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Project URBISAmazônia: what is the nature of the urban phenomenon in the contemporary Amazônia? Cities, places, and networks in the multi-scale configuration of the urban setting in contemporary Amazônia

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South America has experienced important land use change transitions particularly related to urban conversion. In Amazônia, the urban phenomenon is unfolding as a broader and complex contemporary concept, intimately linked to a wide range of aspects, but hardly expressed in the environmental and climatic official agendas. In such region, cities and towns, industrial plants, large and small ranches, mining camps, and indigenous areas work as nodes of a new urban system. This project aims to provide metrics and representations to track connections between upper and lower economic circuits, in order to define urbanization typologies and trajectories for the region.

“Without cities we would all be poor”, said Jane Jacobs, years ago (Jacobs, 1970). Back in 1995, the Brazilian Geographer Bertha Becker had warned us that it was necessary to take seriously the urban agenda if, in any case, we wanted to be serious about environmental policies for the Amazônia region. She coined the term *urbanized forest* in an attempt of being provocative enough in the hope that the times were ready for shaping the debate. Still, many years later, the *urban phenomenon*, as a sound scientific object to be explored for the region, remains neglected by government related financing agencies, NGOs national and international, and also by a fairly share of the academic community dealing only with the “green” Amazônia. And, despite an increasingly important production related to the characterization of the urban fact over the last 10 years, our understanding of the nature of the *urban phenomenon* in the contemporary Amazônia has not advanced.

Recently, Monte-Mór has argued that beyond cities and towns there are various other socio-spatial forms such

as mining areas, settlement and/or colonization projects, timber industries, cattle-ranching and farm enterprises, in addition to urban concentrations of commerce and services spread throughout the region. He claims that the complexity of Amazônia's current urbanization requires new approaches to understand the diverse socio-spatial forms and processes being created throughout the territory beyond the old city-country and urban/rural dichotomy. In order to account for all these diversity he brought about the concept of extended urbanization (Monte-Mór, 2004).

In his view, from cities and towns to commercial and service centers, industrial plants, large and small ranches, small settlements, rubber estates, mining camps, and even indigenous areas work as nodes in an urban system with multiple centralities. The nodes linked through different flows establish a set of interconnected multi-scale networks which rearticulate the regional space based on the local, regional and global forces.

In this context, the urban infrastructure and the social services were extended from the metropolitan regions to the medium size cities and from these to the small towns and its villages, districts, and all other new socio-spatial arrangements, producing a re-configuration within the regional space that goes beyond the old city-country and urban-rural traditional dichotomy models. Logistics and mining, in particular, have shaped the *upper circuit* of the regional urban economic activities which has been established and consolidated. Its actors and their strategies, and its structures and connections, have conditioned the patterns and processes in a mobile urban frontier, strongly characterized by their connectivity relationships.

However, these conceptual projects did prescind of an understanding of the *lower circuits* of the regional urban economic activities (Santos, 1979). These nodes, cities, villages, and others human settlement nuclei are not seen as strategic in the regional development-environment debate. As a consequence, the urbanization processes have had only tangential presence on the agendas for public environmental and climate policies in the regional space. It is essential to reclaim the debate on the possibilities of the Amazônia urbanization as a key element in re-envisioning a new model of regional development.

Against this background, the main goal of the URBISAmazônia project is to qualify and to fill the gaps in our understanding of the structure and functioning of the *urban phenomenon* in the contemporary Amazônia within a conceptual framework that supports the *extended urbanization hypothesis*. In that sense, we propose to take this challenge by open a cross-disciplinary dialogue based on field work, landscape characterization, modeling and simulation, putting together a network of eleven research institutions, from the private and public sectors in Brazil. Have joined the project: (a) a group of regional economists and urban planners from CEDEPLAR-UFMG (Centre for Planning and Regional Development-Federal University of Minas Gerais); (b) a group of demographers from NEPO-UNICAMP (Nuclei for Population Studies-Campinas State University) who will be focused on population and environment issues; (c) computational and statistical modelers from UFOP (Federal University of Ouro Preto) and UFPR (Federal University of Paraná); (d) urban planners and social scientists from UFPA (Federal University of Pará); (e) the tropical forest remote sensing group from INPE-Belém; (f) the urban systems, patterns and process group from INPE-São José dos Campos; (g) the micro-economists and urban planners from FGV-SP (Getúlio Vargas Foundation-São Paulo); (h) NEAD-MDS (Nuclei of Agrarian Studies and Rural Development form the Ministry of Agrarian Development); (i) the climate and health studies group from FIOCRUZ-RJ (Oswaldo Cruz Foundation, Ministry of Health); and (j) ITV-DS (Vale

