MODA)

- ‘Child focused’ MPI
  - Identifies indicators that more directly relate to children’s well-being
  - Specific indicator choice based on Convention on Rights of the Child (CRC)
  - Statistics are generated for children, not households
- Considers single deprivation analysis and overlapping deprivation analysis
  - Many children suffer from more than one deprivation
  - How many children suffer multiple deprivation? Who are they?
  - Overlapping deprivations important for equity—identify the most vulnerable

# CC-MODA versus N-MODA

- Cross-country MODA (CC-MODA) Project
  - Standardized definition of indicators and deprivations to allow cross-country comparisons; MICS and DHS
  - Web portal shows results for 35+ countries, more coming
  - [www.unicef-irc.org/MODA/](http://www.unicef-irc.org/MODA/)
- National MODA (N-MODA) Project
  - Country specific application of MODA method
  - Nationally specific indicators and deprivations identified and used
  - Use any data available (DHS, MICS, LSMS)
- Reference:

De Neubourg, C., J. Chai, M. de Milliano, I. Plavgo, Z. Wei (2012b), *Cross-country MODA Study: Multiple Overlapping Deprivation Analysis (MODA) - Technical note*, Working Paper 2012-05, UNICEF OoR, Florence.

# CC-MODA Indicators

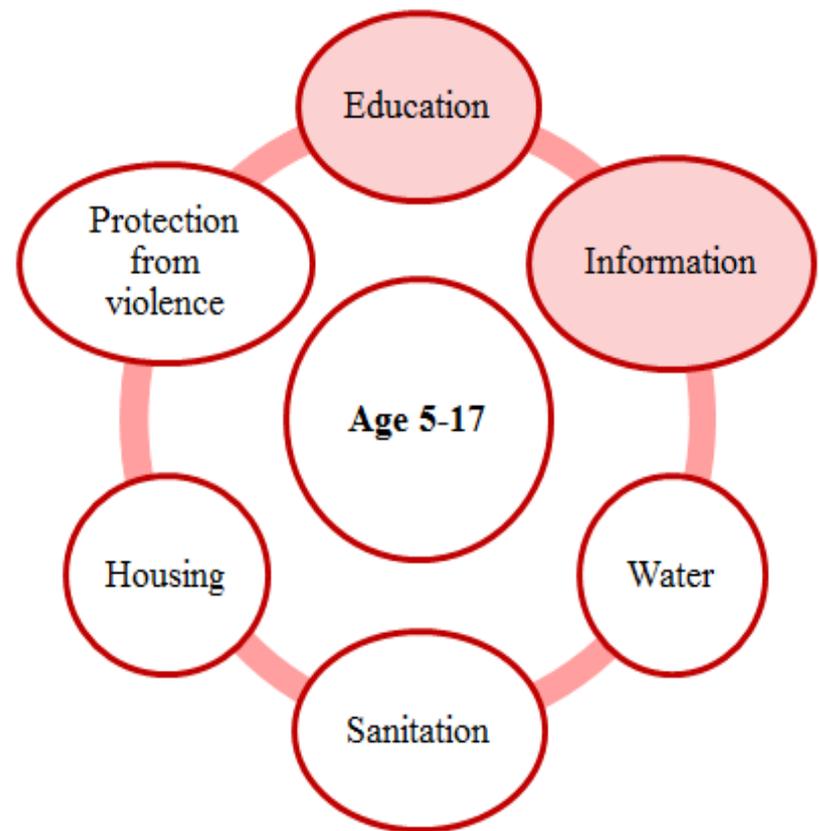
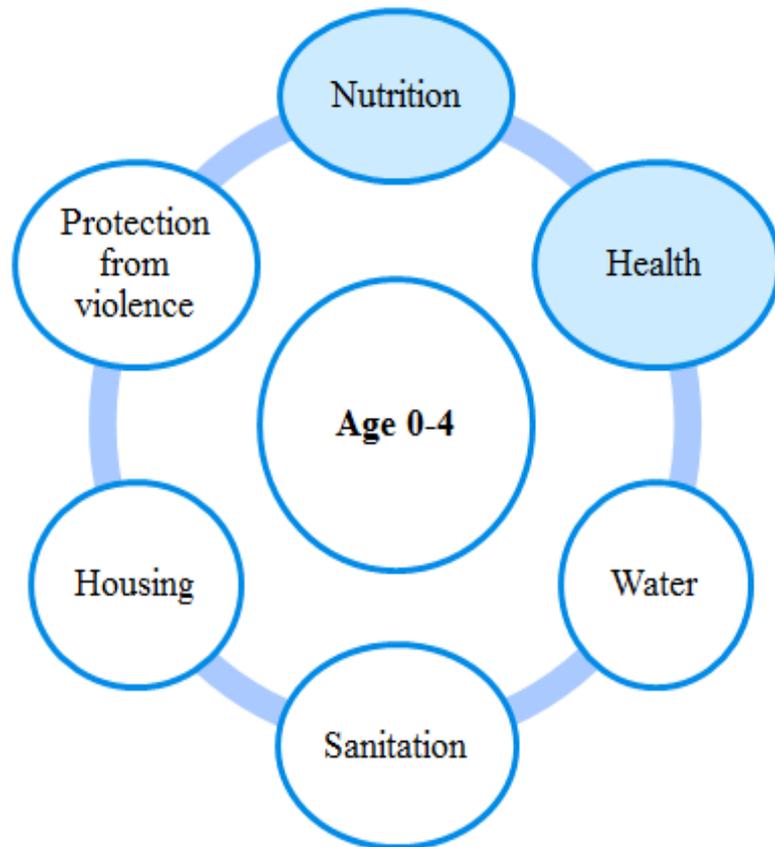
Dimensions	Indicators	Deprived if
<b>1. Nutrition</b>	Infant and young child feeding	Child under 6 months not exclusively breastfed; child between 6-59 months living in a household where children between 6-23 months are not provided with minimum meal frequency in the last 24 hours. WHO standards.
	Weight for height (wasting)	Child's weight for height is below minus two standard deviations from the international median. WHO standards.
<b>2. Health</b>	Immunization	Child aged 1-4 years has not received all 3 DPT vaccinations. WHO standards.
	Skilled assistance at birth	No or an unskilled birth attendant assisted with child's birth. WHO standards.
<b>3. Education</b>	Compulsory school attendance	Child of compulsory school age but not attending school. Country-specific data, retrieved from UNESCO.
	Primary school attainment	Child beyond primary school age with no or incomplete primary education. Country-specific data, retrieved from UNESCO.
<b>4. Information</b>	Availability of information devices	Family has not reported having any of the following: TV, radio, phone, mobile phone, and computer. MDG.

