



THE INTEGRATION OF SOUTH AMERICA AND THE ROLE OF INFRASTRUCTURE

Panel: Territorial planning, integration hubs and relevant regulatory frameworks

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1. The presentation is based on the “Study of Territorial Dimension for Planning – Module 3”, which I coordinated in response to the request made by the Ministry of Planning of Brazil, through the CGEE (Center for Management and Strategic Studies). The study is composed of 6 modules (Strategic Vision, Regionalization, Strategic selections, Investment portfolio, Economic impacts of the portfolio, Sustainability of the portfolio). Module 3 proposes a new regionalization of Brazil, selects new urban centralities and establishes the articulation of the regional development of Brazil as well as the South American integration.
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2. The conceptual and theoretical starting point is the relation between territory and development.

Territory is not just landscape.

Territory means history, attributes, actors, economic, cultural and political identity. The idea of ownership.

The territory as an active element in the development process.

3. Concept of space and region. Region as a cutting of a territory. Territory and dynamization. The regionalization has a date, it refers to a time or era.

Contradiction between region as political-administrative cutting and territorial dynamics. Rescue of the visions related to space and region stated by Perroux and Doudeville:

4. Acknowledgement of the fact that the current regionalization of the country is overwhelmed due to planning and public-policies effects.
 5. Understanding of the fact that contemporary changes alter the territorial scales and their interactions. Harvey speaks of the compression of the space-time relation. Dorreen Massey speaks of the new geometries of power.
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6. We have to work in multiple scales. It depends on the objectives or intentions.
 7. The idea of working the region in an isolated way is over. Regional policy must set itself as a national policy. Critics to the new regionalism. Need of a third generation of policies. Neither top down or bottom up.
 8. Indissolubility of the regional and the urban. The central role of the cities in the structuring of the space. Cities and infrastructure structure and command the territory. Accelerated urbanization. The rural area assimilates urban patterns.
 9. The search for economic and social coherence goes through, at least, 4 integration dimensions.
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- a) territorial or physical integration: Urban network and infrastructure, specially transportation
- b) economic integration – complementariness among territories
- c) social integration – patterns and productive structures that are integrated. Priority agenda
- d) political integration - federal agreement and regional agreement

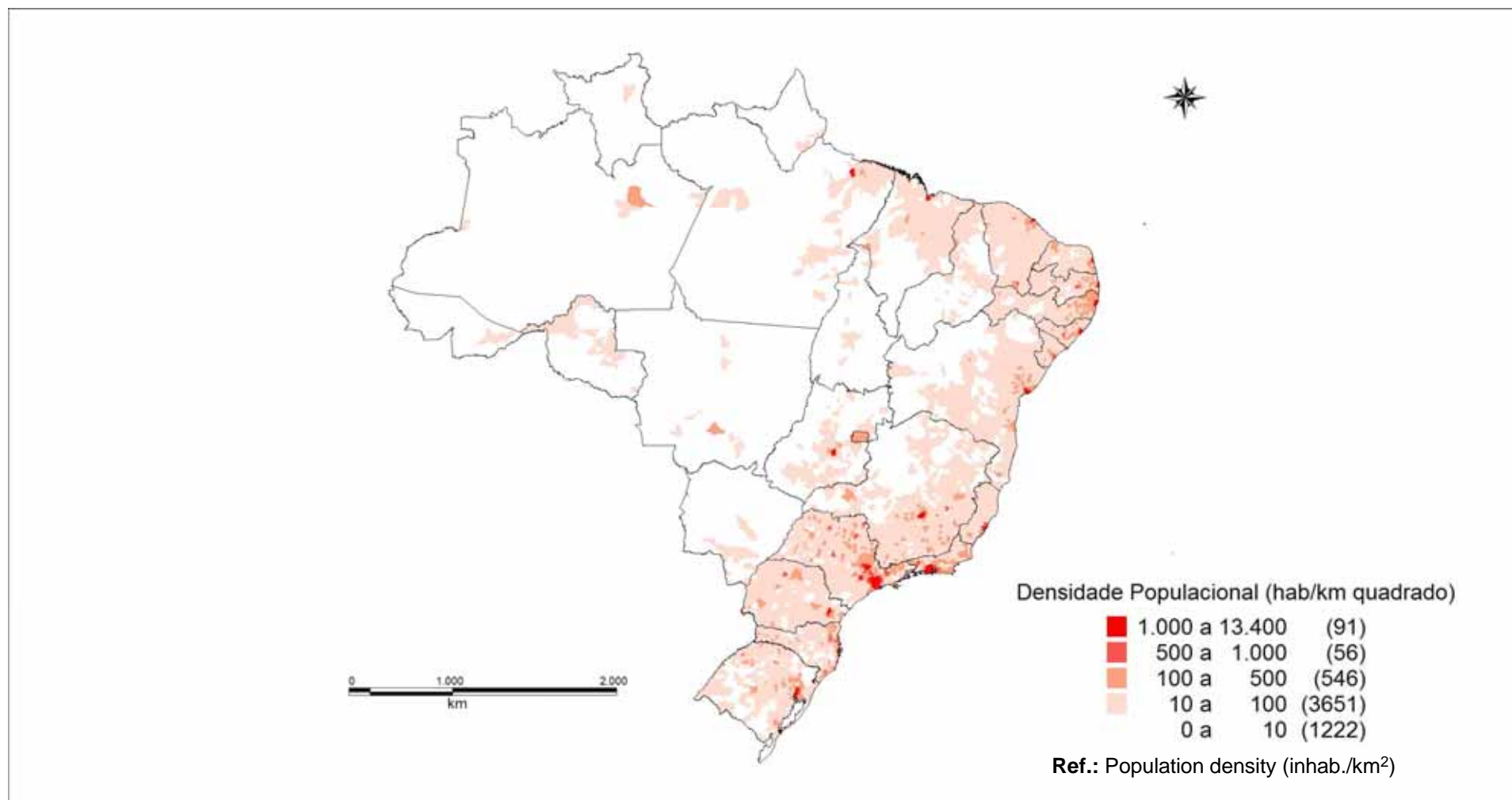
10. Utopia of a polycentric Brazil and a polycentric Latin America.

