



Multidimensional Poverty Index - Applications Colombia

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Oxford, June 2013





**PROSPERIDAD
PARA TODOS**

Our starting point: Improving the instruments and methodologies of poverty measurement

Motivation: Designing a strategy for the reduction of poverty and inequality based on a complete approach using income and multidimensional measures





Institutional agreement on the measurement of poverty

Documento Conpes Social

150

Consejo Nacional de Política Económica y Social
República de Colombia
Departamento Nacional de Planeación

METODOLOGÍAS OFICIALES Y ARREGLOS INSTITUCIONALES PARA LA
MEDICIÓN DE LA POBREZA EN COLOMBIA

DNP – DDS
DANE
DPS

Versión aprobada

Bogotá, D.C., mayo 28 de 2012

The National Department of Statistics acquired the responsibility of producing the official poverty measurements on a year basis

Technical and methodological decisions are defined at the experts-committee (NPD, DSP, external experts)



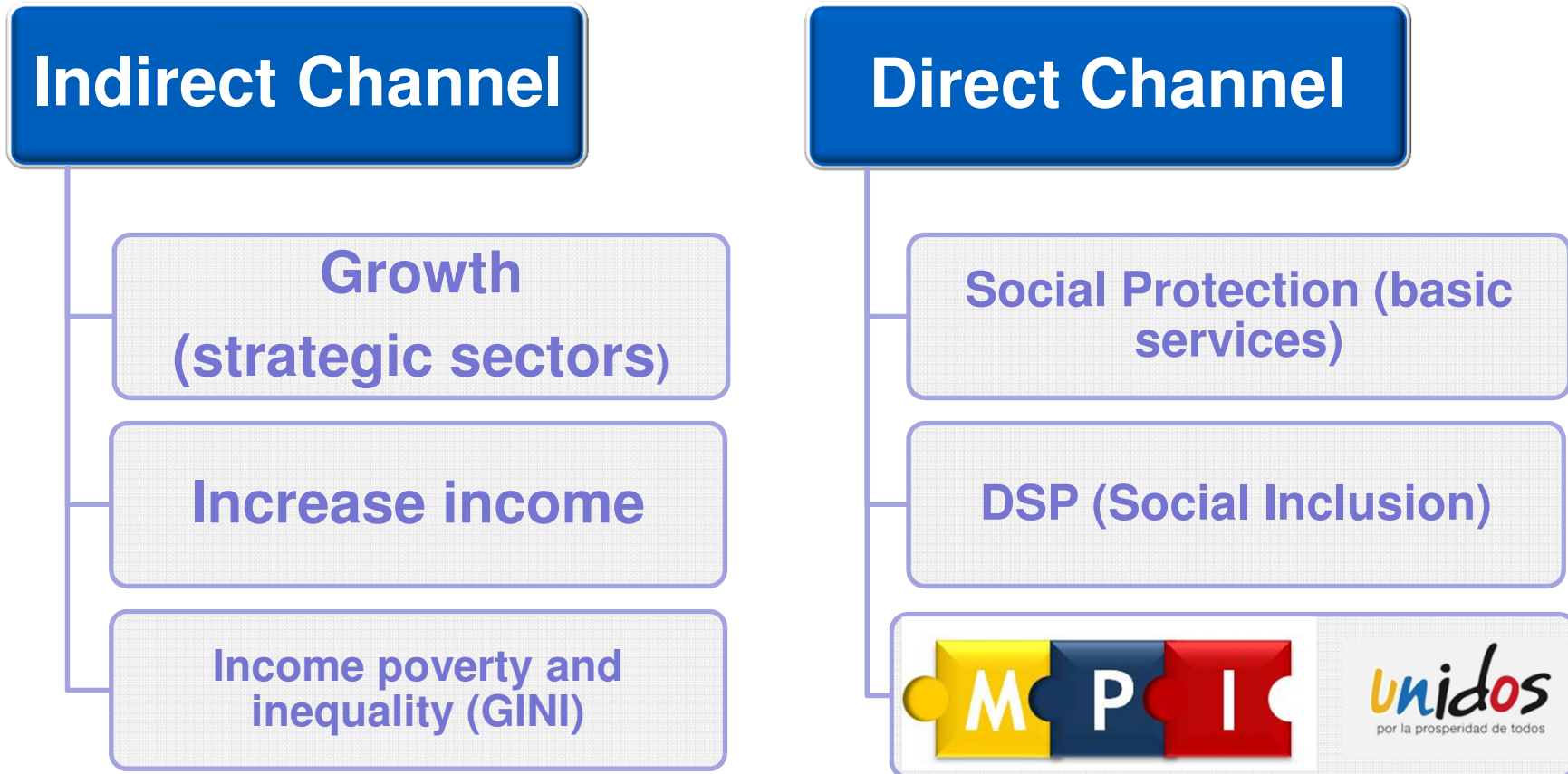
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A complete strategy for
the reduction of
poverty

National Development
Plan 2010-2014
“Prosperity for all”

Two channels for the reduction of poverty



Fuente: Bhagwati



SECTOR OF SOCIAL INCLUSION





Sector of Social Inclusion Department for Social Prosperity (Ministry)



**Agency for
the care of
the internally
displaced
population**



**National
territory
consolidation**



**Center for
historical
memory**



**Institute of
family
welfare**



**Agency for
the
reduction of
extreme
poverty**





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Objective: guarantee equality in opportunities, eradicate extreme poverty and ameliorate the living conditions of the victims and most vulnerable households





