



# Amazon forest, people and biodiversity: the reality of the Ribeirinha community

## *Amazon rainforest, people and biodiversity: the reality of the riverside community*

Elizarégia Reis de Castro

Submitted on: 03/05/2023

Approved on: 03/06/2023

Published on: 03/20/2023 DOI

10.51473/ed.al.v3i1.499

### SUMMARY

This study aims to verify the reality of the riverside community in the Amazon forest, as well as characterize the scientific production on water populations in Brazilian territory; Characterize the profile of families residing in the traditional riverside community. As a methodology, bibliographical research and data from public documents were used. It was concluded that the difficulty of accessibility for the riverside population has as its main variables that influence this issue, the geography of the location, generally located in locations far from urban centers or difficult to reach the community, often only possible via the river. **Key words:** Amazon rainforest, biodiversity, Ribeirinhos.

### ABSTRACT

This study aims to verify the reality of the riverside community in the Amazon rainforest, as well as to characterize the scientific production on the populations of the waters in Brazilian territory; Characterize the profile of families residing in the traditional riverside community. As a methodology, bibliographical research and data from public documents were used. It was concluded that the difficulty of accessibility for the riverside population has as main variables that influence this issue, the geography of the place, usually due to locations far from urban centers or difficult access to the community, which is often only possible by the river .

**Keywords:** Amazon rainforest, biodiversity, Ribeirinhos.

### 1 INTRODUCTION TO THE

There are few scientific investigations in the Amazon region (AM) and those that exist are still in the early stages. Such challenges are related to the fact that the Amazon, unlike other Brazilian and South American regions, represents an ethnic mix that involves at least 184 indigenous peoples, traditional riverside communities, who still live on the banks of rivers and streams, with access difficult and restricted, in addition to the urban population that is heavily concentrated in Manaus (considered a city-state) (NASCIMENTO; OLIVEIRA, 2018).

Another aspect that draws attention in long-lived populations in the Amazon are their eating habits, Previous investigations already carried out on riverine people living in the interior of the Amazon jungle suggested that a diet based on the consumption of guaraná seed powder could have a beneficial impact on their health, reducing the prevalence of risks of cardiovascular diseases, such as metabolic syndrome ( Ferreira MJ, Rigotto RM, 2014).

Still, another study carried out suggests that riverside dwellers who regularly consume guaraná would have better visual quality, when compared to those who consumed little or no guaraná (RUIZ, et al, 2016).

In this way, this research brings within its scope, a reflection on territory, memory, cultural identity and housing of these traditional populations of the Brazilian Amazon, to understand the configurations of these categories for the social emancipation of these people.

1

Studies on this topic can promote greater visibility of the reality of these populations, as well as their needs and desires, in order to demonstrate possible paths towards democratic and participatory emancipation.

The purpose of this study, in addition to providing important information on the subject addressed, brings, in general and more explicitly, an approximation with the current reality of society.

The advantage of a study like this is not just the information presented in it, but the entire methodology used to develop this information, the knowledge about the subject that is passed on to those who read it.



Here, important information is filtered from various research sources, focused on the best way to pass on the knowledge acquired on the subject over these years of study.

Thus, the generating theme of this research was chosen aiming at the need to deepen knowledge about the reality of riverside populations existing in the Brazilian Amazon forest, providing study material for professionals and students.

Thus, the objective is to analyze the reality of the riverside community in the Amazon forest. Specific objectives include: Characterizing scientific production on water populations in Brazilian territory; Characterize the profile of families residing in the traditional riverside community.

As a methodology, bibliographical research and data from public documents were used.

## 2 LITERATURE REVIEW

### 2.1 The Amazon Region

The demographic transition has been occurring on a large scale in Brazil. The phenomenon is dependent on macro-environmental, socioeconomic and ethnic-cultural factors, maintaining a very large heterogeneity and specificity, especially in Brazil as it is such a large country (Borja, 2014).

