

ESA/STAT/AC.320/8

Expert Group Meeting on Data Disaggregation

27-29 June 2016

New York

Data disaggregated by income and/or other dimensions of poverty

By Leonardo Athias

Expert Group Meeting on Data Disaggregation

Session 5 – Data disaggregated by income and/or other dimensions of poverty

Concrete examples of current work and specific strategies
Monday, 27 June 2016

Leonardo Athias

Brazilian Institute of Geography and Statistics - IBGE

Contents

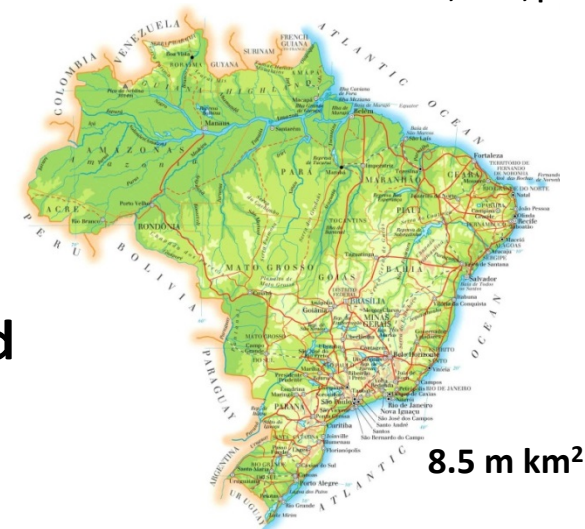
- 1) Problem statement**
- 2) Concrete examples**
- 3) Methodological challenges**
- 4) Identification of priority issues to be addressed for future guidance for SDG follow up and review**

Brazil is a big middle income country with high levels of inequality

HDI rank	Human Development Index (HDI)	Inequality-adjusted HDI (IHDI)		Coefficient of human inequality	Inequality in life expectancy	Inequality-adjusted life expectancy index	Inequality in education ^a	Inequality-adjusted education index	Inequality in income ^a	Inequality-adjusted income index	Income inequality			
	Value	Value	Overall loss (%)								Difference from HDI rank ^b	Quintile ratio	Palma ratio	Gini coefficient
	2014	2014	2014	2014	2014	2010–2015 ^c	2014	2014 ^d	2014	2014 ^d	2014	2005–2013 ^e	2005–2013 ^e	2005–2013 ^e
75 Brazil	0.755	0.557	26.3	-20	25.6	14.5	0.717	23.6	0.518	38.7	0.465	16.9	3.8	52.7

