

URBAN AMAZON

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Evolution of human settlements
in the Colombian Amazon and
of their living conditions

COMMITMENTS

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AMAZON REGION,
COLOMBIA

Pop. 1,289,612

483,163 km²

96 m.a.s.l.



KEY
CONCEPTS

SETTLEMENT RING

URBAN HIERARCHY

RIGHT TO THE CITY

The balance of almost twenty years of research work in the Colombian Amazon region shows a unique urban settlement phenomenon in the country: the establishment of a vast settlement ring whose characteristics reflect the extraordinary biological and cultural diversity of the green ocean that represents the Amazon.

One reason that makes the Amazon synonymous with water is that its forests keep the atmosphere humid 3000 km from the ocean. Together, Amazonian trees

contribute 20 billion tons of water to the atmosphere in a day (Nobre, 2014). This region is, in turn, the habitat for almost 40 million people living in large, intermediate cities, towns, villages, *veredas*, and indigenous *cabildos* (Learning UCLG, 2018). Regarding the Colombian Amazon territory, calculations by the National Administrative Department of Statistics (DANE) estimate about 1,289,612 inhabitants, of which 47.63 % live in municipal capitals (614,246) and 52.37 % in rural areas (675,366).

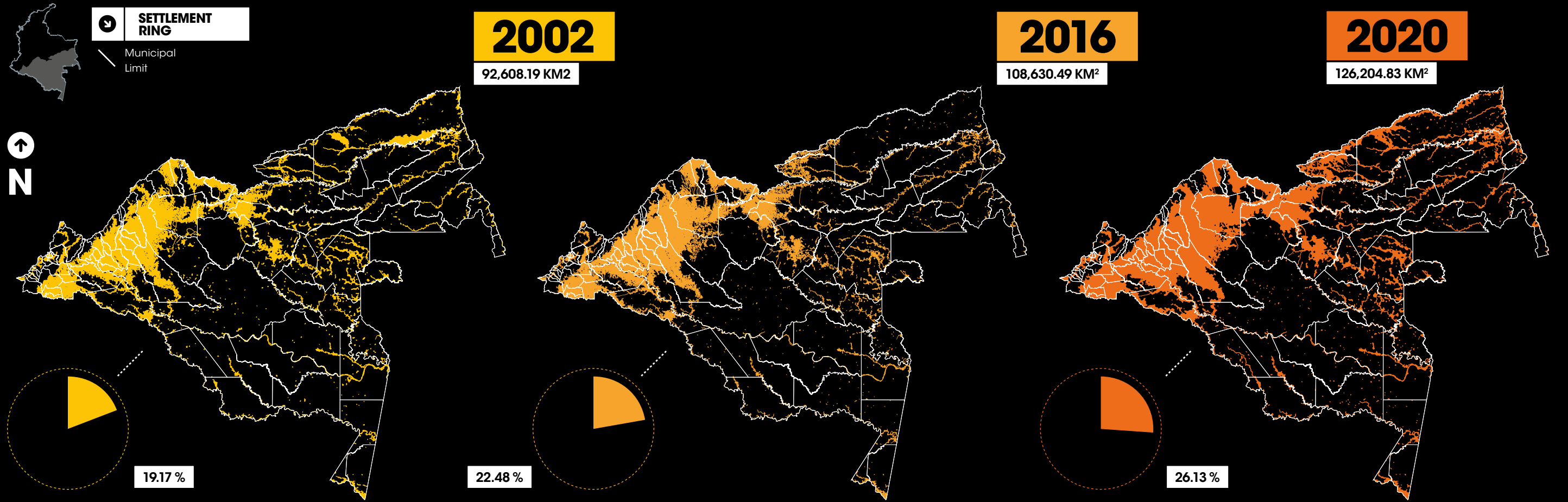
This population comprises about 93 different tribes of indigenous peoples, colonist-peasants, Af-

ro-descendants, and urban dwellers from different regions, which gives rise to an enormous ethnic and cultural diversity. How these settlers are linked to and organize the space where they live has led to heterogeneous territorialities: from those closest to the natural environment with minimal changes to the most transformed, as in the case of different types of urban settlements in which nature is usually excluded.