Following this pattern of demographic change, populations in the Amazon region, taking the State of Amazonas as a reference, are experiencing a strong decline in fertility and mortality levels and, consequently, an increase in life expectancy at birth. In 2015, Brazil had a life expectancy at birth of 75.5 years, in the state of Amazonas this rate was lower: 71.7 years (CARVALHO, et al, 2014).

The Amazon comprises the region of the Amazon River Basin, the largest on the planet, constituting 25,000km of navigable river, covering approximately 6.9 million km<sup>two</sup>with 3.8 million km<sup>two</sup>in Brazilian territory. The Brazilian Amazon covers 59% of the country's territory in nine states, including 772 municipalities (VAZ, et al, 2018).

According to the 2010 census, the total population in this region was approximately 24.5 million, with 72.2% of inhabitants living in urban areas. This region has a low demographic density (4.86 people/km<sup>two</sup>) compared to the national density (22.4 people/km<sup>two</sup>) (VAZ, et al, 2018).

An intense urbanization process is taking place in the region, but this trend contrasts with the rural lifestyle of traditional populations (indigenous groups, river dwellers, rubber tappers) (VAZ, et al, 2018).

In addition to indigenous natives, the region is currently inhabited by riverside dwellers popularly known as Amazonian caboclos. The caboclos are a Portuguese-speaking mestizo people who consider themselves an “almost ethnic” group and are recognized as part of the history of the Amazon. Locally, caboclos/traditional people are referred to as riverside dwellers (Borja, 2014).

Amazonian populations have different demographic characteristics in relation to other parts of Brazil: (1) low regional demographic density, according to IBGE there are around 22 million inhabitants distributed over three and a half million km;(2) high rate of growth through migration observed strongly in the last three decades; (3) high urban concentration in the state capital and metropolitan region; (4) an estimate of six million individuals that make up the so-called traditional peoples (NASCIMEN-TO; OLIVEIRA, 2018).

### 2.2 The invisibility of the Countryside, Forest and Water Populations as a problem with historical roots

The Amazon population is made up of black, indigenous and white people, considered Amazonian caboclos due to the mixing of races. The riverside population is made up of workers who live off the extraction, fishing and crafts, with his uncle being the central element of his economic, cultural and social life.

In the Lower Amazon, the name riverside dwellers is relative, since some communities identify themselves as varzeiros, even though they carry out activities along the Amazon River, which characterizes them as a social group of riverside dwellers (CANTOS, 2007).

The river can be considered as an extension of the riverside people's homes, as there is an economic and cultural interaction with the environment, making it important to preserve and recognize their identity, understanding the patterns of social behavior from a physical, environmental and ecological.

In order to improve access for riverside populations, public policies were instituted, such as

two

OMore Doctors Program, from Law no. 12,871, of October 22, 2013, which is considered a strategy to strengthen primary care in Brazil. These doctors came from Cuba through this program and worked in places of high social vulnerability, especially quilombolas and riverside communities (SILVA et al., 2017).

However, in 2019, the Mais Médicos Program ceased to exist and the situation of inequality in access to healthcare in more remote areas once again came to the fore. To be served, the population of the waters and forests need to travel an average of 80 kilometers to obtain basic care and if they need emergency assistance, the distance can exceed the 400 kilometer mark. With the lack of resources for technical-scientific health treatment, the use of home remedies based on medicinal herbs to remedy health problems still persists (FRANCO, et al, 2015). This fact highlights the invisibility of the riverside population and demonstrates the need for greater attention to these populations (AGÊNCIA EFE, 2018).

The issue of land ownership is a relationship that impacts the riverside population, but also affects the price of food in cities, since by modifying work in the field, changes occur in the farmers' production system. Furthermore, the service conditions of these populations require them to seek fulfillment of their rights in cities.

It is important to highlight that accessibility of education, health and rights policies already reaches the worst rates in the areas of invisibility, demonstrating the lack of appreciation and invisibility for the State (CAMPOS, 2013).

