ACCESS TO JUSTICE AND DIGITAL INCLUSION IN THE AMAZON: GEOGRAPHIC VULNERABILITY AND RIVERSIDE COMMUNITIES

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Abstract. This article explores access to justice for a local population in the Brazilian Amazon region and the opportunities generated by digital transformation in the judiciary, focusing on the case of Porto de Moz, Pará, Brazil. While access to justice has been extensively examined through various theoretical lenses within the realm of social sciences, a noticeable void persists in the scientific discourse concerning access to justice for riverside communities within the Amazon region. Consequently, this study delves into the challenges confronted by the Judiciary and other components of the justice system in a Brazilian region characterized by heightened structural intricacies, underscored by the geographic isolation of its populace and a dearth of public services. The primary objective of this research is to elucidate the perspectives of riverside residents in the Amazon region regarding impediments and enablers to accessing justice services. To achieve this goal, there was undertaken a case study within one of the riverside communities in the municipality of Porto de Moz, situated in the state of Pará, Brazil. Employing document analysis and focus groups with local residents, the empirical research sheds light on the prevailing scenario. The findings of the study reveal that the predominant barriers to accessing justice in the surveyed riverside community include geographical isolation, technological constraints – such as unreliable energy infrastructure – and the virtual absence of public authorities in delivering essential services. Conversely, key facilitators of access encompass public-private partnerships, the establishment of digital inclusion points, and itinerant justice initiatives.

Keywords: access to justice; digital justice; Amazon region; geographic vulnerability; riverside communities.
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1. Introduction

Access to justice in the Amazon region stands out as a distinctive challenge, marked by substantial variations compared to other Brazilian regions. The vast territorial expanse, a myriad of structural issues, and the coexistence of traditional communities constitute formidable obstacles for the justice system in this unique locale [1]. This research scrutinizes access to justice through the lenses of social inclusion, adopting a justice system perspective. In the context of social inclusion, “access to justice refers to the possibility for citizens to resort to judicial services and be treated in the same way, without suffering threats of any kind, constituting a means of social inclusion” to establish a “means of social inclusion, a gateway to participation in the goods and services of a society” [2]. Notably, this inclusivity must uphold core values of equality and social justice and place a distinct emphasis on collective well-being [3].

Riverside communities in the Amazon region of Brazil grapple with numerous challenges in accessing fundamental services provided by public authorities, including judicial services [1]. In this study, judicial services encompass all offerings provided to communities by judicial entities [4], particularly those extended by the judicial units of the state courts. Comprehending the dynamics between riverside communities and public authorities, particularly justice organizations, constitutes a significant challenge for several reasons. Firstly, it necessitates an understanding of the unique demands of these populations. Secondly, it entails a consideration of the existing public infrastructure designed to serve these communities. Thirdly, and perhaps most challenging, it demands physical access to these communities and a sincere engagement with the perspectives of their residents.

In a search conducted on Google Scholar on December 21, 2023, and on Scopus on December 2, 2024, utilizing the keywords guiding this article, namely “administration of justice,” “access to justice,” “sustainability,” “Amazon region,” and “riverside communities,” no research from the past decade on the topics addressed in this study was identified. In a search carried out with the same keywords in the Web of Science database, on June 2, 2024, 927 results were found. However, none of the searches specifically dealt with the object of this study. This discovery underscores the novelty of our research and aims to inspire fellow researchers to delve deeper into this subject.

This study focuses on access to justice, sustainability, and well-being within the riverside communities of the Amazon region, aiming to identify the perceptions of riverside residents regarding the barriers and facilitators to access to justice. To achieve this, we initially conducted a documentary analysis to contextualize the research locus. Subsequently, a focus group was convened with residents of the Itapéua riverside community, situated on the banks of the Xingu River in the city of Porto de Moz, in the northern region of the state of Pará, Brazil.