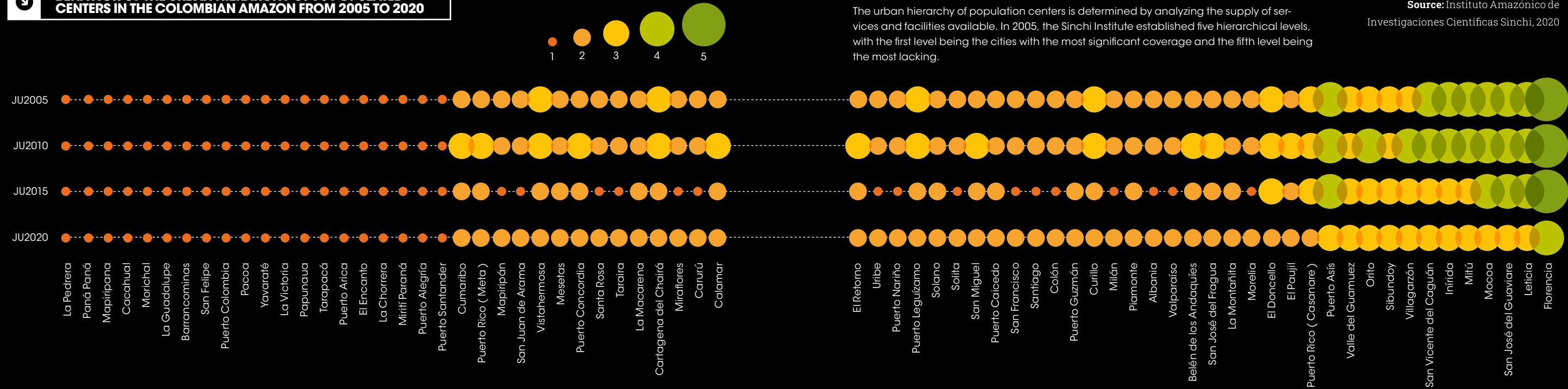
The Sinchi Institute, through the Socio-environmental Dynamics Program, has identified and characterized the processes of occupation, settlement, and urban-

ization in this region for almost two decades (Riaño and Salazar, 2016). Over time, this sustained effort has made it possible to recognize the particularities of settlements in the territory on a regional scale and, in turn, the challenges that arise at the urban level to ensure food sovereignty and access to water for the inhabitants of the region.

In this sense, embracing the vision of BiodiverCities in the Amazon is both a local and a planetary aim capable of reversing urban expansion as an engine of biodiversity loss. It is also a guarantor of contemporary and ancestral practices that preserve and sustainably use biodiversity.



BEHAVIOR OF THE URBAN HIERARCHY OF 70 POPULATED CENTERS IN THE COLOMBIAN AMAZON FROM 2005 TO 2020



A LIVING RING IN EXPANSION

Just as the Amazon region is not a homogeneous space, neither is the geographic space defined as a **settlement ring**. In these rings, urban structures can be identified: through communication networks, they advance penetrating the Amazon region from its periphery towards the center, supported by the areas already consolidated by urban hierarchies and typologies. As a result, a continuous stain is observed, that then extends over the rest of the Colombian Amazon.

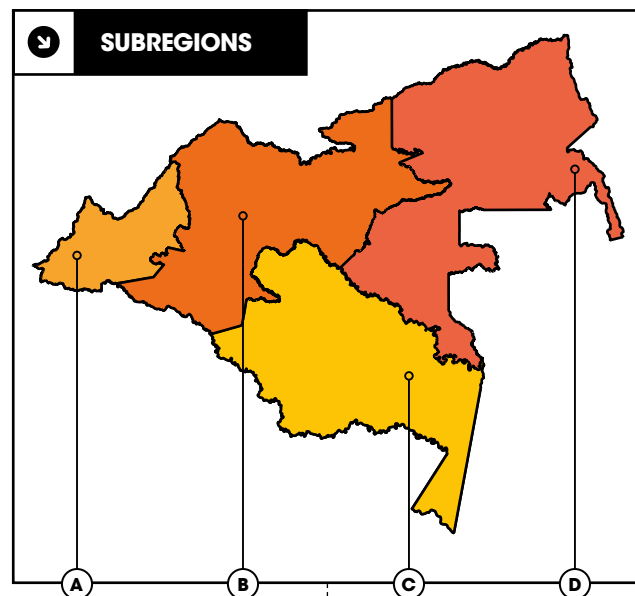
The ring overlaps and transforms protected territories, particular management areas, and indigenous communities (reservations, partialities, ancestral regions, or colonies of nomadic indigenous communities). Consequently, as it progresses, the functional structures of the Amazonian natural ecosystem are altered due to the productive extractive activity that generates surpluses for self-consumption and market. One of the predominant impacts is the fracturing of forests and the contamination of water bodies, which supply local aqueducts and are a source of protein supply for the riverside communities.

The configuration of the population ring from 2002 to 2020 shows the progress in the occupation, population, and urbanization of the Amazon region, which occurs similarly in the rest of the Greater South American Amazon countries. While in 2002, the ring's extension was calculated at 92,608.19 km², in 2020, it reached 126,204.83 km², which means an increase of 36.28 % in 18 years. Notably, the departments of Caquetá, Meta, Guaviare, and Putumayo are the ones that show the highest percentage of urban areas in expansion.

FOUR AMAZONIAN WAYS OF LIVING

In order to understand the dynamics that have led to the Amazon population ring, it was necessary to define the regional territory. To this end, the Socio-environmental Dynamics Program used the **urban hierarchy** analysis of the territory's urban centers and their relationships. Thus, the diverse typologies of present settlements and the configuration of an urban system, together with the economic interests and environmental characteristics of the Amazon, consolidate four recognizable sub-regions: Western Amazonia, Northwestern Amazonia, Northeastern Amazonia, and Southern Amazonia.