# MODA Indicators (cont...)

Dimensions	Indicators	Deprived if
<b>5. Water</b>	Access to improved water source	Household's main source of drinking water is unimproved. WHO standards.
	Distance to water source	Time needed to collect water (go, get water, and come back) is more than 30 minutes. WHO standards.
<b>6. Sanitation</b>	Access to improved sanitation	Household usually uses unimproved toilet facility. WHO standards.
<b>7. Housing</b>	Overcrowding	Household has on average more than four people per sleeping room. UN-HABITAT, adjusted for the number of sleeping rooms only.
	Roof & floor material	Both roof and floor are made of natural material, which are not considered permanent. UN-HABITAT standards.
<b>8. Protection *</b>	Domestic violence	Child is living in a household where a child between 2 and 14 years experiences any type of physical abuse by parents.

\* When available

# Life-cycle stages and dimensions in CC-MODA



# CC-MODA Deprivation Indicators

Children 0-59 months		Children 5-17 years	
Dimension	Indicator	Dimension	Indicator
<b>Nutrition</b>	Child feeding	<b>Education</b>	Incomplete primary (>13 yrs)
	Weight for age (w/a)		Child enrollment
<b>Health</b>	Assisted delivery	Information	TV, radio, phone, etc
	DPT vaccinations	Water	Protected water
Water	Protected water		Clean water <30 min.
	Clean water <30 min.	Sanitation	Improved toilet
Sanitation	Improved toilet	Housing	Crowding
Housing	Crowding		Roof & floor
	Roof & floor	<b>Protection</b>	Exposure to violence
<b>Protection</b>	Exposure to violence		

# MPI versus MODA (children <4 years)

Dimension	Indicator (MODA)
Nutrition (1)	Child feeding
	Weight for age (w/a)
Health (1)	Assisted delivery
	DPT vaccinations
Water (1)	Protected water
	Clean water <30 min.
Sanitation (1)	Improved toilet
Housing (1)	Crowding
	Roof & floor
Poverty line: no fixed line	

Dimension	Indicator (MPI)
Education	<5 yrs schooling (1/6)
	child enrollment (1/6)
Health	Malnutrition (w/a, BMI) (1/6)
	Child mortality (1/6)
Standard of Living	Protected water (1/18)
	Electricity (1/18)
	Improved toilet (1/18)
	Floor of dirt/sand (1/18)
	Cooking fuel (1/18)
	Assets (TV, radio, etc) (1/18)
	Poverty line: 0.33

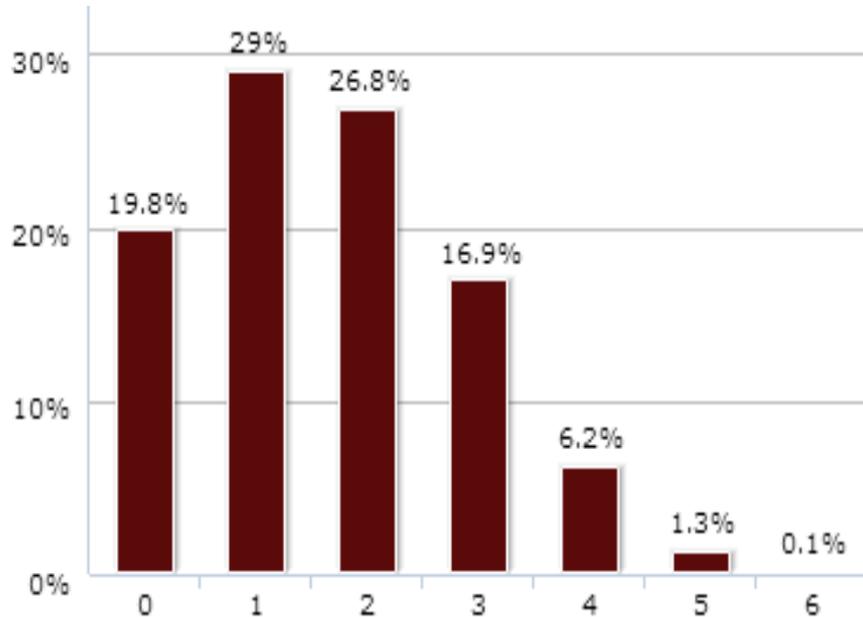
# MPI versus MODA (children 5-17years)