- Colombia

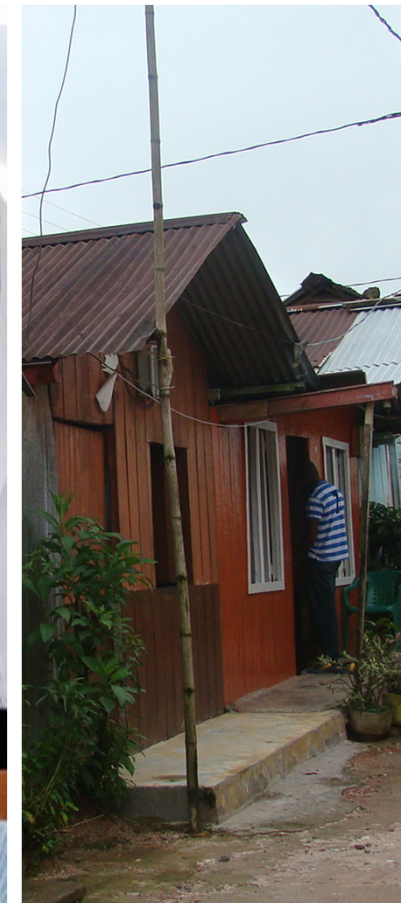
Education

Childhood & youth

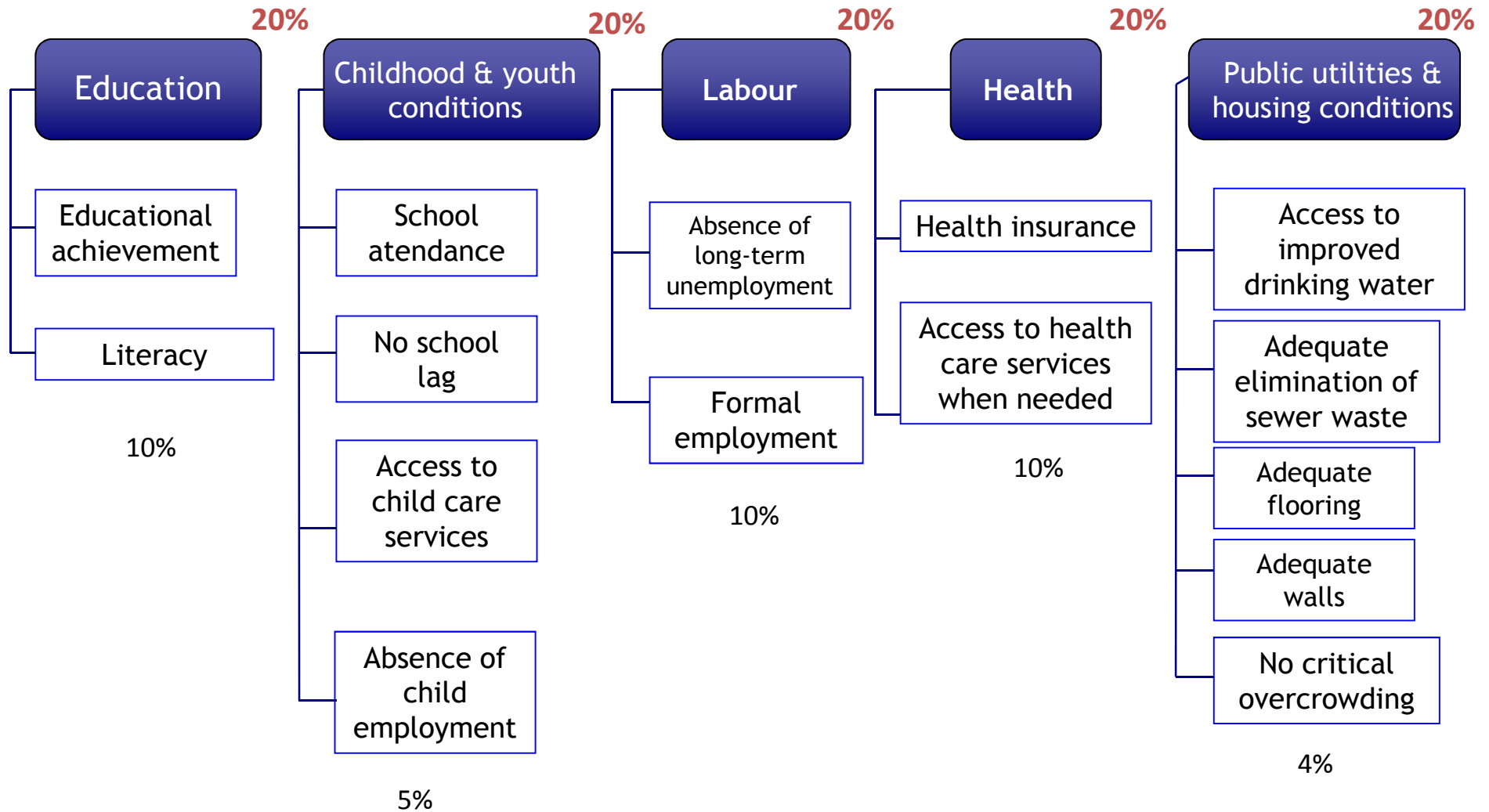
Labour

Health

Public utilities & housing conditions



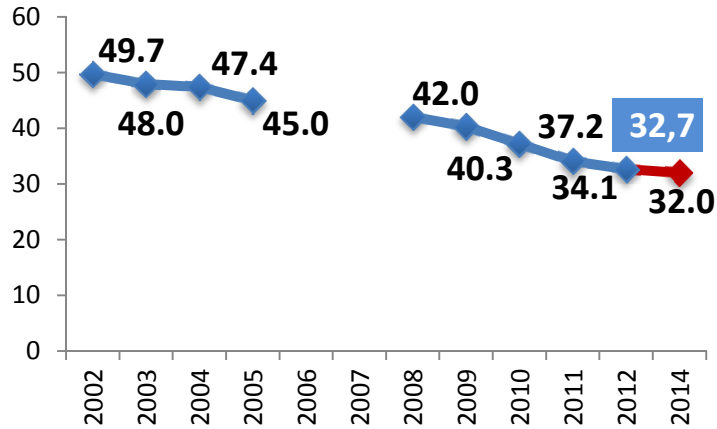
5 dimensions & 15 variables



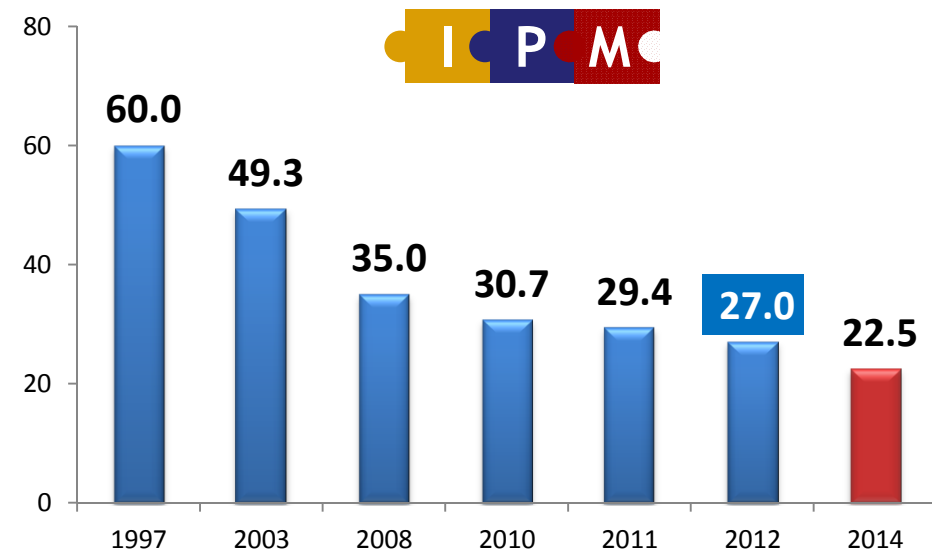
Fuente: Angulo, Pardo y Díaz (2011)

We are on the right track Sustained poverty reduction

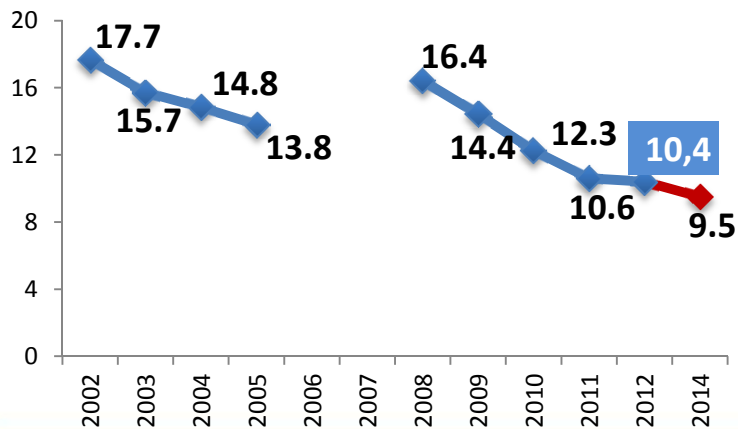
Pobreza monetaria



Pobreza Multidimensional



Pobreza extrema monetaria



Fuente: DNP'SPSCV



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**From 2010 to 2012, 1,7 million
persons overcame income poverty
and 700 thousand extreme poverty**

**On the other hand, 1.3 million
persons were no longer
multidimensionally poor**

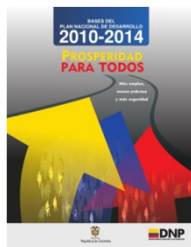


To what do we owe these good results?



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NDP



2010

2011

2012

2013



2010 Alerts:

- Habitability
- School achievement
- Early childhood care
- Income generation



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2010- 2011 Policies:

- Free tuition fees in primary and secondary education
- National strategy for childhood care
“De cero a Siempre”

NDP



2010

2011

2012

2013



2010 Alerts:

- Habitability
- School achievement
- Early childhood care
- Income generation



**PROSPERIDAD
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NDP



2010

2011

2012

2013



2011 Alerts:

- Habitability
- Lower rhythm of multidimensional poverty reduction



**PROSPERIDAD
PARA TODOS**

NDP



2010

2011

2012

2013

2011-2012 policies:

- 100,000 free housing solutions for poor households

2011 Alerts:

- Habitability
- Lower rhythm of multidimensional poverty reduction
- Low budget execution?



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NDP



2010