The study operates under the premise that merely providing essential services to riverside communities is insufficient. Public authorities must also prioritize humanization and effective accessibility [5], paying particular attention to the needs and challenges of the people of the Amazon rainforest. This is especially crucial considering the myriad barriers preventing these communities from fully exercising their citizenship. Conducting on-site consultations and documenting issues related to their geographical isolation are imperative steps toward

José Gomes De Araújo Filho, Fabrício Castagna Lunardi, Adalmir De Oliveira Gomes, and Pedro Miguel Alves Ribeiro Correia
Virtual Economics, Vol. 7, No. 2, 2024
understanding the reality of these populations and formulating solutions to address the obstacles they encounter.

This study sought to fill the gap identified in the literature, providing a detailed analysis of the barriers and facilitators of access to justice for the riverside population in the Amazon, contributing to the debate to promote inclusive and effective justice. The specific objectives of the study include a) the identification of geographic, social, and economic barriers that hinder or impede access to justice; b) analysis of the riverside population’s perception of available judicial services; c) evaluating the impact of digital inclusion initiatives and itinerant justice actions on access to justice; d) proposing practical solutions and implementing public policies to improve access to justice in riverside communities in the Amazon.

The central hypothesis postulates that the implementation of public policies adapted to local specificities, such as the creation of digital inclusion points and the carrying out of itinerant justice actions, can promote a significant improvement in access to justice for isolated riverside communities in the Amazon. To achieve the proposed objectives, the research was based on participant observation and carrying out a PESTEL analysis in the context of the city of Porto de Moz, located in the State of Pará, Brazil. Next, a focus group was conducted with residents of the riverside community of Itapéua, located on the banks of the Xingu River, in the city of Porto de Moz. Carrying out the on-site study allows us to understand the reality of the riverside population, being the starting point for formulating solutions to face the obstacles experienced.

In section 2, the paper presents a review of the literature on access to justice and social inclusion, highlighting existing gaps and recent advances on the topic. Section 3 will address the methodology, detailing the data collection and analysis methods used in this study. In section 4, the results will be highlighted, presenting the main findings of the case study and focus groups. In section 5 there will be space for discussion, interpreting the results obtained in light of the existing literature and its real implications. Finally, in section 6, the conclusion of the study will be presented, summarizing the main findings and proposing recommendations for future research.

2. Literature Review
2.1. Theoretical Approaches to Access to Justice

When delving into the exploration of access to justice, sustainability, and the well-being of a local community in the Amazon region, a foundational step involves defining the approaches and dimensions to be employed. The discourse on access to justice is not a recent development; it has been a subject of extensive deliberation for an extended period, not confined solely to the legal domain but spanning various fields of knowledge as well [2]. Nevertheless, there remains a dearth of empirical research specifically examining the Amazon Region through the lens of the demands voiced by its communities and residents.

To enhance the comprehension of access to justice, particularly for vulnerable societal groups like the riverside peoples of the Amazon region, a comprehensive perspective is imperative. This approach should facilitate a thorough structural analysis of the issues at hand and advocate for systemic interventions capable of genuinely achieving inclusive access to justice [2].
The concept of access to justice is expansive, multifaceted, and amenable to analysis from various perspectives [2]. The exploration of access to justice gained momentum and prominence during the 1960s and 1970s with the advent of the Global Access to Justice Project. The Florence Access to Justice Project had a multidisciplinary team of lawyers, policy makers, economists, anthropologists, and sociologists from nearly thirty nations. Despite the inherent challenges in delineating the boundaries of the term “access to justice,” it has been defined as a fundamental prerequisite—an elemental human right—within a contemporary, egalitarian legal system that aspires not only to proclaim but to guarantee the rights of all individuals [6]. Initially linked to securing justice through the judicial process, wherein individuals could assert their rights and resolve disputes irrespective of social, economic, or ethnic distinctions, the term “access to justice” was also tied to the conditions necessary for obtaining justice within a system that yielded socially equitable outcomes [6]. Indeed, these definitions laid the groundwork for scholarly inquiries and prompted the categorization of access to justice into successive “waves of renewal,” reflecting attempts to demarcate the evolution of the concept over time.