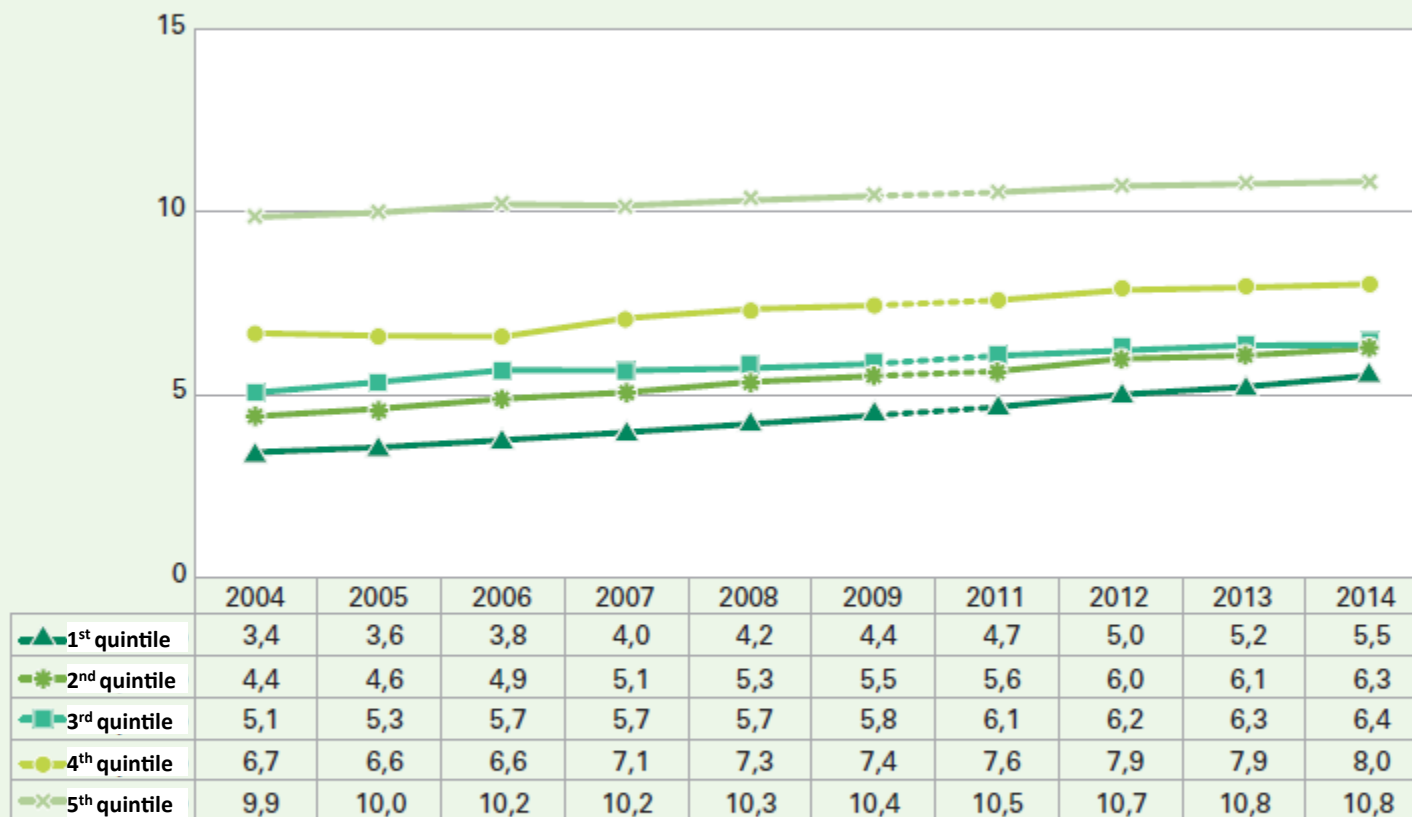
HDR, 2015, p. 217

Along with urban/rural, gender, racial, and regional inequalities, income is one of the main inequalities if not the most studied



Educational achievement

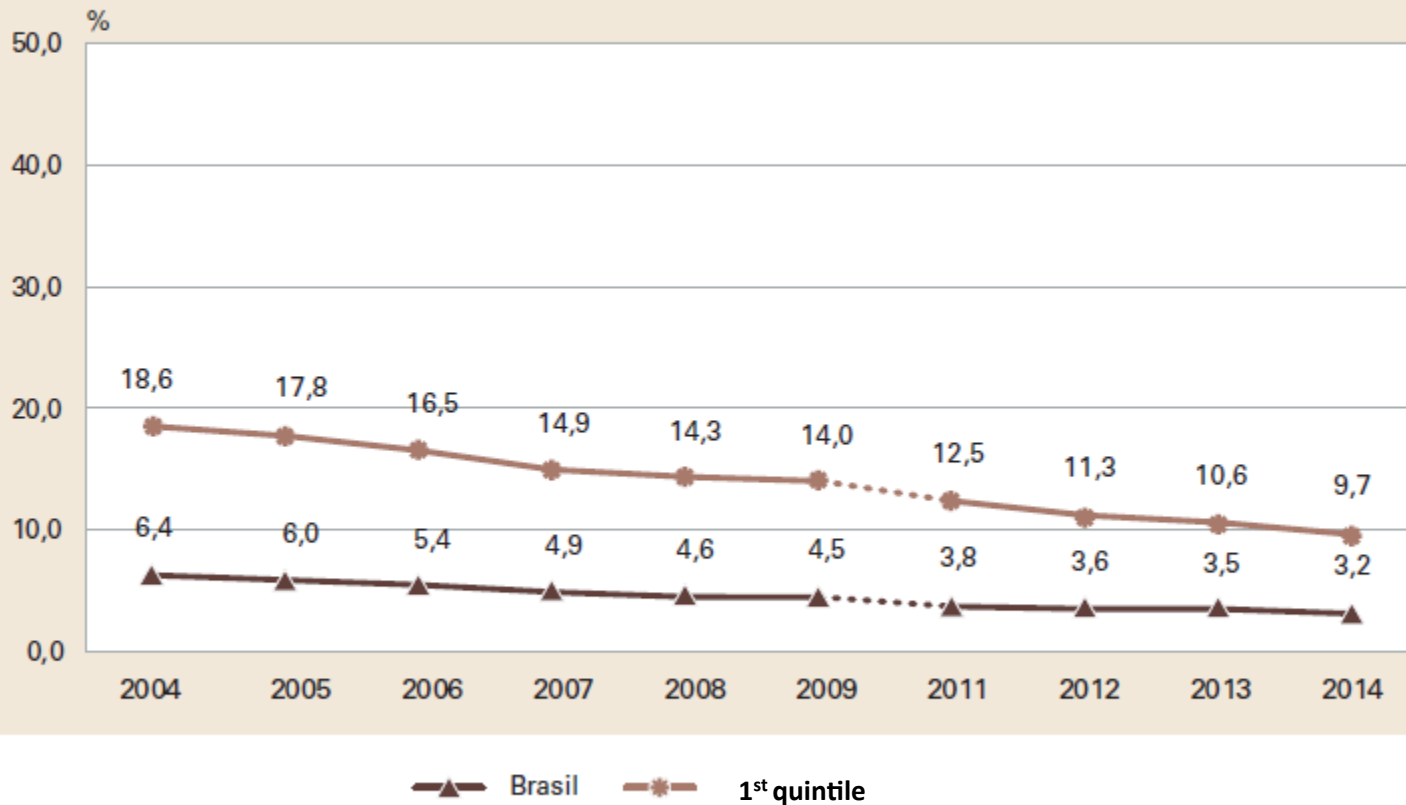
Average years of schooling of people 25 y.o.+ per quintiles of average monthly household per capita income - Brazil - 2014