11. METHODOLOGY – 7 STAGES

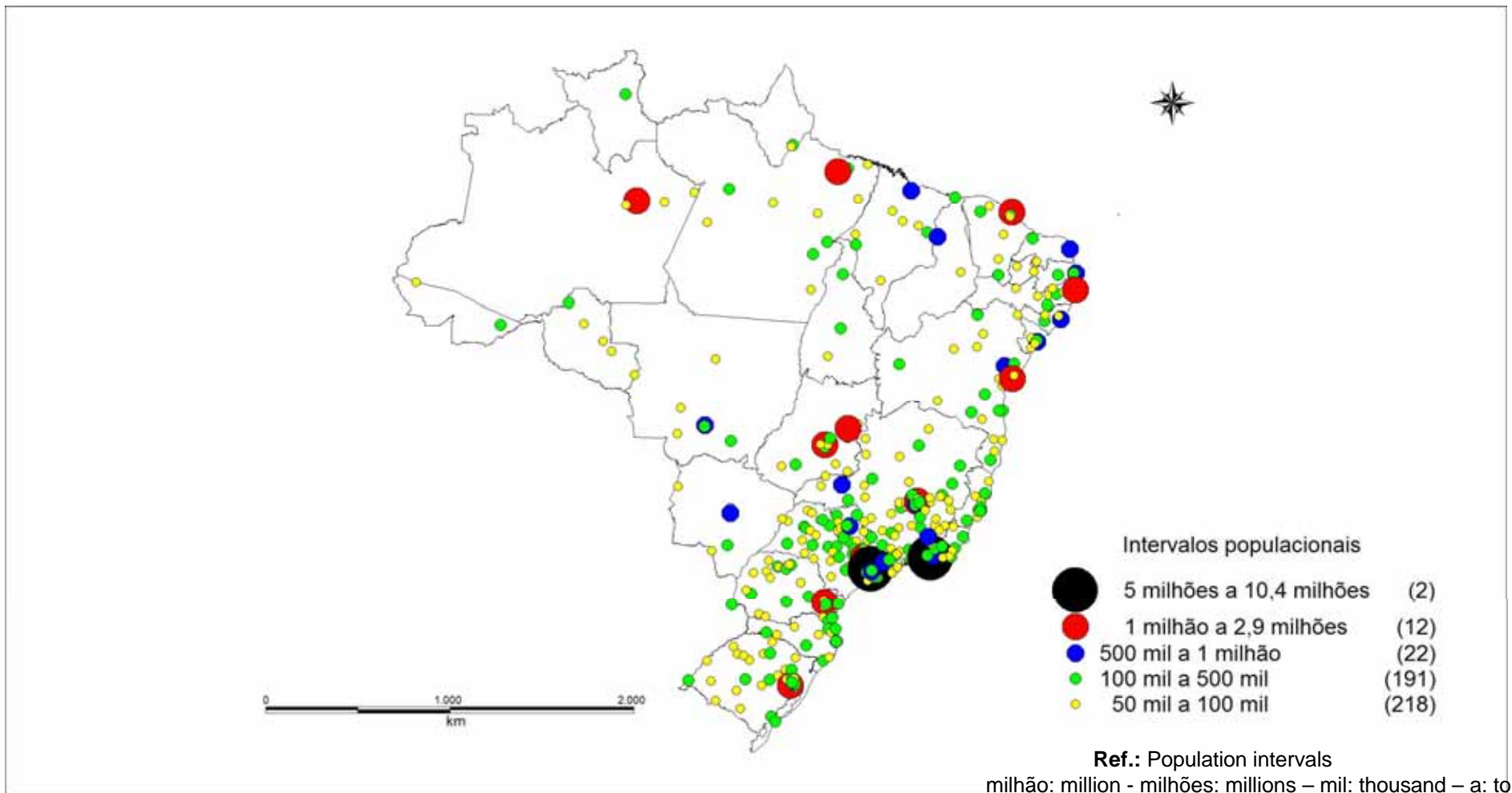
- a) plain gravitational model – density of the tertiary for the selection of macro-poles and meso-poles. Base: 558 geographic micro-regions.
 - b) gravitational model with population and migratory dynamics – 1st time in Brazil.
 - c) adjustment of accessibility. Geographical or geodesic distance changes to real distance through the bi-modal system (land and river). Base of Mapinfo modifies distances converted to time according to the quality of the roads – first time in Brazil.
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- d) consideration of the environmental variables (biomes, eco-regions, sub-basins)
 - e) estimation of the ICTR (index of regional technological training) – items, patents, postgraduate students, workers in export firms, training of work force – Polarization power