Dimension	Indicator (MODA)
Education	Incomplete primary (>13 yrs)
	Child enrollment
Information	TV, radio, phone, etc
Water	Protected water
	Clean water <30 min.
Sanitation	Improved toilet
Housing	Crowding
	Roof & floor

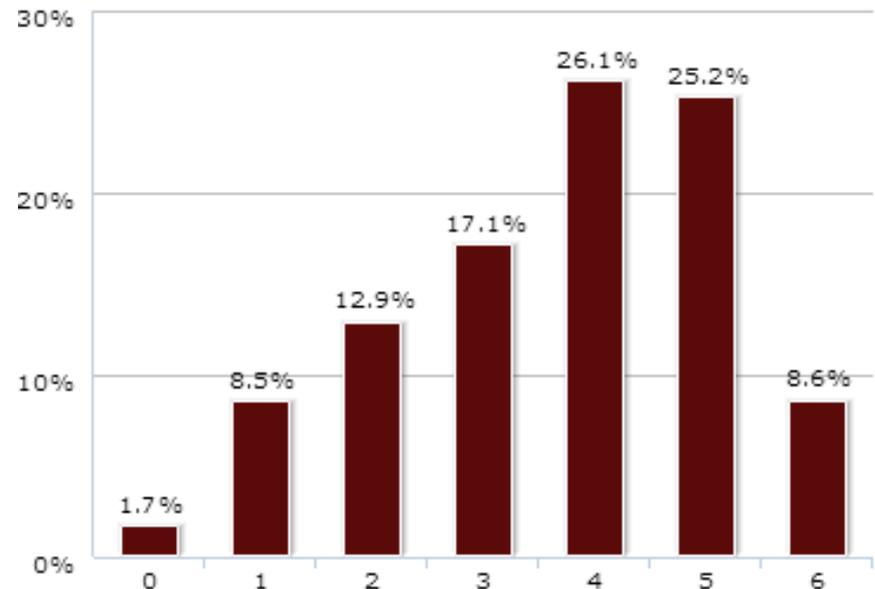
Dimension	Indicator (MPI)
Education	<5 yrs schooling (1/6)
	child enrollment (1/6)
Health	Malnutrition (w/a, BMI) (1/6)
	Child mortality (1/6)
Standard of Living	Protected water (1/18)
	Electricity (1/18)
	Improved toilet (1/18)
	Floor of dirt/sand (1/18)
	Cooking fuel (1/18)
	Assets (TV, radio, etc) (1/18)