Source: IBGE, PNAD

Dwelling characteristics

Proportion of overcrowded households, total and 1st quintile of average monthly household per capita income - Brazil - 2004/2014



Note: overcrowding is defined as >3 persons per dormitory.

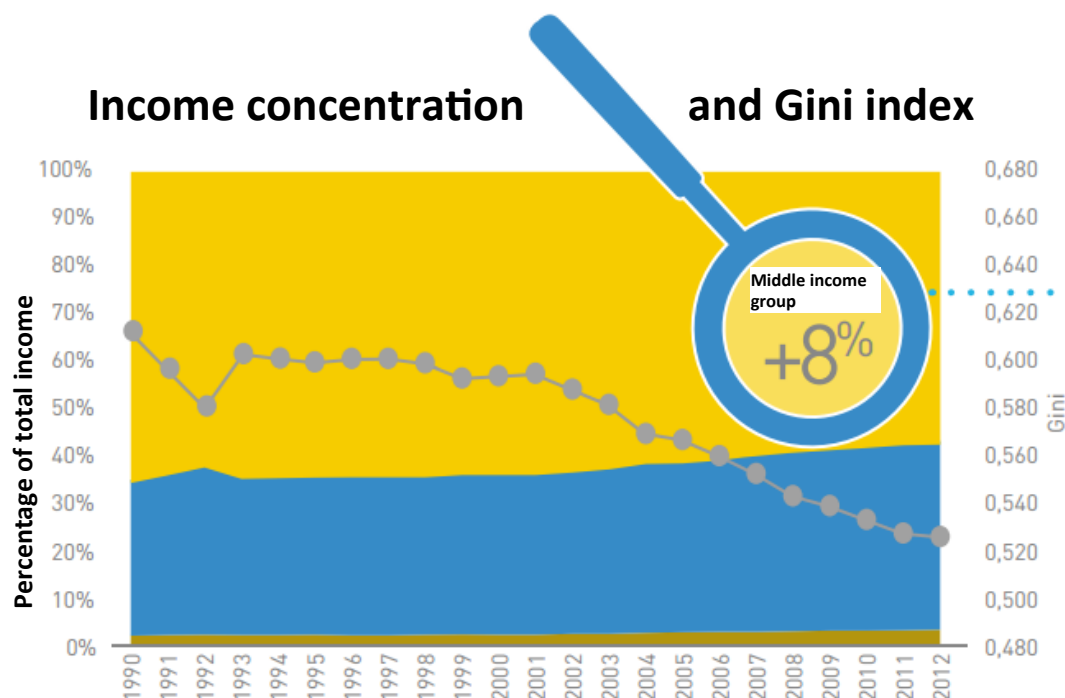
Source: IBGE, PNAD

2) Concrete examples: MDG monitoring

MDG national monitoring reports disclosed “UN indicators” and “National indicators” for Goal 1 such as:

- National income concentrated by 20% richest

	1990	2012
20% poorest	2,2%	3,4%
20%-80% middle	32,6%	39,5%
20% richest	65,2%	57,1%
Gini index	0,612	0,526



Middle income group (+6.9 p.p.) concentrated most of the 8% lost by 20% richest in the period

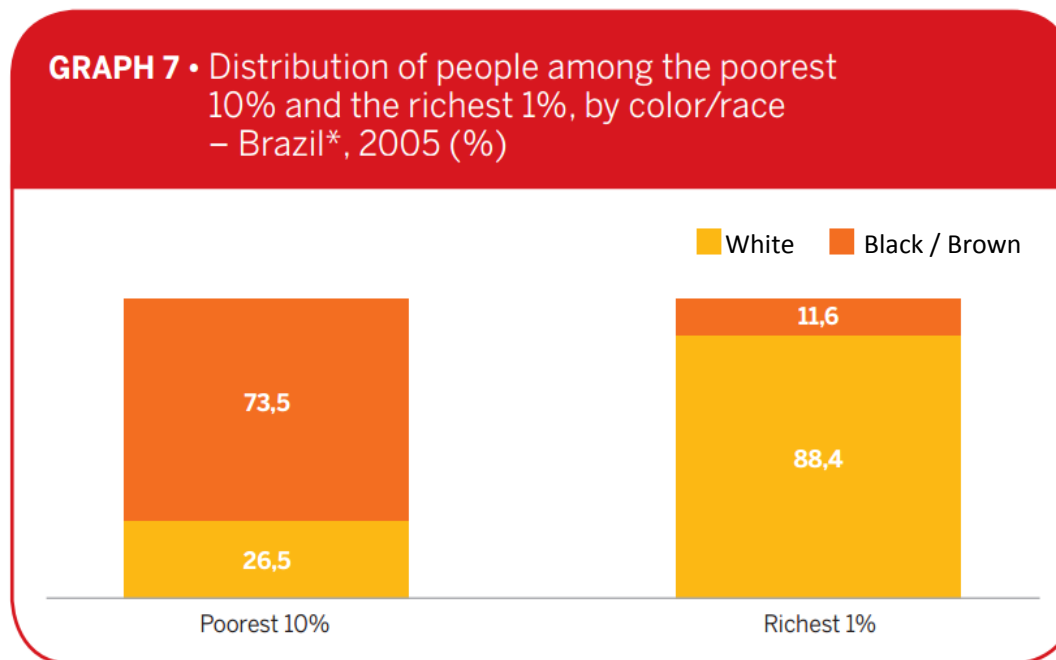
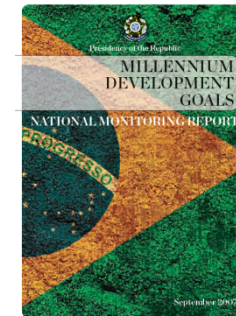
Data source: IBGE, PNAD

Source: 5th MDG national monitoring report, 2014.

2) Concrete examples: MDG monitoring

MDG national monitoring reports disclosed “UN indicators” and “National indicators” for Goal 1 such as:

- National income concentrated by 20% richest
- Distribution of population in the 10% poorest and 1% richest, by race



Data source: IBGE, PNAD

Source: 3rd MDG national monitoring report, 2007.

IBGE main household surveys

Decennial census (municipality level), short/long form
Provides: total/labor/other income (reference month - July)

Regular income data with annual national Labor Force Survey, 1981-2015 (State, Metropolitan areas, urban/rural)
Provides: total/labor/other income (reference month - Sept.)

Transition since 2012 to panel LFS (HH stays 5 quarters), similar to Ireland and Mexico LFS.

Questionnaire revision: Oct/2015
Provides: total/labor/other income (reference: last month)

Budget survey is less frequent, 2002-2003, 2008-2009, ...
Provides: consumption, total/disposable income (reference: 12 months)

Income as variable and as disaggregation ...