Initial studies delineated three waves of renewal: the first, centered on legal aid for the indigent, aimed to dismantle economic barriers; the second, associated with the representation of diffuse and collective interests, sought to facilitate the representation of vulnerable groups; and the third, concentrated on justice system reforms with an emphasis on simplification, accessibility, and the adoption of alternative conflict resolution methods [6]. A fourth wave would be linked to contemporary challenges in legal education and the training of legal professionals [7], and a fifth wave would be associated with the utilization of big data technology in the realization of rights [8].

Access to justice stands as an indivisible fundamental right interwoven with other rights enshrined in the Brazilian legal system and numerous international treaties. Its foundational significance constitutes one of the pillars of the Democratic Rule of Law and serves as a structural imperative for safeguarding citizens’ guarantees and the dispensation of justice [9]. Nevertheless, despite its pivotal role, access to justice has received scant attention and funding in comparison to other rights of equal social relevance, such as health and education [10].

Despite extensive efforts by governments and organized civil society to modernize and enhance the justice system, numerous obstacles and barriers persist, impeding universal access to justice, particularly for individuals in vulnerable situations [11]. The infringement upon the assurance of access to justice gives rise to a profound social issue, fostering an inaccurate hierarchy among citizens, eroding state legitimacy, and reinforcing its incapacity to uphold fundamental rights and guarantees [12]. In Brazil, the constitutional articulation of access to justice, as articulated in Article 5, item XXXV, of the Federal Constitution (“the law shall not exclude from the appreciation of the Judiciary any injury or threat to the right”), has, due to its vagueness and indeterminacy, primarily served as a foundational point for theoretical and dogmatic analyses. The prevailing notion that access to justice extends beyond merely reaching the Judiciary, encompassing a fair legal order that includes the Public Prosecutor’s Office, the Public Defender’s Office, the Legal Profession, and other entities within the justice system, has gained widespread acceptance [13].

Building on the constitutional framework, access to justice can also be posited as an indispensable right to protection or provision, capable of codifying a set of values, rights, and
interests crucial for individuals facing the potential or actual infringement of their rights [14]. An isonomic and democratic approach to access within a socially just order, arising from a redistributive political stance, holds the potential to render basic social rights effective, secure, and expeditious, thereby averting conflicts and mitigating intra- and extra-procedural inequalities [15]. However, it is imperative to acknowledge that cyclical economic limitations exist in the promotion of material equality.

The myriad of research studies across diverse fields, varied theoretical approaches, and the intricate nature of the concept of access to justice coupled with the scarcity of empirical studies, present challenges in systematizing knowledge on this subject. To address this, theoretical and conceptual frameworks for access to justice were formulated, laying the groundwork for the approaches employed in empirical research. It is imperative to meticulously examine the barriers, resources, structural aspects, and provision of public services within the study context, recognizing the challenges encountered by individuals in vulnerable situations, understanding their coping mechanisms, and exploring potential avenues for the realization of their rights as citizens [16].

The concept of sustainability, as viewed through the lens of macroeconomics, encapsulates the long-term equilibrium between resource exploitation and the concurrent development of economic, environmental, and social factors [17]. Grasping this concept requires a more comprehensive analysis of the studied scenario, particularly in the Amazon. The challenges faced by vulnerable groups contribute to the inherent inequality in access to justice, given the prevalent poverty and deficient infrastructure in these communities [18]. Consequently, it can be asserted that the formulation of public policies and justice system reforms that inadequately account for the impact on vulnerable groups perpetuates social inequality further [19].