1/6 + 1/6 of MPI is based on children

# Example: How many children suffer a deprivation? How many experience multiple deprivations?

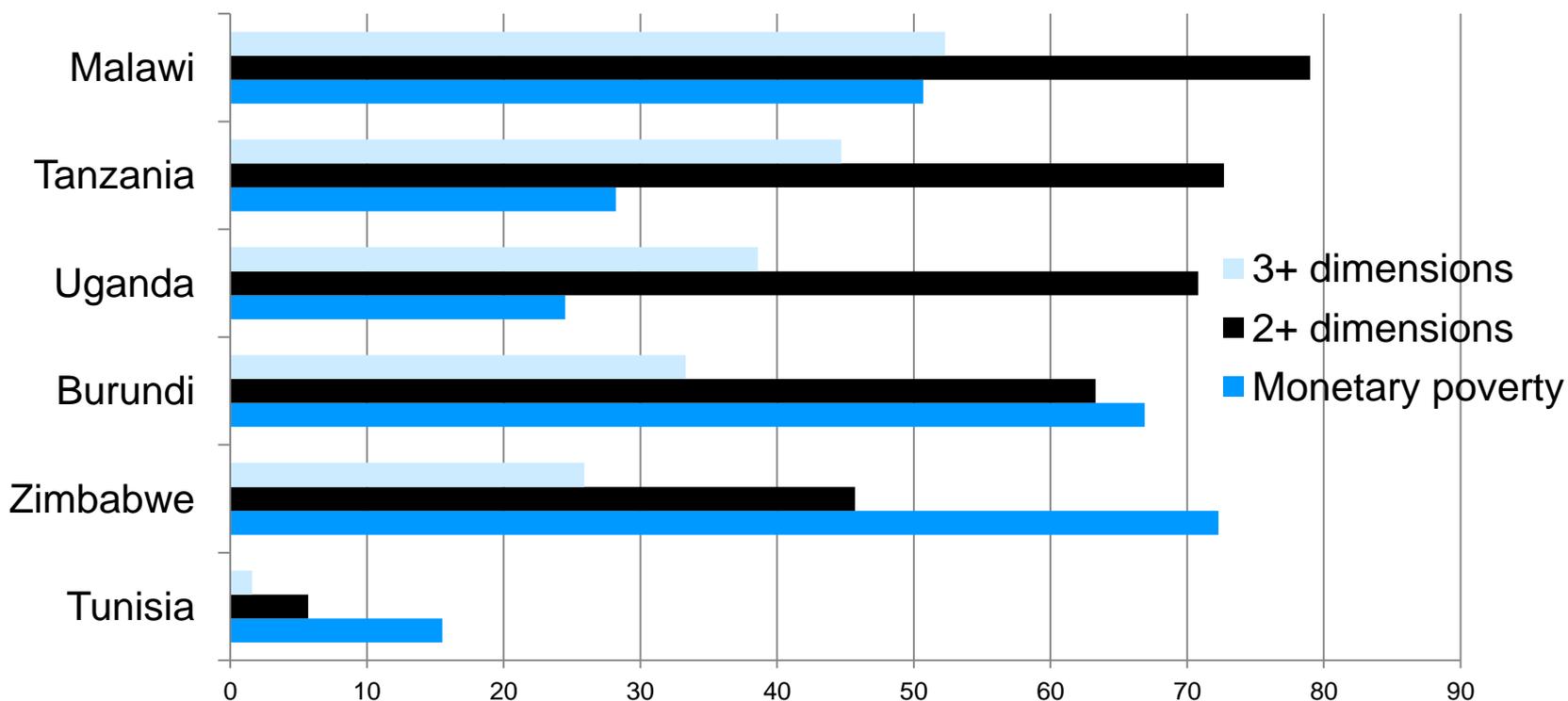


Côte d'Ivoire 2012: children aged 5-17 years



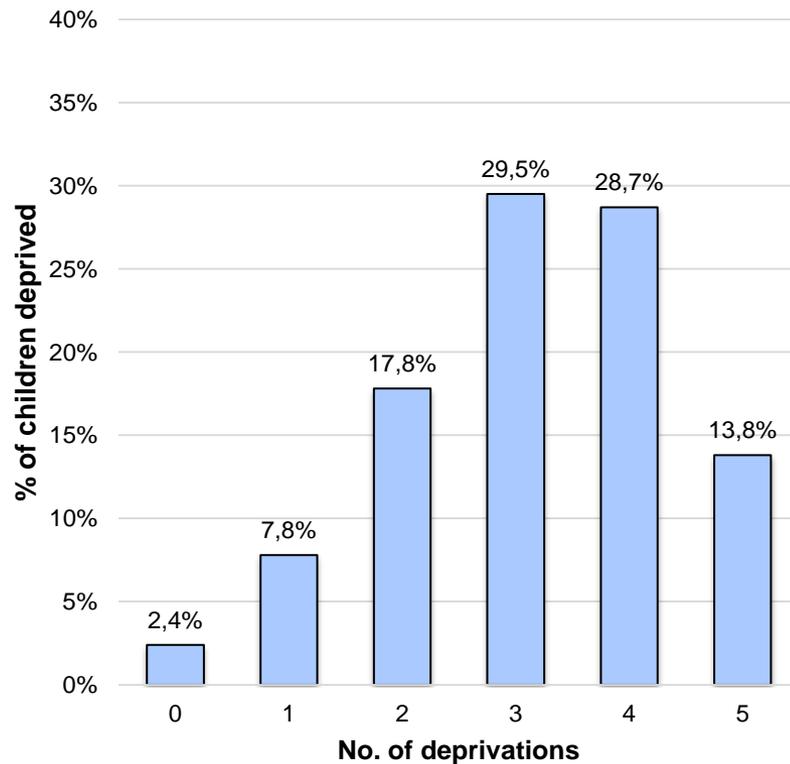