2011

2012

2013



2012 Alerts:

- Lower rhythm of income poverty reduction
- Gaps of rural to urban income poverty maintained

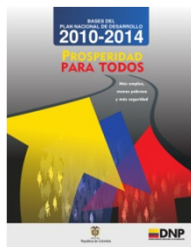


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2012-2013 policies

- Improved CCT program
“Más Familias en Acción “
(Higher amount and beneficiaries on rural areas)
Food Security Programa:
Colombia Growyh Without
Hunger

NDP



2010

2011

2012

2013

2012 Alerts:

- Lower rhythm of income poverty reduction
- Gaps of rural to urban income poverty maintained



**PROSPERIDAD
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NDP



2010

2011

2012

2013



2013 Alerts:
-Social mobility
-Youth unemployment



NDP



2010

2011

2012

2013

2012-2013 policies

- CCT to increase human capital and youth employment
- “Jóvenes en Acción”**

2013 Alerts:

- Social mobility
- Youth unemployment



MPI - Colombia

- 4 key aspects:

1. Reflects the objectives of social policy
2. Strategically designed for it to include all public policy sectors
3. Practical instrument for monitoring public policy
4. Useful alerts for decision -making at a short notice



**PROSPERIDAD
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**MPI implied an important
achievement on public policy
coordination**

**Shared responsibilities on the
strategy for poverty
reduction**

High Official Commission

Monitoring the national strategy for the reduction of poverty using official poverty measures

■ Leaders

- Presidency (Mandatory presence of the President of Colombia)
- Department for Social Prosperity
- National Planning Department

■ Permanent members

- Ministry of Health
- Ministry of Labour
- Ministry of Housing
- Ministry of Agriculture
- Ministry of Education
- Ministry of Finance





Goals in the reduction of poverty using a complete profile (MPI & income)