 - f) consideration of political and cultural identity - difficulties
 - g) specialized treatment of the Amazon region. Going down from the micro-regional scale to the municipal scale. Imperative of the nature. Service is not an appropriate variable. Political intentions.
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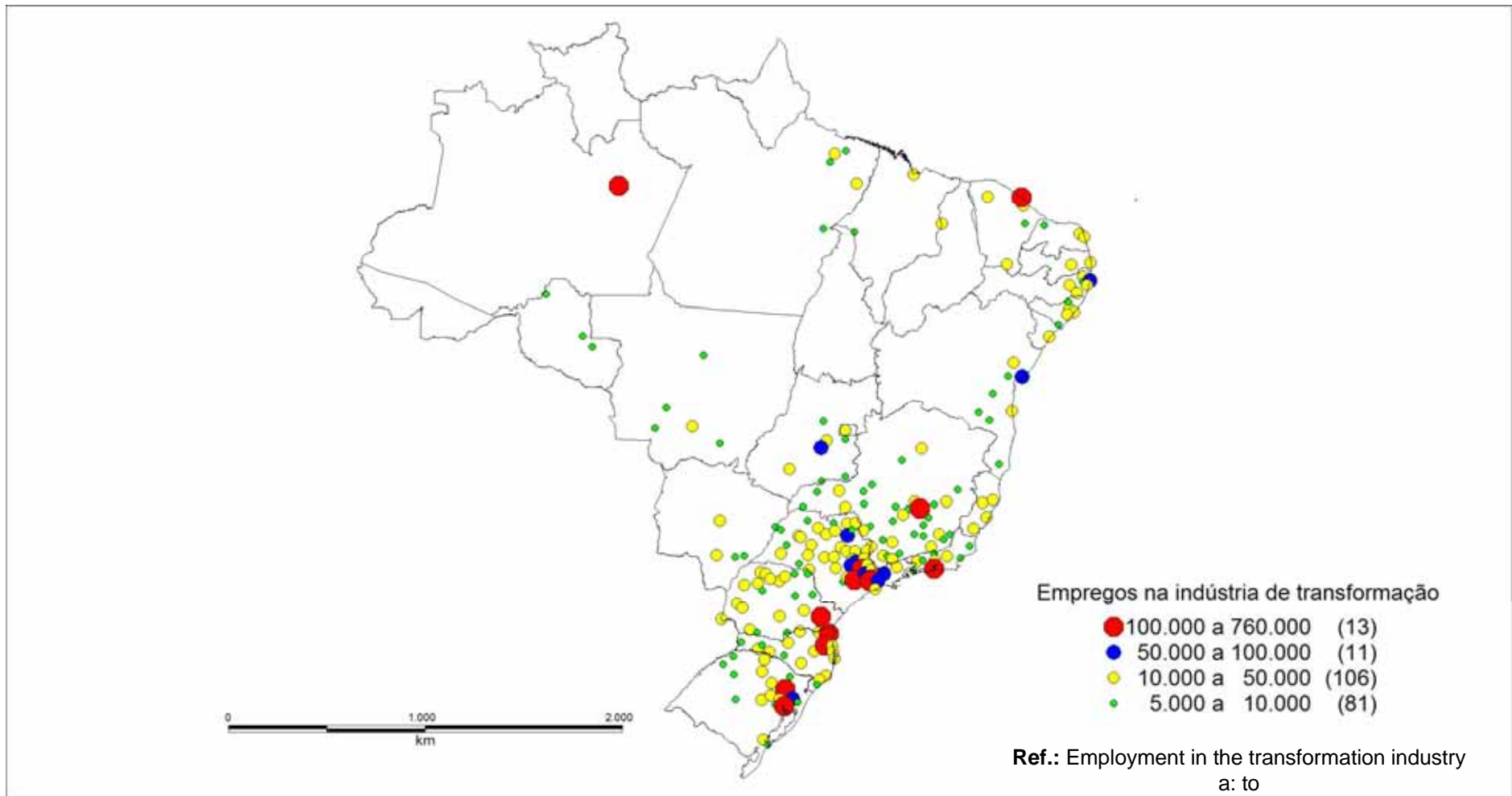
Brazil, demography - 2007



Urban network with more than 50,000 people in 2007



Geographical micro-regions with more than 5,000 industrial jobs - 2006





Reference:

- Bioma...: Amazon Biome
- Centro-Norte: Centre-North
- Litoral Norte...: North-Northeast coast
- Centro-Oeste: Centre-West
- Semi-árido: Semi-arid
- Litoral Sul...: South-Southeast coast

**Strategic
areas**

Brazil: Macro-poles, proto-poles and macro-regions – eleven macro-regions



Reference:

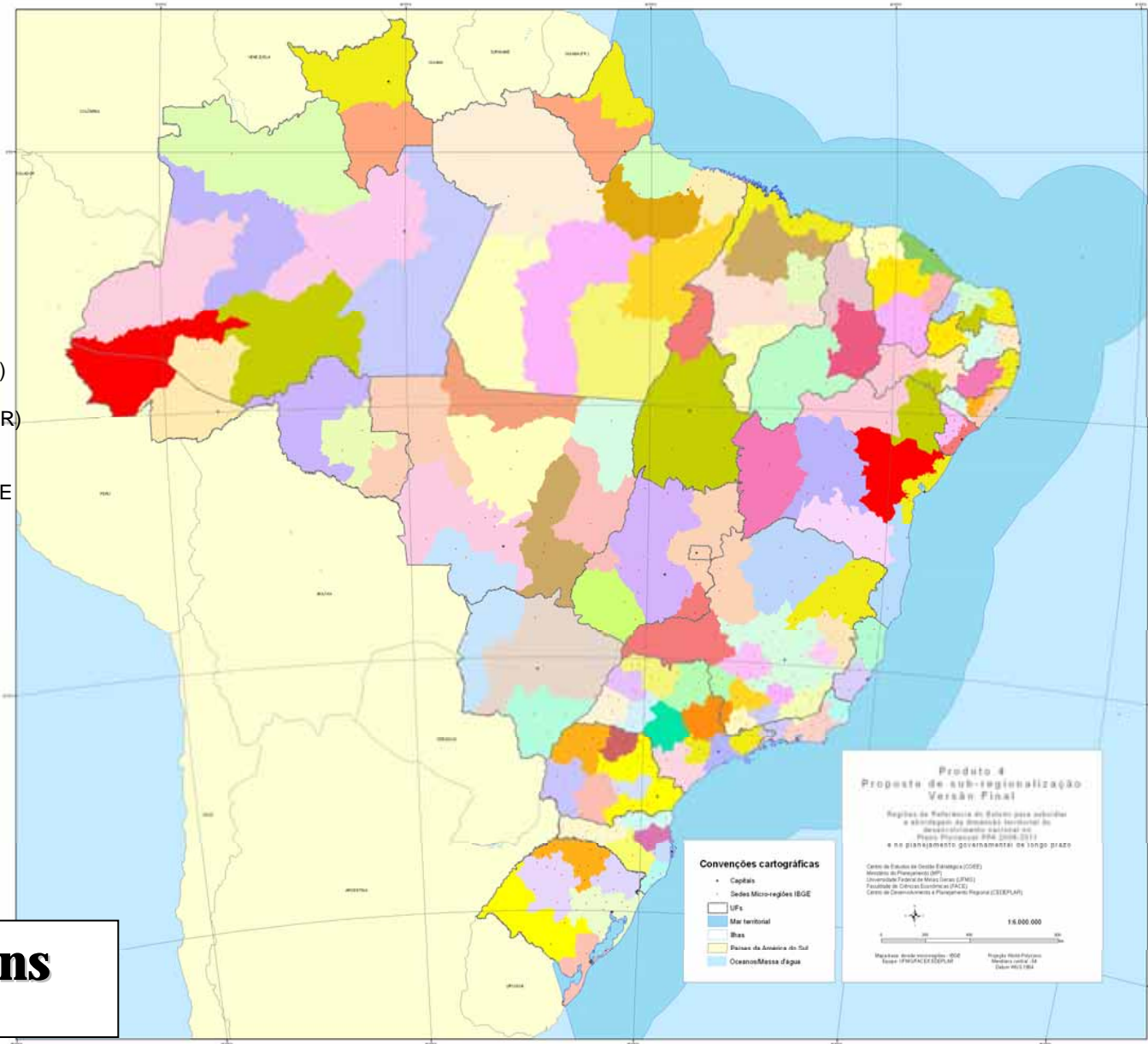
Product 4
 Sub-regionalization proposal
 Final version
 Regions of reference of the study. A subsidy will support the performance of the territorial zoning for the national development in the pluriannual plan PPA 2008-2011
 Study Center for Strategic Manag. (CGEE)
 Ministry of Planning (MP)
 Federal University of Minas Gerais (UFMG)
 Economics Faculty (FACE)
 Center for Reg. Dev. and Plan. (CEDEPLAR)

Scale:

Base map: division by micro-regions – IBGE
 Team: UFMG/FACE/CEDEPLAR
 Polyconic world projection
 Central Meridian: -54

Cartography conventions:

Capitals
 IBGE Micro-regions headquarters
 Territorial sea
 Island
 South American countries
 Oceans/Mass of water