Congo DR 2010: children aged 5-17 years

# CC-MODA: Comparisons of national monetary poverty and child deprivation rates

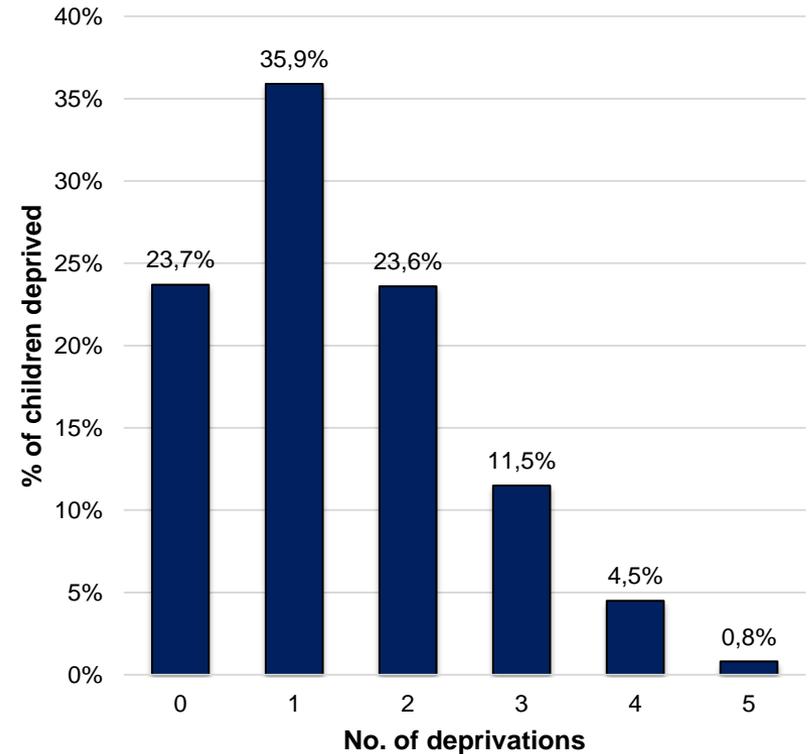


# CC-MODA for Mali: Rural versus urban

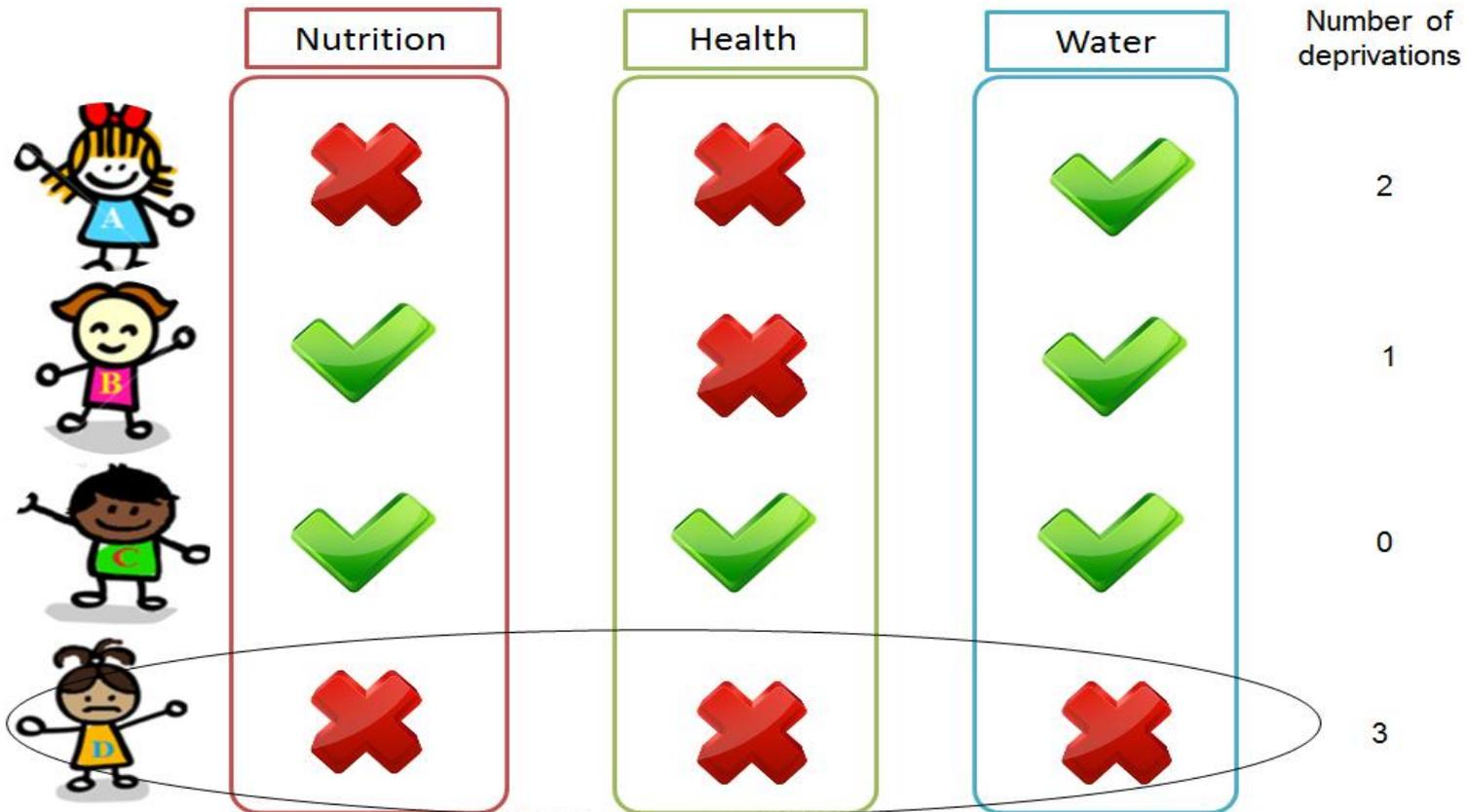
No. of deprivations, children < 5 years:  
in Rural areas