It is, therefore, essential to institute public policies that provide skilled labor, assistance, good infrastructure, education, health and housing, as it is in the face of survival situations that populations end up migrating to cities in search of opportunities (SILVA, 2011 ).

However, without education and low purchasing power, these workers become easy targets for exhausting working hours and labor exploitation (SANTANA et al., 2016).

The way of life of this population does not fall within the capitalist scope and they do not participate in the conventional labor market, but riverside dwellers in the Amazon territory are able to support themselves through extractivism and fishing, and the environmental issue must be considered, avoiding silting of rivers and loss of important trees for these populations.

By territory, it is understood not only as a geographical space, but as an environment of memory, being the place where riverside dwellers develop their customs and culture as a social artifact encompasses meanings of the way of living and working (BARTH, 2000).

The fight for territory is a way for riverside dwellers to guarantee the use of their lands and resources, as well as to practice their culture and faith, guided by their relationship with the past and expectations for the future (BARTH, 2000).

Furthermore, this population does not live isolated only due to its geographical position, but also culturally, in which the river itself becomes an access barrier and at the same time a field of opportunities.

Regarding riverside dwellings, there is a predominance of houses made of wood, straw or clay, with a maximum of three compartments and the absence of electricity and comfort services. The walls are generally decorated with photographs of family members and images of saints.

Despite advances in the construction of housing conditions in Brazil, this still presents itself as an unresolved social and economic problem, with a major impact on urban organization, whether due to the need for infrastructure or the pressures of land regularization and environmental preservation, resulting from alternative forms of survival and housing, carried out by the low-income population to produce housing.

The course of Brazilian housing policy is marked by many years of challenges, for access to housing in decent conditions, highlighting the rural community and scientific evidence on the factors listed in housing as determinants of health (COHEN et al., 2012 ).

Conceptualizing ruralities, Candiotta and Corrêa (2018) explain that there are two currents, the first understands rurality as a process of valuing rural areas, which is disseminated by global institutions through financing and public policies. A second current conceptualizes it as a empirical reality, constructed, especially endogenously.

Regarding this subject, the author Biazzo (2009, p. 19) explains that:

[...] in both spaces, social identities that configure rurality and urbanity are manifested. In rural and urban landscapes (forms, sets of objects) there are urbanities and ruralities (contents – heritages, origins, habits, relationships, set of actions) that combine, generating new territorialities, assuming that each location or region can house different overlapping territorialities, relating to different social actors.

In this way, it is understood that the term “rural” is no longer just a space, but rather expresses the

social relations inserted in it and “rurality” comprises a socially shaped rural environment (CARDOSO, 2022).

The term rural population is considered, as it encompasses the population of the countryside, forest and water, demonstrating their plurality and diversity (PESSOA; ALMEIDA; CARNEIRO, 2018).

The existence of public services adjacent to the population is a prerequisite for living with quality of life, making it possible to work in conjunction between networks, through partners, as a means of promoting access to citizenship, so that basic needs are met in a prominent way for equality and universalization of human rights (CARVALHO; RODRIGUES, 2016).

As for data from the Brazilian Institute of Geography and Statistics (IBGE, 2013), in 2012, the water supply deficit in the country was greater in small municipalities and rural areas, highlighting the importance of basic sanitation for public health, with the State adopt public policies so that environmental quality is more important.

Regarding sanitation, Borja (2014) mentions that public policies are still far from guaranteeing the right to basic sanitation in the country, facing challenges of different dimensions, highlighting the political-ideological, financing, technological matrix, and social control, among others.

In this sense, riverside dwellers face, in addition to the risks of their professional activities, environmental problems related to chemical pollution from industries and the lack of basic sanitation, in addition to difficulties in accessing health services.

Difficulties in accessing education, basic sanitation and health services particularly highlight geographic and social inequalities between minority groups, denoting what needs to be improved regarding the provision of health services to the population, especially in terms of access to health services, especially when relating to the rural population.