Sub-regions

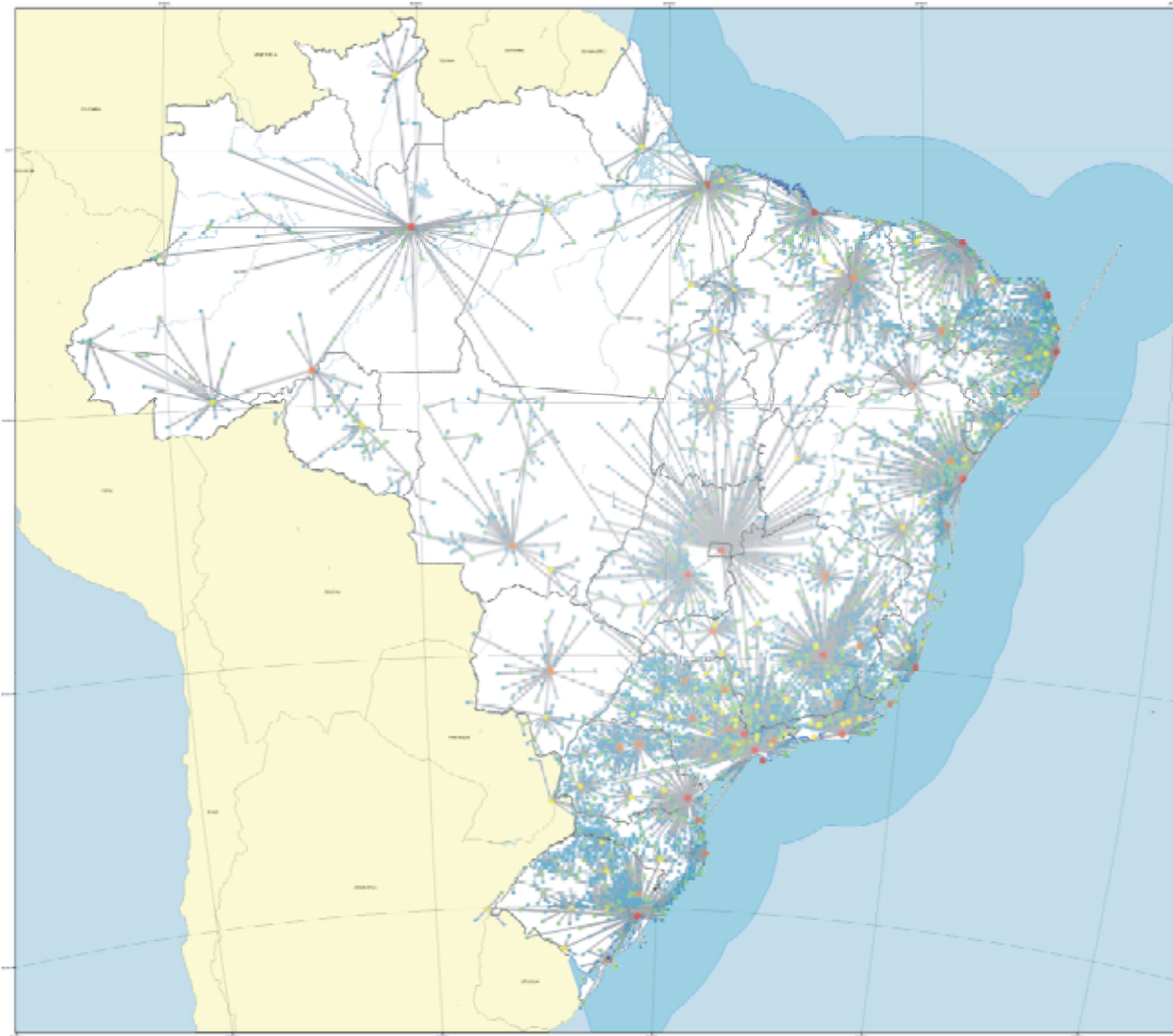
118 sub-regions. 12 variables, indicators or socio-demographical reserves. 19 of economic structure.
24 of territory, 6 of urban network.

12. SELECTION OF NEW CENTRALITIES

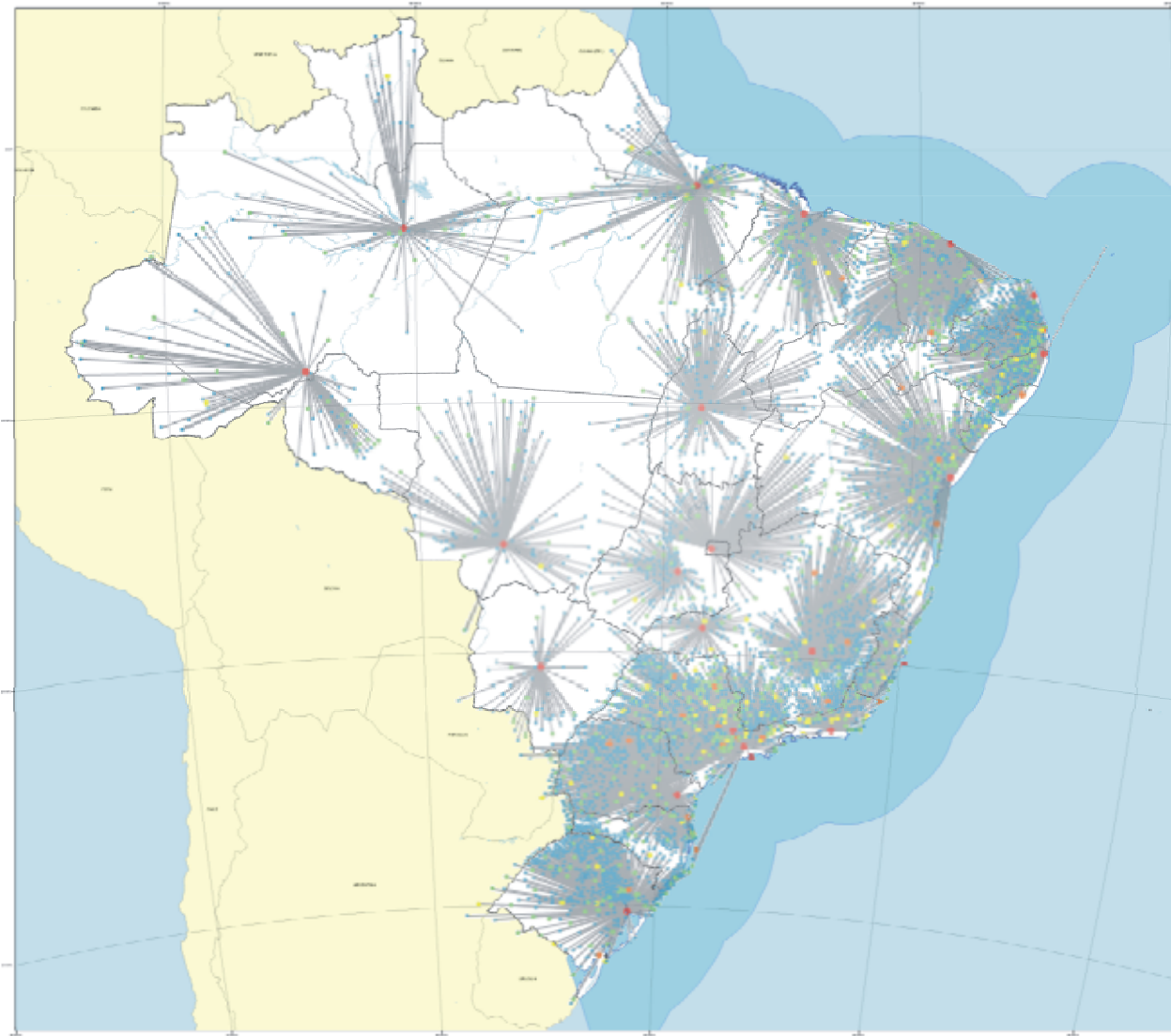
Geographical criterion, productive potential, polarization capacity (capacity to organize and command their complementary areas), objective: territorial, economic, social, political unity with South America as well as integration with the mentioned continent