The study of these different subregions has revealed large territorial imbalances expressed in high population densities, as in the western subregion; high levels of intervention in the environment, and others sparsely populated, as in the southern subregion, and with a lower level of ecosystem impact.



A WESTERN

- › Extensive overland road network linking urban centers with other country centers.
- › Regional importance.
- › Economy based on commodity production.
- › Pastures and livestock predominance.
- › High incidence of coca cultivation.
- › Presence of illegal armed actors.

B NORTHWESTERN

- › Linked to the markets of Meta and the country's interior by a river.
- › Extensive livestock.
- › High incidence of coca cultivation.
- › Armed conflict scenario.
- › Forced displacement.

C SOUTH

- › Natural communication route constituted by the Amazon and Andean rivers.
- › Extractive economy.
- › Culturally diverse indigenous groups.
- › Leticia concentrates population flows from the region's interior and the country.

D NORTHEAST

- › Reduced road and merchandise links with the interior of the country.
- › The tropical rainforest predominates.
- › Dispersed population, primarily indigenous.
- › Subsistence-based economy (*chagras*, settlers' plots, and extraction of forest resources such as fibers and ornamental fish).
- › Low level of forest loss.

HOW DO YOU EXPERIENCE THE AMAZON?

Human settlements in Amazonia fulfill different roles determined by supplying products or providing regular or occasional services to the inhabitants -for example, they can be market centers or administrative headquarters-which ends up being expressed in social and spatial reality. There is thus a differentiated pressure on ecosystems and their services that gives rise to various typologies of Colombian Amazonian settlements: capital cities, urban centers, municipal headwaters, headwaters of non-municipalized areas, population centers, settlements in rural areas, settlements of indigenous communities, settlements of peoples in isolation and the recent territorial spaces for training and reincorporation (ETCR) (Riaño and Salazar, 2018).

It should be noted that the settlement dynamics in the Amazon region have had severe environmental consequences. On the one hand, the typical conditions of any urbanization process that is neither planned nor guided by social welfare criteria are present. These conditions include unemployment, criminality, poverty, and environmental degradation. On the other hand, in urban centers such as Florencia or Mocoa, the way the territory is occupied increases the population's vulnerability, given the processes of environmental degradation and location in risk areas.

Moreover, the natural attributes of the Amazon, which could well be incorporated into better forms of cities in the tropical rainforest, and the elements of indigenous and mestizo architecture with a unique intercultural mix, are not valued. Extractivism, in particular, becomes a serious environmental problem because it is an economic model that intensively uses a resource that does not fix economic and social capital in the area, leaving instead human and environmental degradation. Thus, in the end, what we see are urban centers that do not guarantee the **right to the city**.

Despite the challenges facing urban occupation in the Colombian Amazon, the region has an immense capacity for action with creative attitudes, boundless energy, and confidence in the future. On this basis, Amazonian cities can be transformed to offer a high quality of life to their inhabitants, privileging human development and reducing their impact on nature, with a prosperous economy for all and based on the active, direct, and committed participation of citizens.

In this order of ideas, what is urban and the city in the Amazon are issues that require further study to

understand their complexity and specificity. Planning and management strategies can then be proposed and adjusted to the Amazonian environment and its inhabitants, whose participation is essential to meet the challenge of having cities for life within the region. The experience of the Socio-environmental Dynamics Program sheds light on five fronts on which it is worthwhile to undertake efforts.

KEY LESSONS

→ It is necessary to propose planning and management strategies adjusted to the Amazonian environment and its inhabitants, whose participation is essential to meet the challenge of having habitable cities in the region.

→ It is necessary to recognize the ongoing urbanization process and its lack of inclusion in public policies. Considering all the region's urban diversity, building cities in the Amazon is today's challenge for such policies and their transit towards sustainability and that of the territory in which they are immersed.

→ Integrating the main ecological structure with a public and urban green space system is essential, recognizing the social and environmental value of protected areas, rivers, streams, wetlands, and parks.

→ The role of the Amazon as a wetland requires the implementation of circular economy guidelines applied to water and waste generation cycles that reduce the impact of urban settlements on the surrounding ecosystems.

→ A promising mechanism for ensuring food sovereignty in the urban environment is to appropriate the region's ancestral farming systems, such as the *chagras*. In this sense, it will be necessary to:

- › Focus on food for the people.
- › Value food suppliers.
- › Locate food systems.
- › Place control at the local level.
- › Promote knowledge and skills.
- › Be compatible with nature.

→ BiodiverCities could not be sustained without a component to promote science and citizen awareness. Recognizing both scientific and traditional knowledge about biodiversity that persists in urban settlements and its role in the well-being of its inhabitants is key to fostering interaction between scientific and citizen actors around the planning and future expansion of their cities.