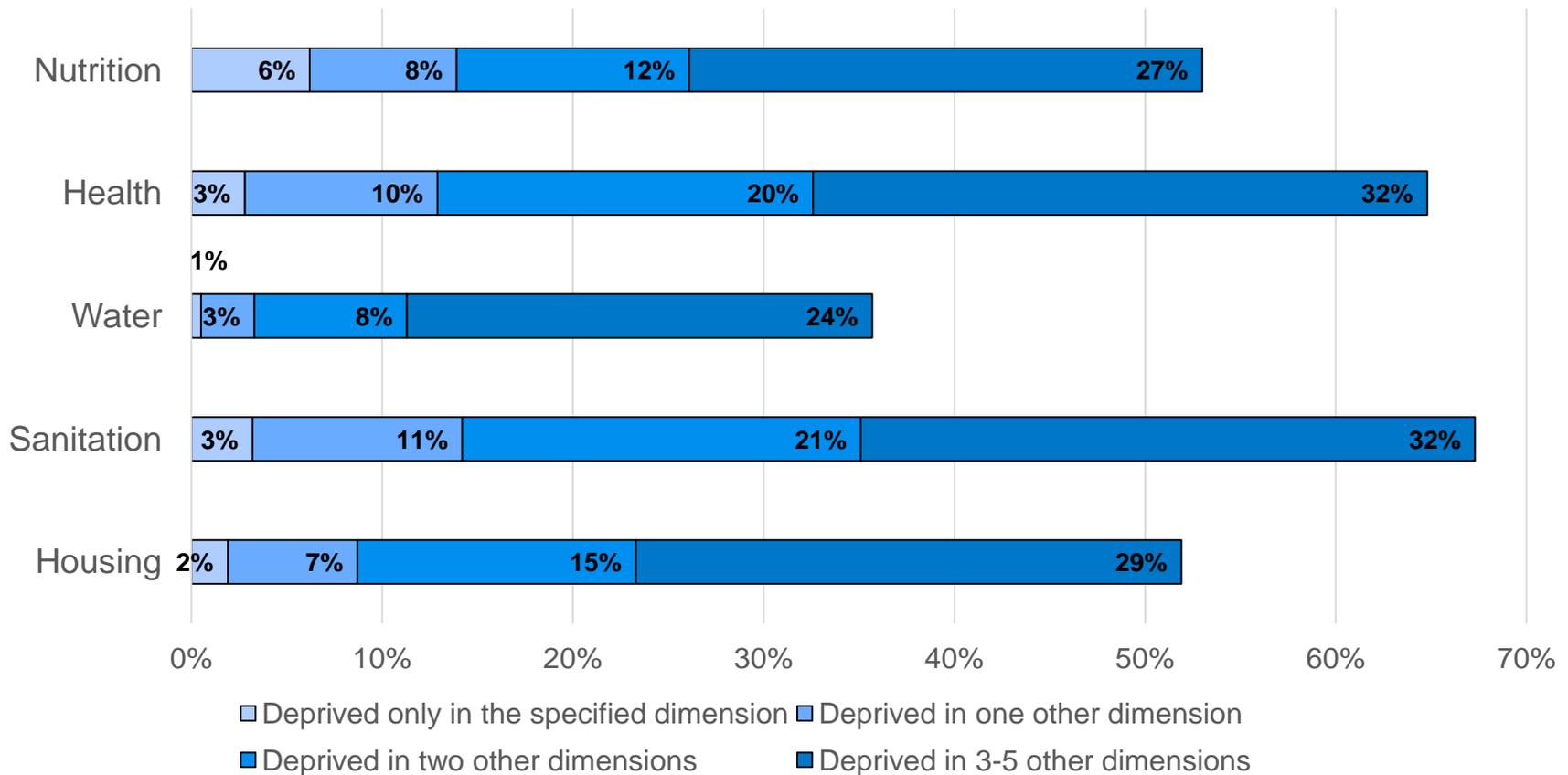
No. of deprivations, children < 5 years:  
in Urban areas



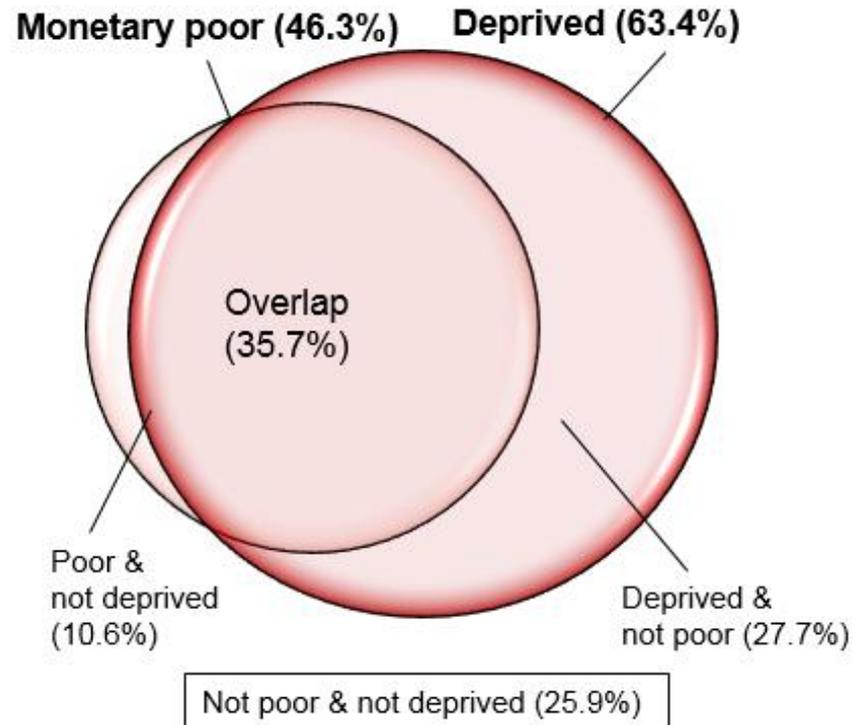
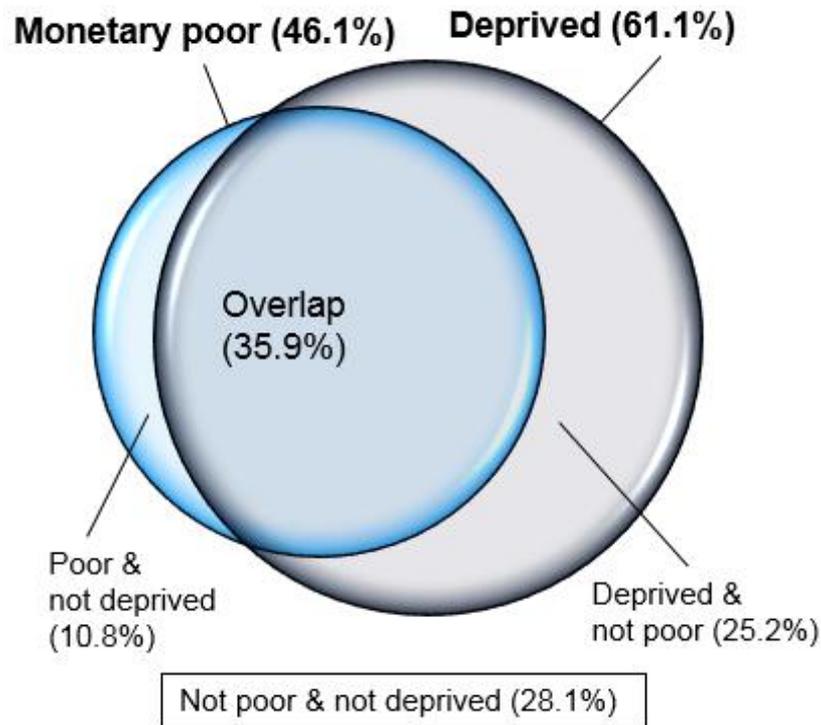
# Multiple overlapping deprivations