UTOPIA RELATED TO A POLYCENTRIC
BRAZIL

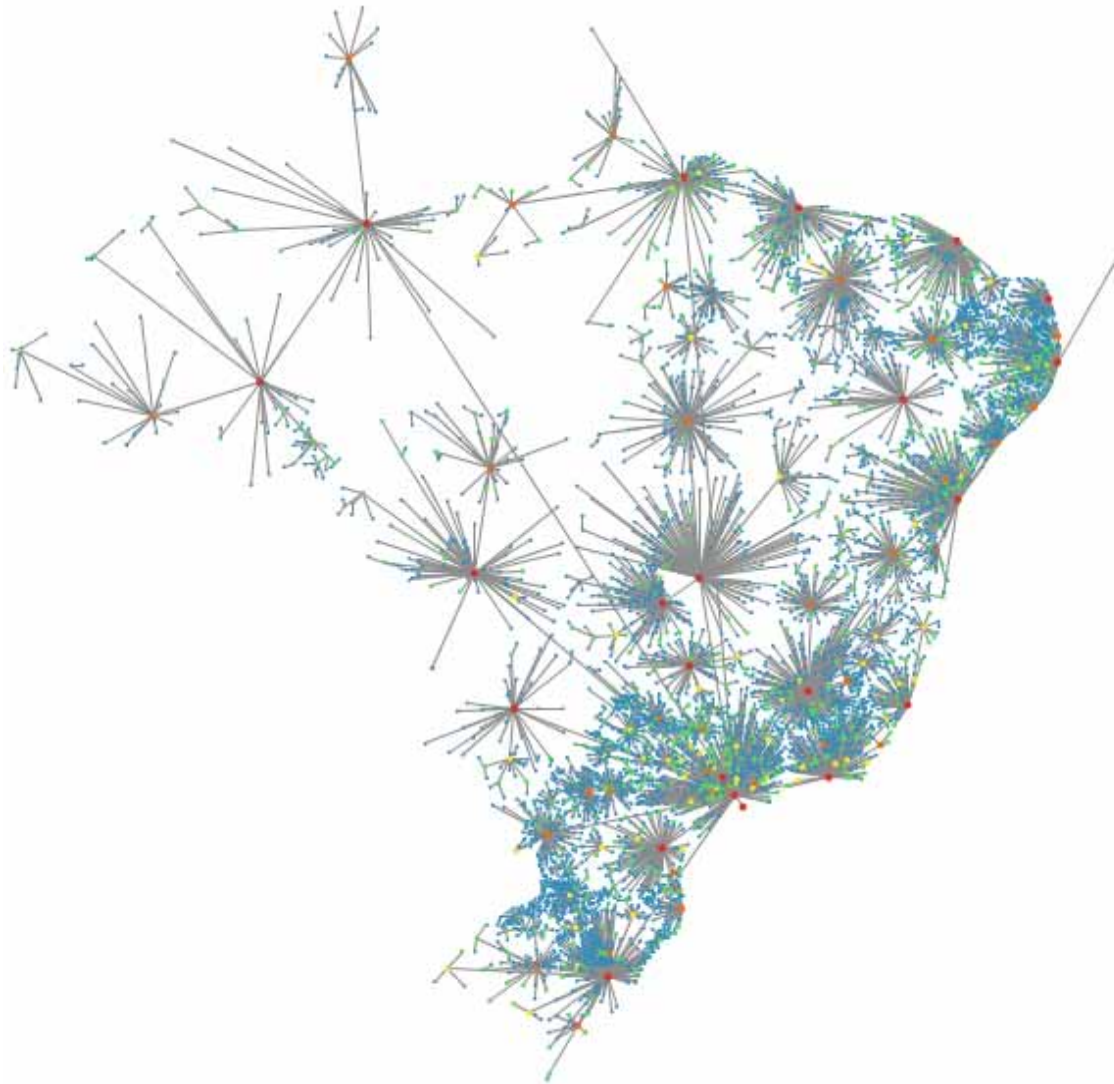
Brazil – Urban network and polarizing force in 2000