Garnelo et al (2018) analyzed the extent of coverage that covers geographic access barriers for family health teams, finding difficulties in meeting spontaneous demand, scheduling appointments and availability of transport for care were also reported.

The problem of distance from riverside populations is characterized by low economic level and limited access to cities, and geographic limitations are considered barriers to access to health services and quality of life (GAMA, et al, 2018).

The difficulty of access is commented by Barroso, Melo and Guimarães (2014), showing that the greater the level of complexity, the greater the difficulty of access for residents of rural populations.

The cultural and geographic complexity of the Amazon region also poses difficulties in accessing education, including an insufficient number of schools and a lack of teachers for specific subjects (ARAÚJO; SILVA, 2015).

With large families, children also end up using their labor force to help with the family economy, and have difficulty reaching higher education, including the lack of efficient transport and nearby schools (CARDOSO, 2022).

Carvalho et al (2014) found in their studies that work often begins in childhood and is considered by riverside populations as a normal and necessary issue to supplement income and pass on the profession to new generations.

During times of flooding, the situation worsens, as some populated areas become flooded and residents' movement becomes even more difficult, requiring them to walk for many kilometers to get to school.

According to Gonçalves et al (2021), floods generally occur when precipitation is intense and the amount of water that reaches the river is greater than its drainage capacity, resulting in its waters overflowing the riverside areas.

The main natural variables for the occurrence of flooding are the relief, quantity and intensity of rainfall, vegetation cover, and soil drainage capacity. The main artificial conditions arise from the use and management of the soil, such as hydraulic works, degree of soil sealing, deforestation and reforestation (GOLDONI; VESTENA, 2006).

4

For Franco et al. (2015) the invisibility of the forest and water population is due to the country's historical roots, with the conception of a country divided into an urban population and a rural population prevailing for many years, forgetting those who lived in the forest and on the banks of the rivers. rivers.

For Santos (2003), this invisibility is a means of maintaining colonial power and the struggles of traditional peoples are adapted from the perspective of social emancipation. The riverside peoples seek to remain in their traditional territory, imposing themselves on the colonial dehumanization that condemned them to the condition of oppressed.

For Freire (2005), only through the education of these oppressed people, as historical social subjects, is it possible for them to be able to assume their voices and memories and thus fight for their rights.

In this sense, it appears that in addition to the historical problem of invisibility, these populations They also face a lack of studies that allow this research to be developed in more depth.

## CONCLUSION

This study demonstrated the difficulty in accessing basic services for the riverside population, with situations that affect this issue being the geography of the territory and the distance or difficult access to cities, as transportation is often only possible via the river.

It is important to report the lack of research on the reality of riverside populations, as it can be seen that the articles and works selected for this research are different in terms of objectives, which makes it difficult to have a focused discussion on the subject, especially when it comes to communities riverside areas, having their invisibility extended beyond public policies.

## REFERENCES

EFE Agency. Departure of Cuban doctors exposes inequality in health in Brazil. **G1**.2018. Available at: <https://g1.globo.com/mundo/noticia/2018/12/09/saida-de-medicos-cubanos-expoe-desigualdade-na-saude-do-brazil.ghtml>

Barroso Sabrina Martins, Melo Ana Paula, Guimarães Mark Drew Crosland. Factors associated with depression: differences by sex among residents of quilombola communities. *Rev. bras. epidemiol.* [Internet]. 2015, June [cited 2019 Oct 26]; 18(2): 503-514.

Bart, Frederick. *The guru; the initiat or and other anthropological variations*. Rio de Janeiro: Contra C'P' Livraria, 2000.

Bonadiman BSR, Cadoná FC, Assmann CL, et al. Guarana (*Paullinia cupana*): Cytoprotective effects on age-related eye dysfunction. *Journal of Functional Foods*. 2017; v. 36 (2017): 375–386.