● 0%-10% avance
 ● 10%-25% avance
 ● >25% avance

Poverty and Inequality	Base Line 2009	2011	Alert	2012	Goal
▪ Income poverty (% LP)	40.2%	34,1%	●	32.7%	32%
▪ Extreme income poverty(%LI)	14.4%	10.6%	●	10.4%	9.5%
▪ IPM (Multidimensional poverty) Base line 2008	34.6%	29.4%	●	27.0%	22.5%
▪ Graduated families from extreme poverty (Unidos)	0	581	●	46,000	150.000
▪ Gini (Income)	0.557	0.54	●	0.539	0.544

FUENTE: DNP-DDS-SPSCV



Tracking MPI progress:

from multidimensional
to multisectoral

15 Goals - Sectoral
accountability



Sectoral goals For accomplishing the strategy

Pobreza	Línea Base PND 2008	Dato 2011	Dato 2012	Análisis	Goal	
MPI (Multidimensional Poverty)	34.7%	29.4%	27.0%	●	22.5%	
A ⁽¹⁾ <ul style="list-style-type: none"> Educational achievement (≥15 yrs) Literacy (≥15 yrs) 	58.8%	54.6%	53.1%	●	52.8%	
	14.2%	12.0%	12.1%	● ★	12.0%	
B ⁽²⁾ <ul style="list-style-type: none"> School attendance (6-16) No school lag (7-17) Access to child care services (0-5) Children not working (12-17) 	5.4%	4.8%	4.1%	●	3.5%	***
	33.4%	34.1%	33.3%	●	33.1%	***
	12.1%	10.8%	9.4%	●	10.6%	***
	5.5%	4.5%	3.7%	●	2.9%	***
C ⁽³⁾ <ul style="list-style-type: none"> Long-term unemployment Formal employment 	9.6%	9.1%	10.0%	● ★	9.3%	***
	80.6%	80.4%	80.0%	●	74.7%	***
D ⁽⁴⁾ <ul style="list-style-type: none"> Health insurance Access to health services 	24.2%	19.0%	17.9%	●	0.5%	***
	8.9%	8.2%	6.6%	●	2.4%	***
E ⁽⁵⁾ <ul style="list-style-type: none"> Access to water source Adequate sewage system Adequate floors Adequate external walls No critical overcrowding 	12.9%	12.0%	12.3%	● ★	10.9%	***
	14.1%	14.5%	12.1%	●	11.3%	***
	7.5%	6.3%	5.9%	●	5.6%	***
	3.1%	3.2%	2.2%	●	2.1%	***
	15.7%	14.2%	13.1%	●	8.4%	***

*** Change 2011-2012 est. significant



If every ministry target beneficiaries accordingly and spends the committed resources, the official goal will be achieved

The MPI will decrease (12 p.p) from 34.6% in 2008 to 22% 2014
(more than 3 million people out of poverty)



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A useful tool for public policy implementation



Applications

www.dps.gov.co



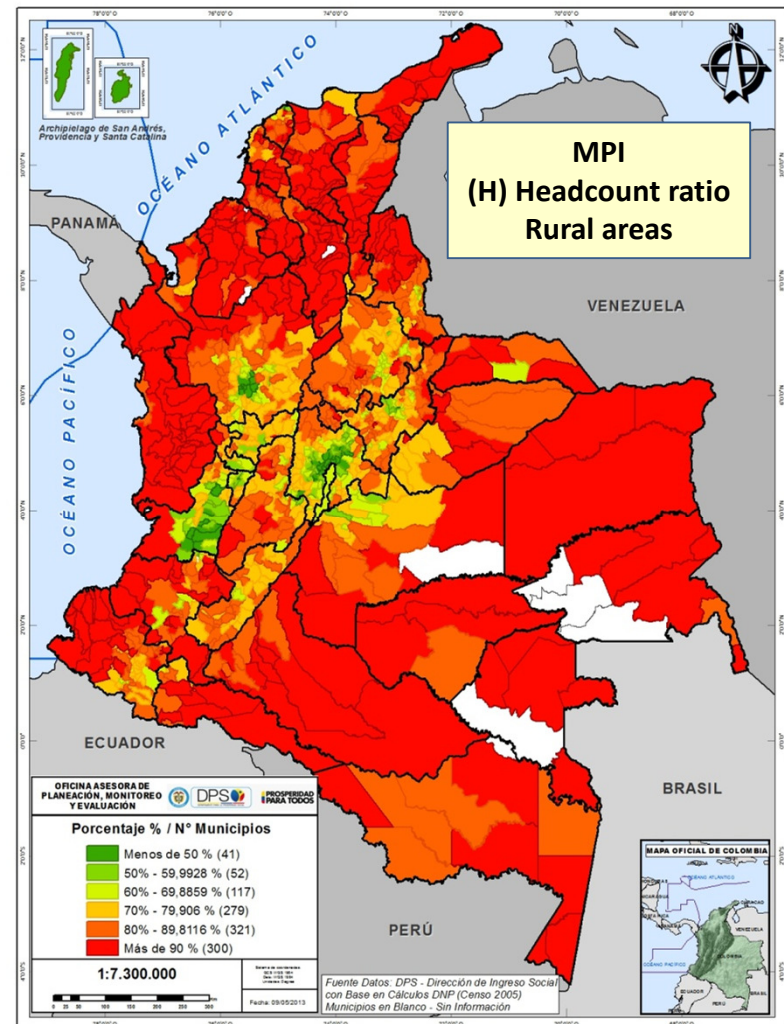
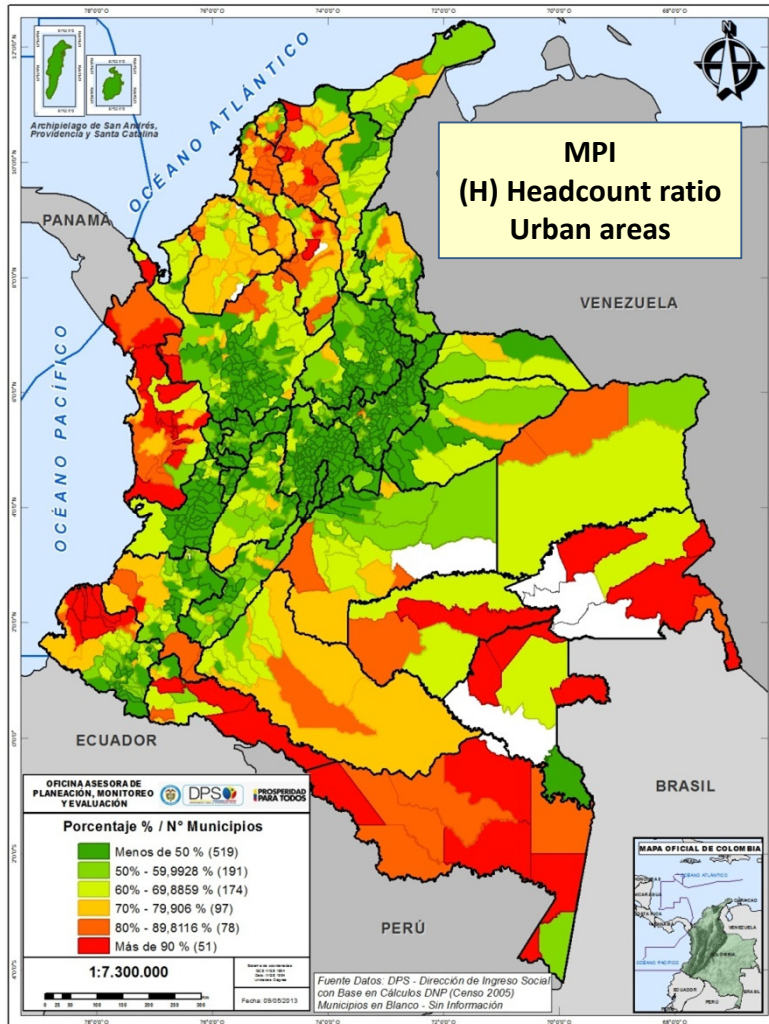
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1