# CC-MODA for Mali: overlap analysis by dimension, children <5 years (MICS 2009-10)



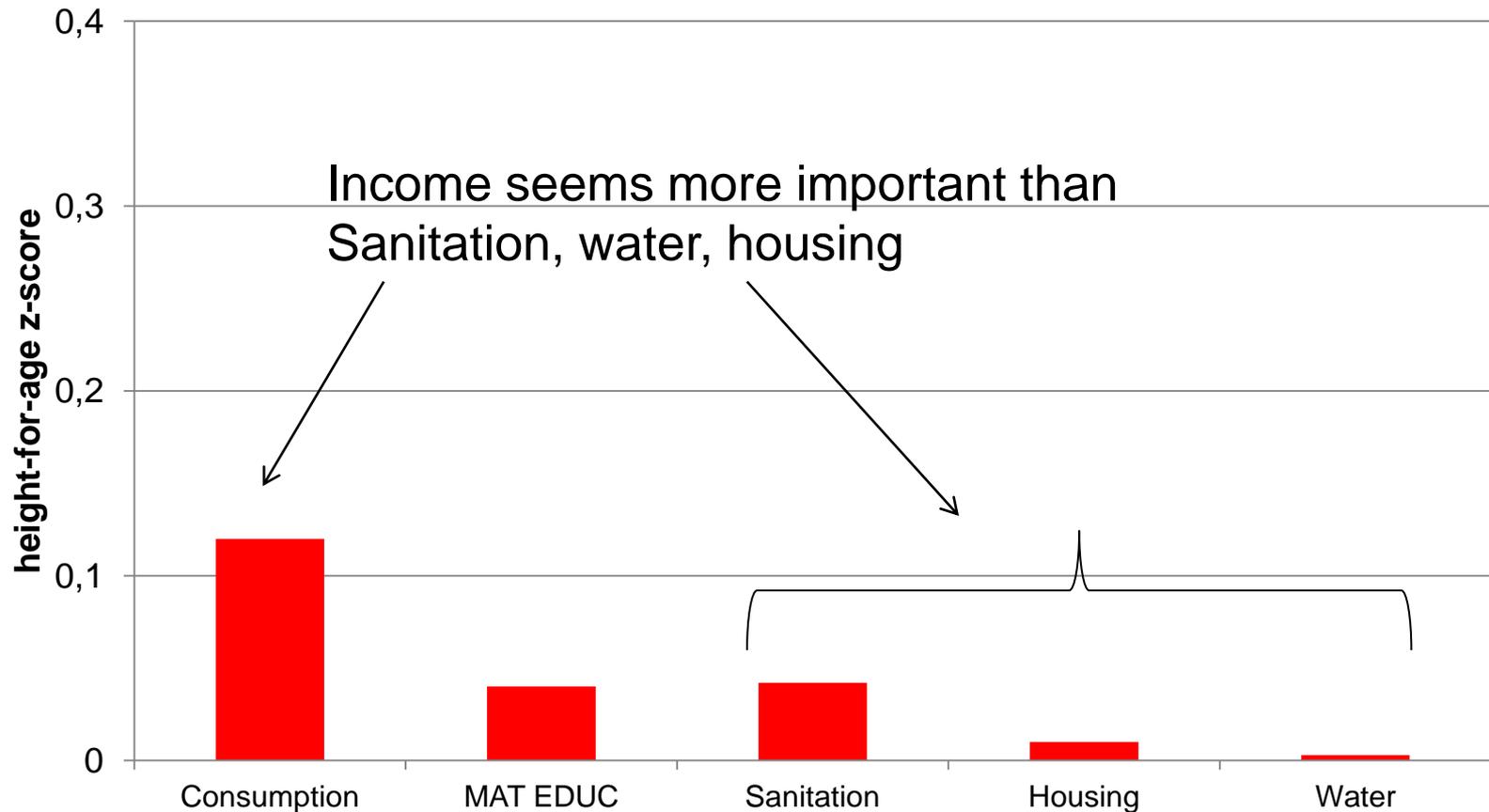
# Overlap between monetary poverty and deprivation (Mali 2010)