Borja PC. Public policy on basic sanitation: an analysis of the recent Brazilian experience. *Health and Society*. 2014;23:432-47.

Brazil. National health survey: 2013: access and use of health services, accidents and violence: Brazil, major regions and federation units / IBGE, Work and Income Coordination. – Rio de Janeiro: IBGE, 2015.

Brazil. Ministry of Health. Secretariat for Strategic and Participatory Management. Participatory Management Support Department. *Policies to promote health equity*. Brasília: Ministry of Health, 2013.

Brazil. Ministry of Health. Secretariat for Strategic and Participatory Management. Participatory Management Support Department. *National Policy for Comprehensive Health of Rural and Forest Populations / Ministry of Health, Secretariat for Strategic and Participatory Management, Department of Support for Participatory Management*. Brasília: Publisher of the Ministry of Health, 2013.

Cardoso, Aparecida Mendes. Family farming and public development policies in Vale do Ribeira in SP. **RCMOS – Multidisciplinary Scientific Journal O Saber**.ISSN: 2675-9128. São Paulo-SP, year II, v.2, n. 2, Jul./Dec. 2022.

Carmo, Eraldo Souza. Educational processes and teaching municipalization strategies in the municipality of Breves in the Marajó archipelago. 2010. Master's Thesis. Center for Higher Amazon Studies, Postgraduate Program in Sustainable Development of the Humid Tropics, Federal University of Pará, 2010.

5

Carvalho IG, Rêgo RD, Larrea-Killinger C, da Rocha JC, Pena PG, Machado LO. Towards a dialogue of knowledge between subsistence fishermen, shellfish gatherers and environmental labor law. *Science & collective health*. 2014 Oct 1;19(10):4011.

Ferreira MJ, Rigotto RM. Epistemological/methodological contributions to the fortification of an emancipatory con (science). *Science & collective health*. 2014 Oct;19(10):4103-11.

Freire, Paulo. *Pedagogy of the Oppressed*. Rio de Janeiro: Peace and Land, 2005.



Gama AS, Fernandes TG, Parente RC, Secoli SR. Health survey in riverside communities in Amazonas, Brazil. Public Health Notebooks. 2018 Feb 19;34:e00002817.

Garnelo L, Lima JG, Rocha ES, Herkrath FJ. Access and coverage of Primary Health Care for rural and urban populations in the northern region of Brazil. Health in Debate. 2018;42:81-99.

Gonçalves LPM, et. al, Study of susceptibility to gravitational mass movements and floods in the urban region of Patos de Minas, Minas Gerais. RCMOS – Multidisciplinary Scientific Journal O Saber. ISSN: 2675-9128. São Paulo, vol. 06, p. 01-42, jun. 2021.

Nascimento MN, Oliveira IF. Actions of CRAS flying teams in the interior of Rio Grande do Norte. Psychology Studies (Natal). 2018 Jun;23(2):122-32.

Pessoa VM, Almeida MM, Carneiro FF. How to guarantee the right to health for rural, forest and water populations in Brazil? Health in Debate. 2018;42:302-14.

Ruiz EN, Santos VF, Gerhardt TE. Mediations in health care from the perspective of the Gift Theory: the health of the rural population highlighted. Physis: Public Health Magazine. 2016;26:829-52.

Santos, Boaventura de Souza. Can the right be emancipatory? Revista Crítica de Ciências Sociais, 65, 2003, p. 3-76. Available at: [http://www.boaventuradesousasantos.pt/media/pdfs/podera\\_o\\_direito\\_ser\\_emancipatorio\\_RCCS65.PDF](http://www.boaventuradesousasantos.pt/media/pdfs/podera_o_direito_ser_emancipatorio_RCCS65.PDF).

Vaz MR, Bonow CA, Abreu DP, Vaz JC, Mello MC, Xavier DM. Rural workload and factors associated with the use of medication by elderly people. Magazine of the USP School of Nursing. 2018;52.