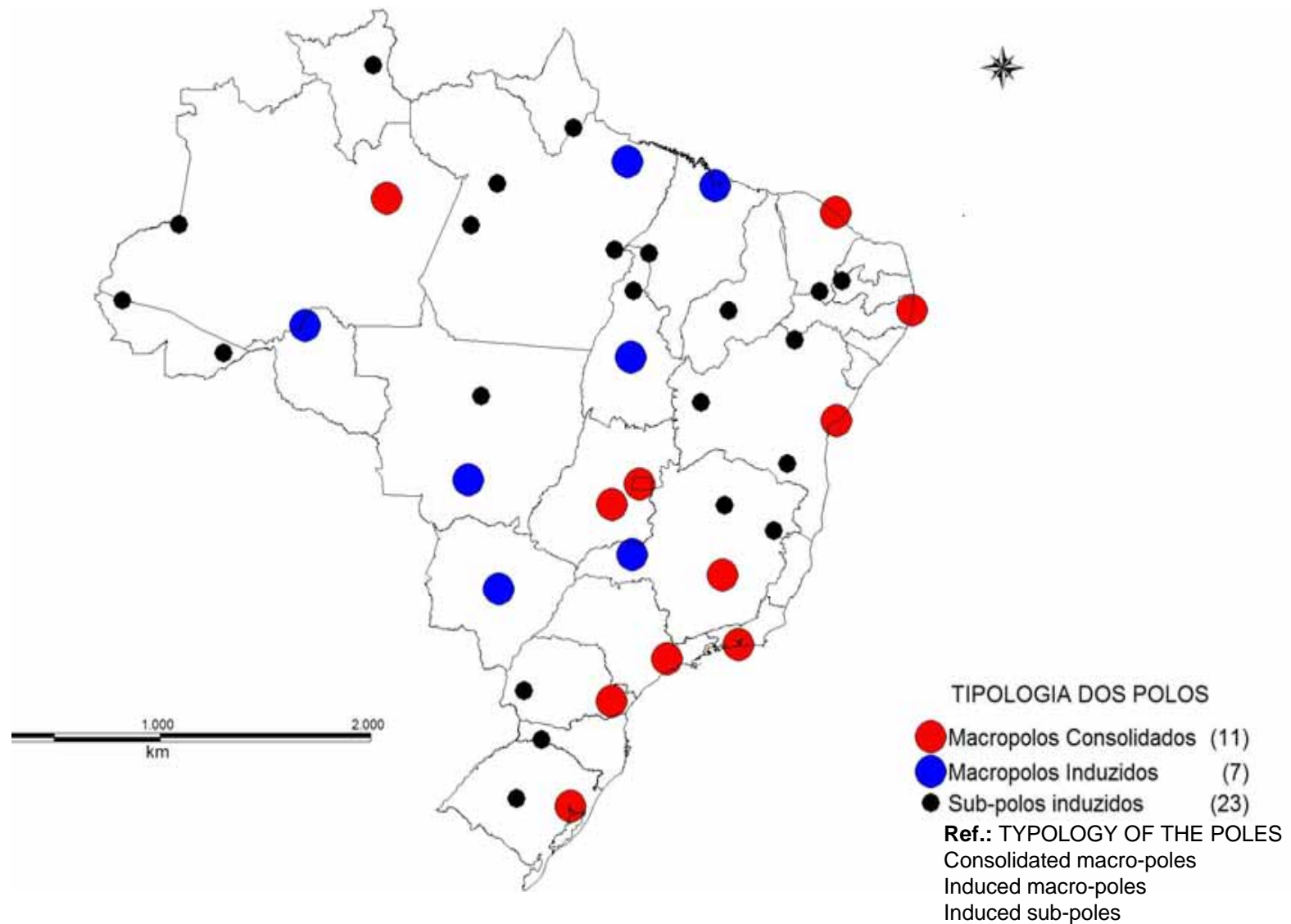
Simulation - Polycentric Brazil, 11 consolidated macro-poles and 7 new macro-poles