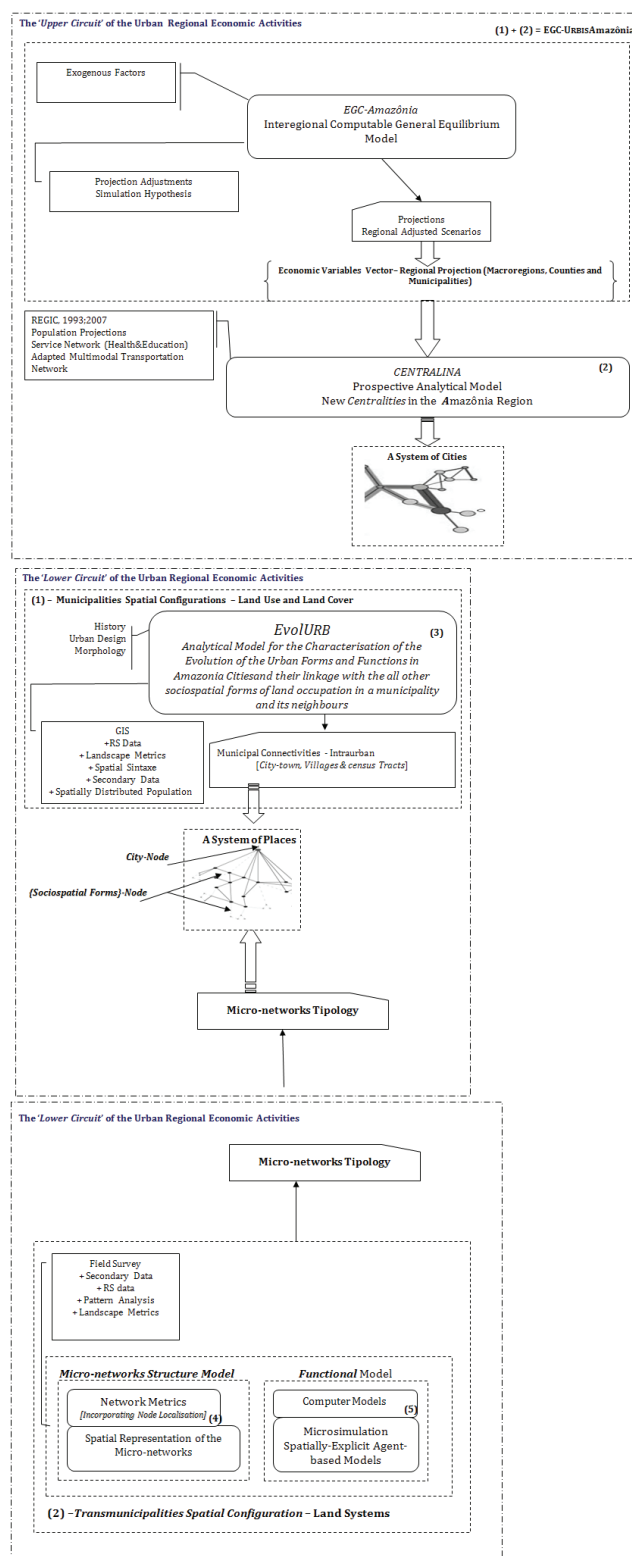


Figure 1. Conceptual framework of URBIS Amazônia, showing the spatial scales across the project. (a) macro scale, (b) meso scale and (c) micro scale.

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In addition, our project recognizes as urgent the articulation between the economic agendas proposed for the region with the network of cities and the micro-networks of traditional villages, communities, camps and small settlements located in areas of potential forest conversion. In this case, instead of being looking only for a *typology of cities* and its related hierarchy, we should

be looking for a typology of networks and its possibilities of connections. Finally, we have just started the project in January, 2012. We hope that the URBISAmazônia research outcomes can provide a support for promoting an informed debate over the agendas for public environmental and climate policies across the region which must consider the contemporary *urban processes* taking place in the Amazônia and look for its possibilities as a policy-oriented device.

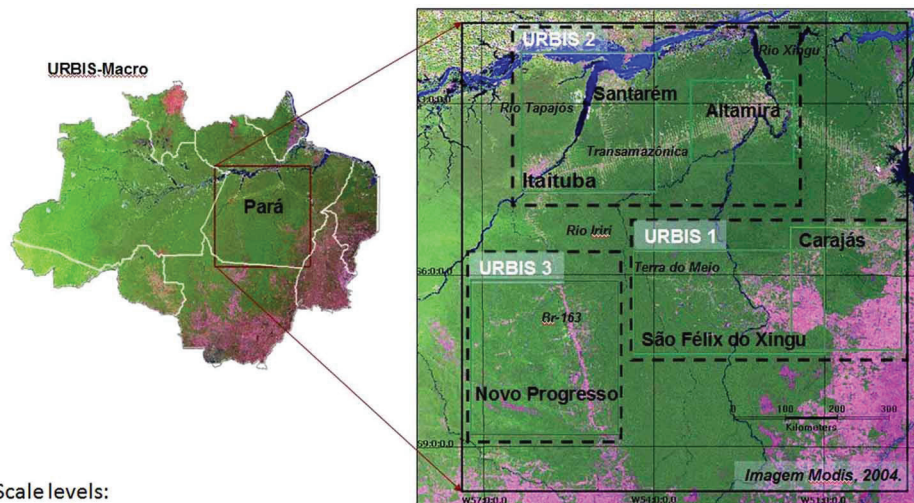


Figure 2. Map of Amazônia and local regions selected for the URBISAmazônia project.

Scale levels:

Urbis – Macro - Models Macroeconomy – [1] CGM-Amazônia, [2] CENTRALINA - New Centralities and Network Review

Urbis – Meso – Models [1] EvoUrb - Selected areas analysis of urbanisation evolution, landscape metrics development, demographic analysis of mobility/migration and the health services structure and functioning.

Urbis – Micro – Models [1] Micronets - Localities dynamics description and analysis through micro-simulation, ABM and Complex Networks metrics)

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