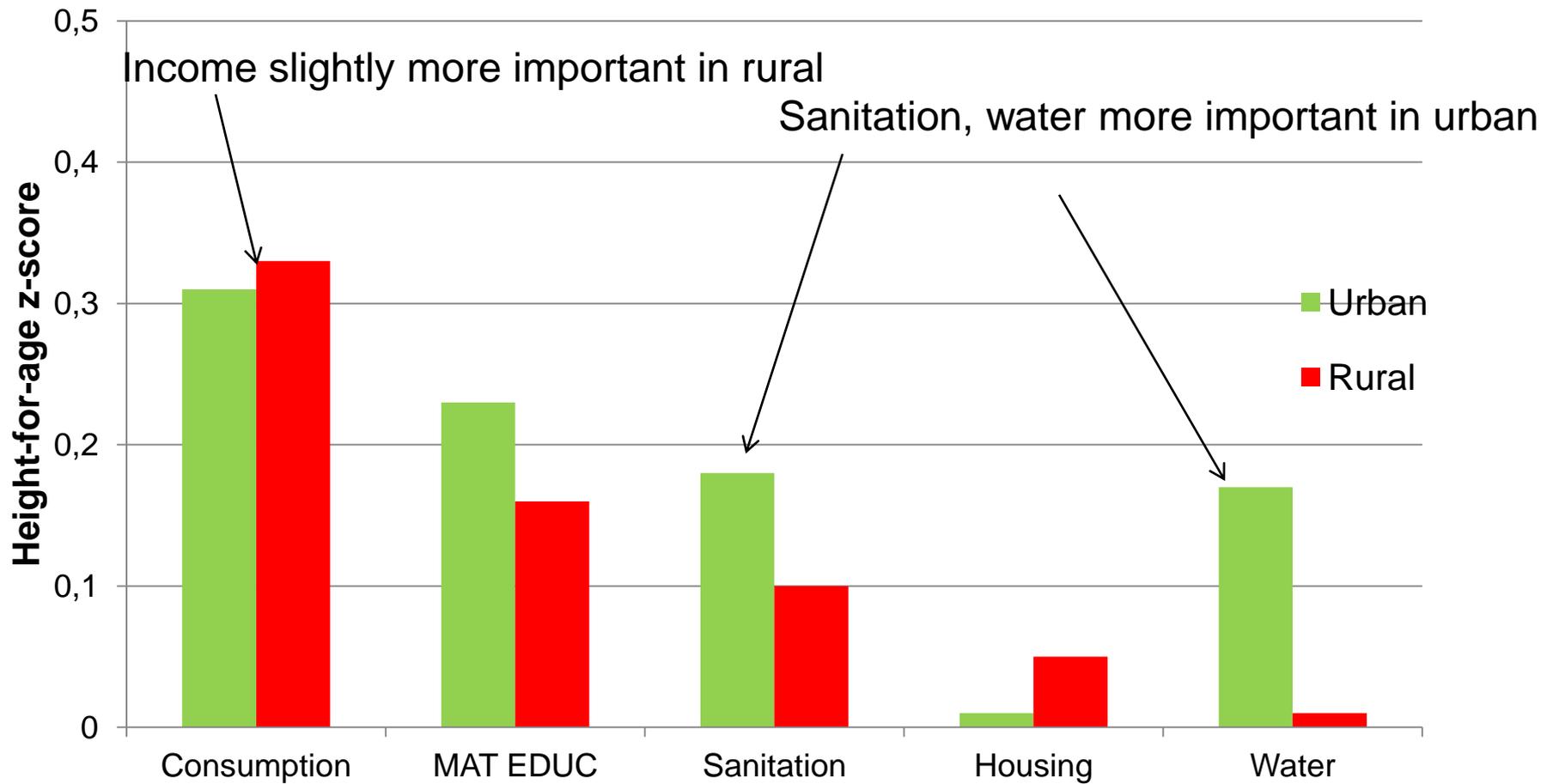
Children < 5 years (3+ deprivations)

Children 5-17 years (2+ deprivations)

# Relative importance of income versus other factors in determining height-for-age in Mali (standardized coefficients)



# Relative importance of factors determining height-for-age by region



# Summary

- Added value of MODA
  - Child specific indicators
  - Different age groups (life-cycle approach)
  - Individual child level analysis (versus household)
  - Overlap analysis
- Uses of MODA
  - Type, distribution of deprivations
  - Overlaps with each other and monetary poverty
    - Targeting
    - Relative importance allows prioritization of interventions