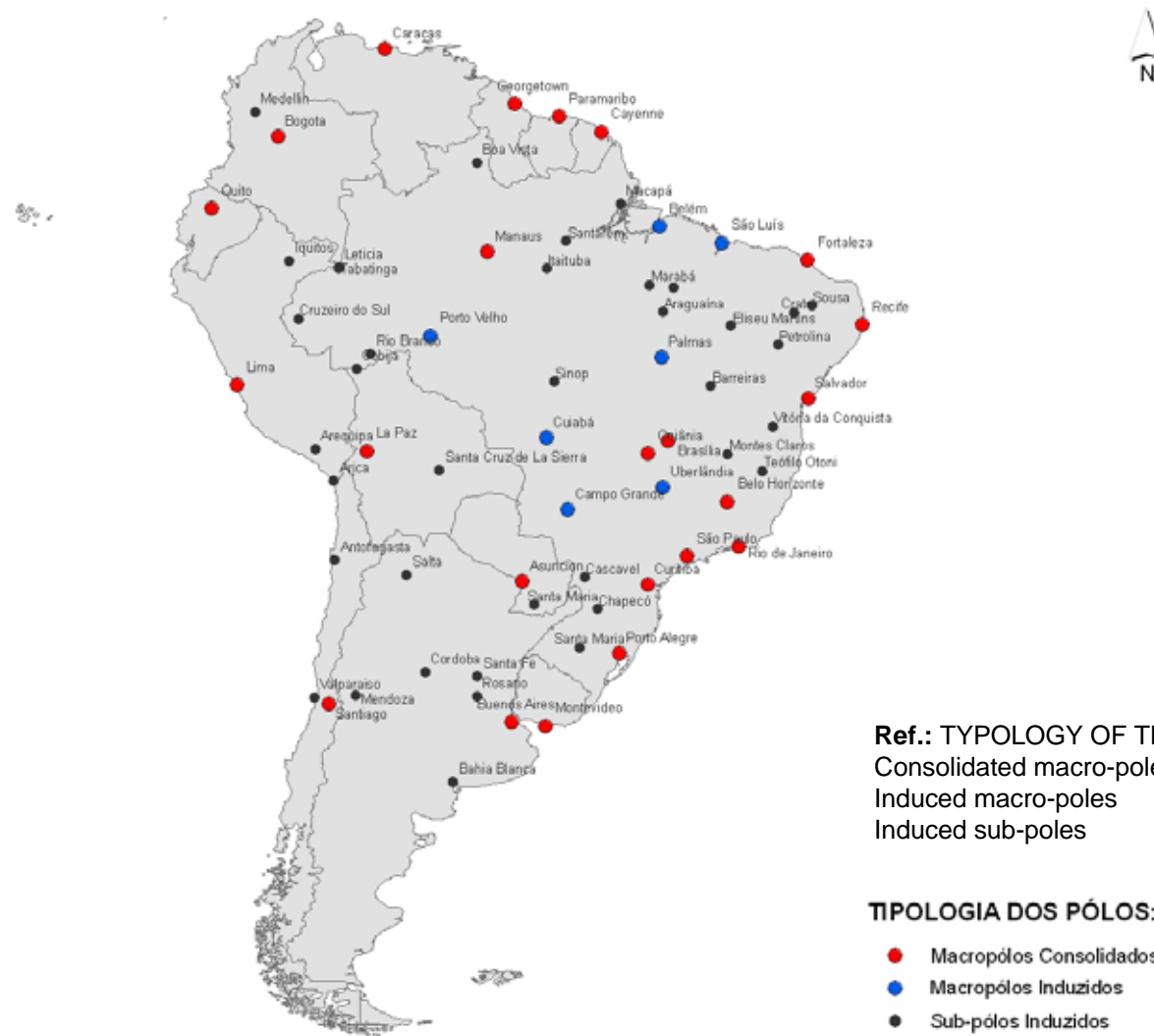
**Simulation – Polycentric Brazil, 11 consolidated macro-poles,
7 new macro-poles and 22 sub-poles**



Proposal of a polycentric Brazil



Articulation of the Brazilian urban network and South America



Ref.: TIPOLOGIA OF THE POLES
 Consolidated macro-poles
 Induced macro-poles
 Induced sub-poles

TIPOLOGIA DOS PÓLOS:
 ● Macropólos Consolidados
 ● Macropólos Induzidos
 ● Sub-pólos Induzidos

Selected municipalities and impacts

Centre-North		
Belém	Level: Macro	1,5
São Luís	Level: Macro	2,0
Marabá	Level: Subregional	2,0
Imperatriz	Level: Subregional	2,0
Araguaína	Level: Subregional	2,0
Palmas	Level: Macro	6,0
Barreiras	Level: Subregional	2,0
Amazon Biome		
Boa Vista	Level: Subregional	2,0
Macapá	Level: Subregional	2,0
Rio Branco	Level: Subregional	2,0
Santarém	Level: Subregional	2,0
Itaituba	Level: Local	2,0
Cruzeiro do sul	Geopolitical	2,0
Tabatinga	Geopolitical	1,5

Centre -West		
Cuiabá	Level: Macro	3,0
Porto Velho	Level: Macro	3,0
Campo Grande	Level: Macro	2,0
Uberlândia	Level: Macro	3,0
Sinop	Level: Subregional	6,0
Semi-Arid		
Petrolina-Juazeiro	Level: Subregional	2,0
Cariri ou Crajubar	Level: Subregional	2,0
Eliseu Martins	Level: Local	20,0
Souza	Level: Local	2,0
Montes Claros	Level: Subregional	2,0
Teófilo Otoni	Level: Subregional	2,0
Vitória da Conquista	Level: Subregional	2,0
South-Southeast		
Cascavel	Level: Subregional	2,0
Chapecó	Level: Subregional	2,0
Santa Maria	Level: Subregional	2,0

Source: Own source