Distribution of personal or household (per capita) income by

... percentiles of income (20%,10%)

... 1/4, 1/2, ... 5+ minimum wage (today ~ US\$500 PPP2011)

classes

Other usual disaggregation:

Sex

Age groups

Race

Urban/rural

Regions

Disability (census data)

3) Methodological challenges

Brazil

Consumption is better indicator for monitoring (Goal 1) than income, but no annual recollection

Many income lines

Expenditure survey, 5x5 years (recommendation)

Perspective: continuous Budget survey

Income quintiles/deciles:

LFS with complex samples, minimum income & ties, database order, metadata

Disaggregation when near the target, e.g., US\$1.25 PPP extreme poverty in Latin America // discussions in regional monitoring, population & development

3) Methodological challenges

International level

India comment on 1.1.1./1.1.2. indicators: In Asia consumption expenditure is collected instead of income

SDGs: Many themes and data sources (if available) how to link?

Questions about unifying income and consumption sources in World Bank data

Metadata from PovcalNet:

- Uses both income and consumption because of (un)availability and study with 20 countries
- Consumption aggregates differ

Many decisions regarding income/consumption /“poverty in all its dimensions”, “people living below...” (Tier 3)

How about transparency, replicability?

4) Identification of priority issues to be addressed for future guidance for SDG follow up and review

Pressures regarding censuses and surveys:
periodicity, coverage, more & more & more questions?
How to set the limits of disaggregation?
How to prioritize disaggregation types?

4) Identification of priority issues to be addressed for future guidance for SDG follow up and review

Pressures regarding censuses and surveys:
periodicity, coverage, more & more & more questions?
How to set the limits of disaggregation?
How to prioritize disaggregation types?

NSO = official statistics ...
How to integrate other data sources?
Non-official data, data with high error margins...
How to compose using records and census/survey data?

THANK YOU !

IBGE

<http://www.ibge.gov.br/english/>

E-mail

leonardo.athias@ibge.gov.br

BACKUP

Data sources & HH income components

Canberra Group Handbook
2nd edition
(UNECE, 2011)

IBGE surveys:
HH Budget survey (POF)
Continuous LFS (PNADC)
LFS (PNAD)
Census long form

Conceptual definition	Operational definition	HH Budget survey (POF)	Continuous LFS (PNADC)	LFS (PNAD)	Census long form
1 Income from employment]	
Employee income	Included	√√	√√	√√	√√
Wages and salaries	Included	√√	√	√	√
Cash bonuses and gratuities	Included	√√	√	√	√
Commissions and tips	Included	√√	√	√	√
Directors' fees	Included	√√	√	√	√
Profit-sharing bonuses and other forms of profit-related pay	Included	√√	√		
Shares offered as part of employee remuneration	Included	√√			
Free or subsidised goods and services from an employer	Included	√	√√	√√	
Severance and termination pay	Included	√√	√		
Employers' social insurance contributions	Included				
Income from self-employment	Included	√√	√√	√√	√√
Profit/loss from unincorporated enterprise	Included	√√	√	√	√
Goods and services produced for barter, less cost of inputs	Included				
Goods produced for own consumption, less cost of inputs	Included	√			
2 Property income					
Income from financial assets, net of expenses	Included		√	√	√
Income from non-financial assets, net of expenses	Included	√√	√√	√√	√
Royalties	Included	√√	√	√	√
3 Income from household production of services for own consumption					
Net value of owner-occupied housing services	Included	√√			
Value of unpaid domestic services —	Not Included				
Value of services from household consumer durables —	Not Included				
4 Current transfers received					
Social security pensions / schemes	Included	√√	√√	√√	√√
Pensions and other insurance benefits	Included	√√	√√	√√	√
Social assistance benefits (excluding social transfers in kind, see 10)	Included	√√	√√	√√	√√
Current transfers from non-profit institutions	Included	√√	√	√	√
Current transfers from other households	Included	√√	√√	√√	√
5 Income from production (sum of 1 and 3)					
6 Primary income (sum of 2 and 5)					
7 Total income (sum of 4 and 6)					
8 Current transfers paid					
Direct taxes (net of refunds)	Included	√√			
Compulsory fees and fines	Included	√√			
Current inter-household transfers paid	Included	√√			
Employee and employers' social insurance contributions	Included	√√			
Current transfers to non-profit institutions	Included	√√			
9 Disposable income (7 less 8)					
10 Social transfers in kind (STIK) received	Not Included	√			
11 Adjusted disposable income (9 plus 10)					

Note: √√ directly captured; √ captured aggregated with other components; most recent survey presented: POF 2008-2009, PNAD 2011-15, PNADC Oct/15 onward; Census 2010. Source: IBGE, internal documentation; UNECE, 2011, p.24.