Geographical Targeting (Municipal Poverty Maps)



Municipal MPI Colombia Headcount ratio, urban-rural areas, 2005



MPI proxy based on Census Data 2005



Más Familias en Acción

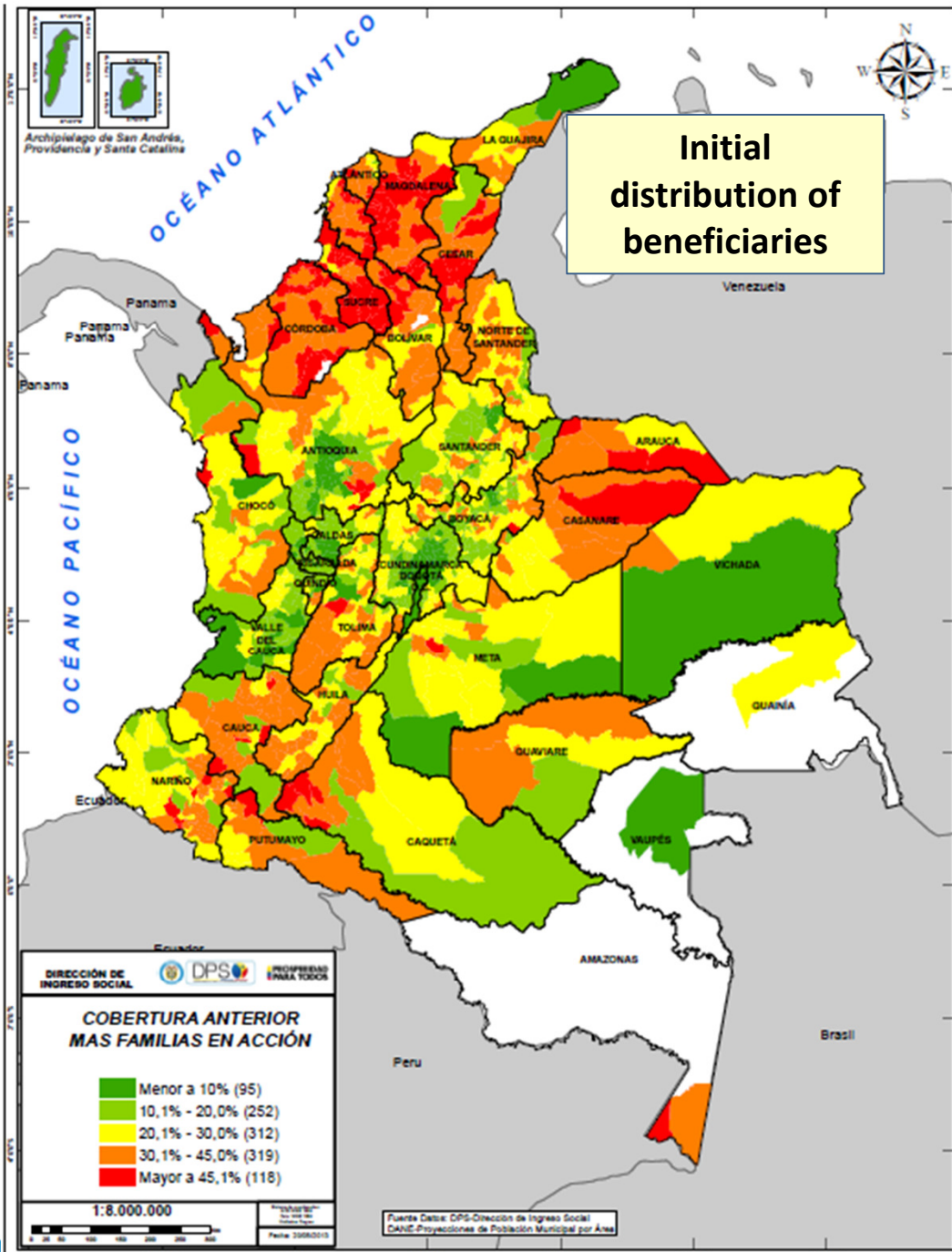


An example of geographical targeting using MPI

Conditional Cash Transfer Program

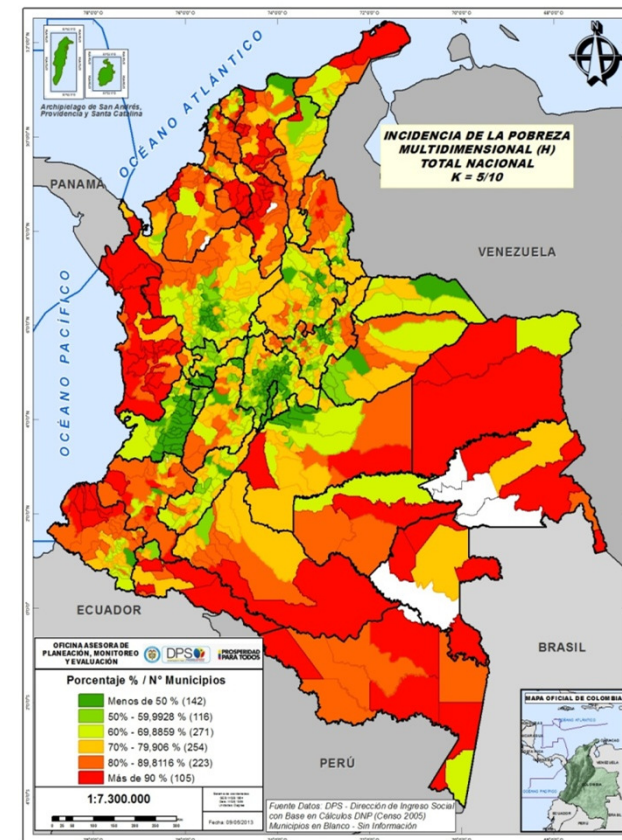
“Más Familias en Acción”