BACKUP

1.1.1 Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

1.2.1 Proportion of population living below the national poverty line, by sex and age

1.2.2 Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

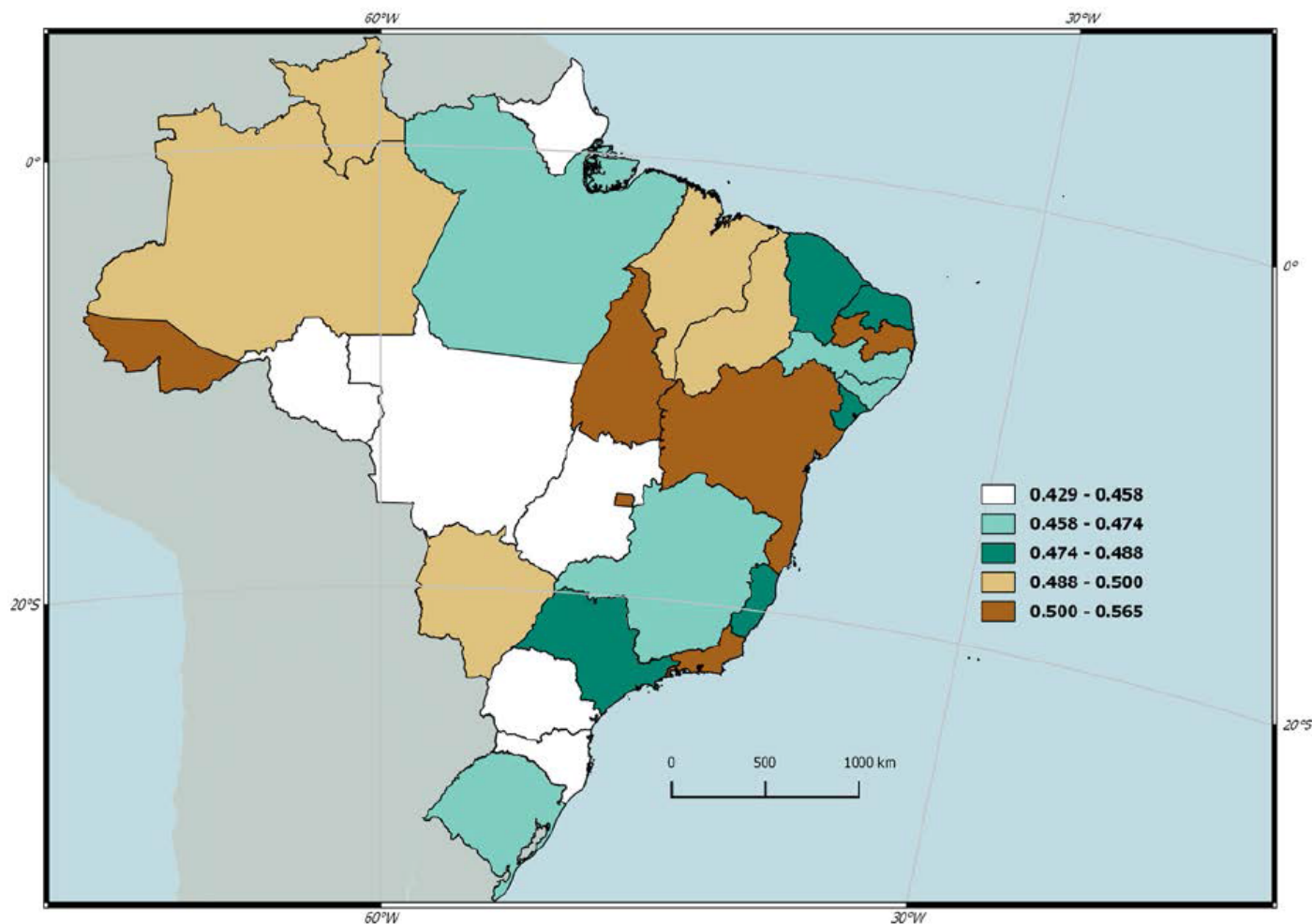
10.1.1 Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population

10.2.1 Proportion of people living below 50 per cent of median income, by age, sex and persons with disabilities

17.18 By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts

BACKUP

Gini index of monthly income of 15 y.o. + persons with income by State - 2014



Source: IBGE. Pesquisa Nacional por Amostra de Domicílios 2014.