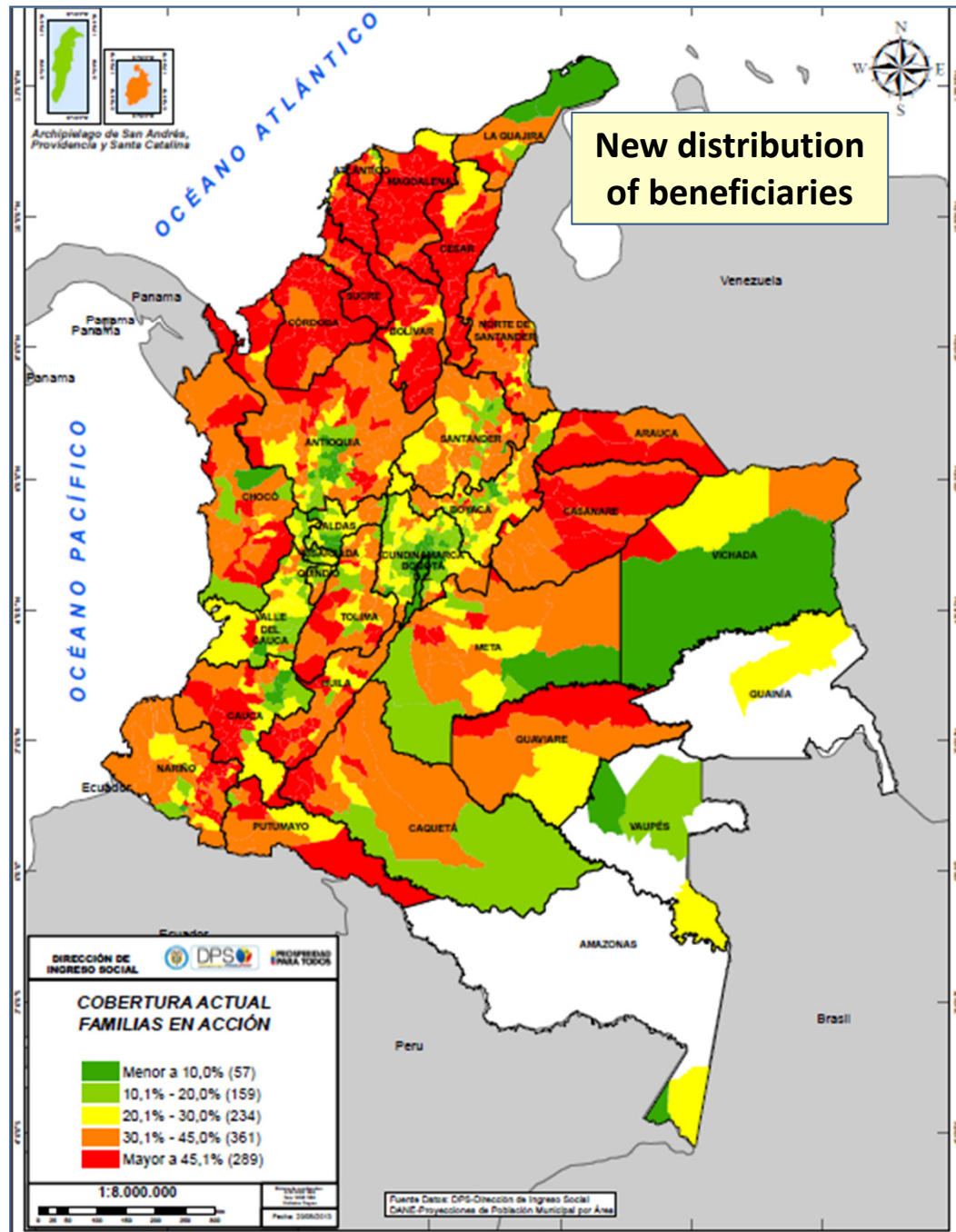
2.7 million families



Re targeting program's beneficiaries:
approximating to municipal MPI

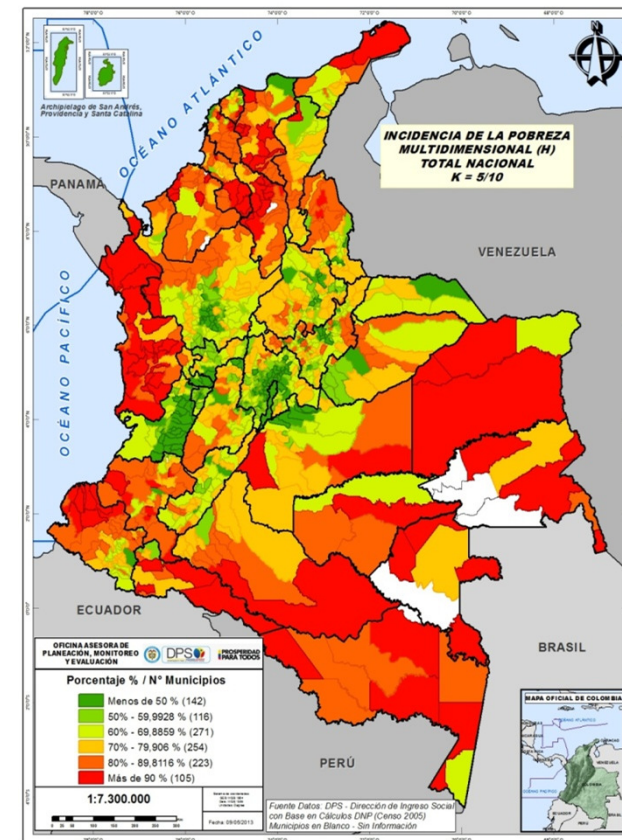
National - MPI





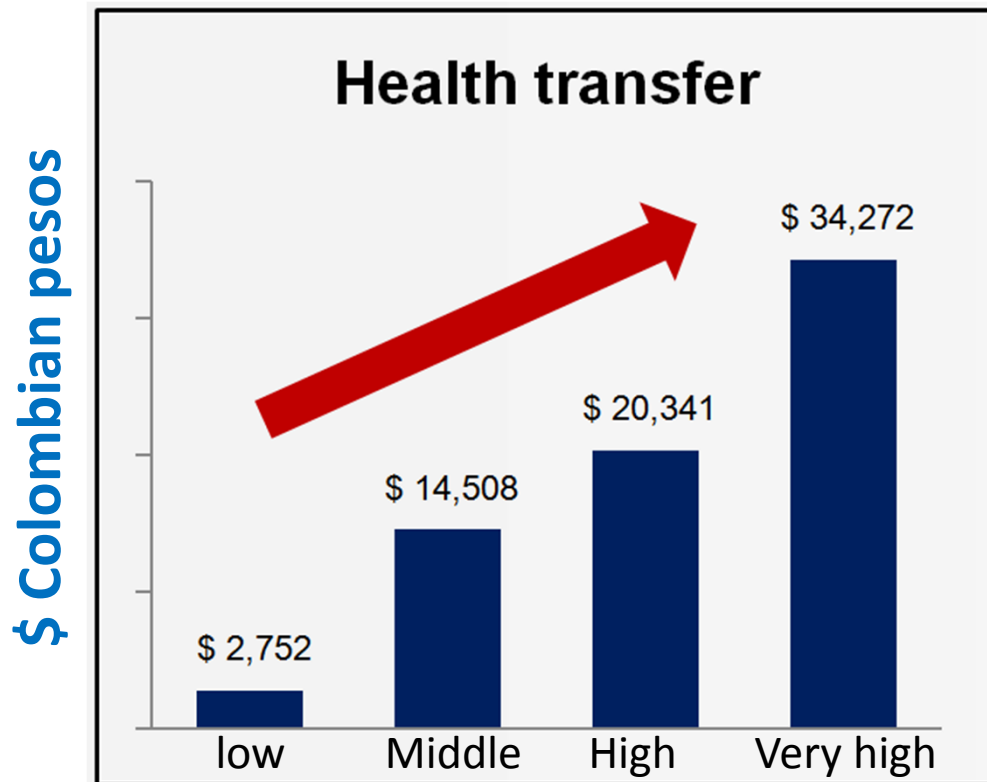
Re targeting program's beneficiaries:
approximating to municipal MPI

National - MPI





One example



MPI Municipal Head Count Ratio

Differentiating transfer amounts according to municipal MPI

Higher amounts on the poorer and rural areas



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2

Targeting beneficiaries according to specific dimension deprivations



Targeting beneficiaries identifying:

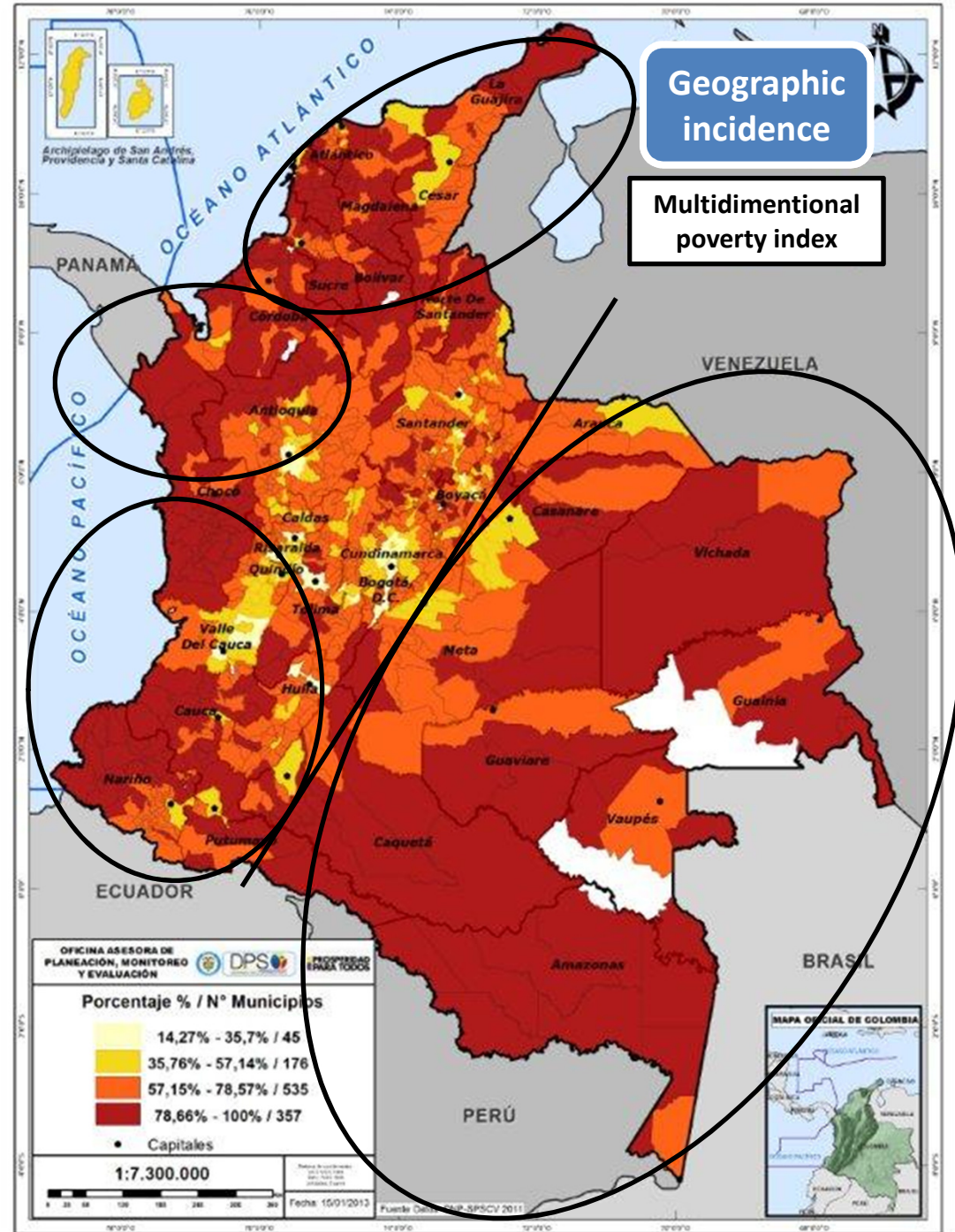
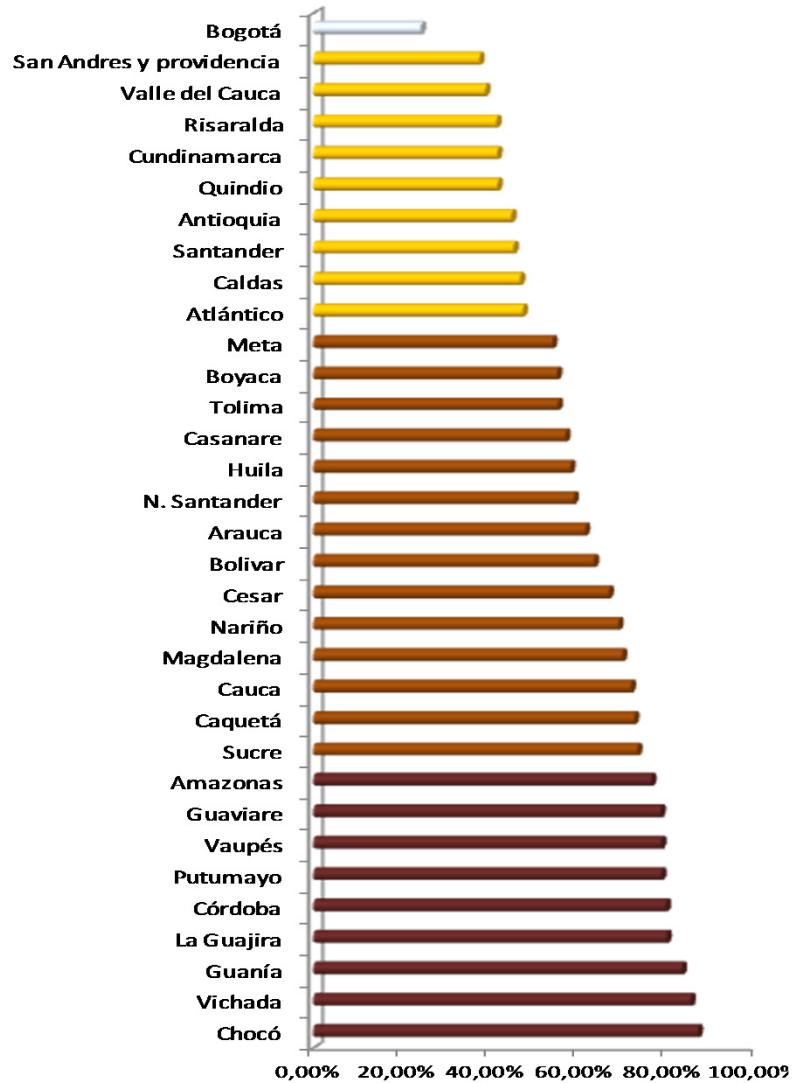
Where?

What?

To whom?

Using MPI

Different types of social programs depending on multidimensional poverty incidence





3

Methodology for measuring “graduation” from extreme poverty using MPI

Safety Net Program

unidos

como uno por la prosperidad de todos



A family is “graduated” from **unidos** if:
como uno por la prosperidad de todos

Sufficient condition:



&



Not in extreme income
poverty

Not multidimensionally
poor



4

Adjusted - MPI for indigenous groups



- Revising the MPI (missing dimensions, cutoffs or weights) in order to adapt the index to the conditions of indigenous population of Colombia

- The objective is to have a pertinent MPI useful for the design of public policy targeting this population



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5

Public policy effects micro-simulations



The method of micro data imputation may be used in the construction of counterfactual scenarios to evaluate the effect of public policy on the MPI behavior



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