Access to justice within the justice system context pertains to the individual’s capacity to report or defend themselves before the competent court, utilizing channels to assert their rights and engaging with justice system institutions for the peaceful resolution of threats or impediments to those rights [2]. However, the concern extends beyond merely facilitating access through institutional means; it involves concretely enabling access to a genuinely fair legal order. In examining the dimensions of access to justice, this investigation prioritized social demand, focusing on the needs and gaps in accessing justice from the perspective of the population or community of interest [2]. The geographical scope of access to justice considered was regional, involving the local public sector, with particular emphasis on the justice organizations responsible for the investigated riverside population.

2.2. Obstacles to Access to Justice in the Amazon Region

Numerous obstacles confront the population in their pursuit of rights, ranging from economic inequality to the intricate structural characteristics of each of Brazil’s Federative Units. These challenges necessitate tailored strategies, particularly for communities grappling with social vulnerability.

In this context, the Brazilian Amazon region stands out, spanning approximately 4.2 million square kilometres across the states of Acre, Amapá, Amazonas, Pará, Rondônia, Roraima, Mato Grosso, Tocantins, and Maranhão. The population of the Brazilian Amazon is roughly 25
million, with the majority residing in the significant urban centres of the country’s northern region [20]. Within this populace, an estimated 5.5 million inhabitants exclusively inhabit rural areas, residing in small traditional communities comprising indigenous people, riverside dwellers, and quilombolas (communities of descendants of slaves), among others [20].

In a landscape marked by numerous challenges, discussions on access to justice cannot ignore a critical aspect: judicial governance. This term encompasses the amalgamation of leadership, strategic initiatives, and control mechanisms instituted to assess, guide, and monitor judicial management, all aimed at fostering equitable access to justice [15]. The implementation of judicial governance tools within a judicial unit facilitates the focused allocation of efforts towards the efficient functioning of the Judiciary, ultimately benefitting society [21].

In this context, within the framework of new public governance, the role of the traditional judge has undergone significant modification, with an increasing demand for tangible outcomes [22]. This transformation has been particularly pronounced with the technological evolution of the judiciary; a process accelerated by the COVID-19 pandemic. The pandemic rendered face-to-face proceedings unfeasible, leading to an accelerated shift toward digitization, coupled with the adoption of new information and communication technologies (ICT), automation, artificial intelligence, business intelligence, and innovative approaches to managing people, processes, and logistical resources [23]. In Brazil, these initiatives not only aim to alleviate the substantial backlog of cases in the courts but, more importantly, strive to enhance the delivery of justice, especially in those courts whose precarious and complex structures impede full and effective access for the less privileged citizens.

Recognizing the pivotal role of judicial governance in Brazil, the National Council of Justice (CNJ), the central coordinating body for national judicial policies, outlined 11 national goals for 2023 during the 16th National Meeting of the Judiciary. These goals seek to standardize, rationalize, and automate procedures and processes essential for improving the provision of justice [24].

While representing a significant stride in the management of justice in Brazil, it is evident that the current consolidated national goals of the Judiciary are exclusively focused on criteria such as efficiency and innovation. Consequently, the assessment of the Brazilian Judiciary’s performance remains predominantly centred on quantitative metrics, emphasizing the objective relationship between inputs and outputs [25]. Issues of paramount importance, such as humanized judicial provision and the implementation of tangible measures to bring the judiciary closer to citizens, have not been duly considered. This omission poses a particular challenge, especially in complex scenarios like the Amazon region.

In contrast to the Brazilian model, Portugal’s Justiça Mais Próxima [Closer Justice] Plan 2020/2023 stands out with a vision to establish a justice system that is agile, transparent, humane, and intimately connected with citizens. The distinguishing factor between the Brazilian and Portuguese models lies in their guiding pillars [5]. While the Brazilian model emphasizes ‘efficiency’ and ‘innovation’ as its pillars, the Portuguese model includes ‘proximity’ and ‘humanization’ as foundational principles.
The Judiciary serves as a common and rivalrous resource, allowing anyone to file a lawsuit without concerns about overloading the system or compromising its speed and quality of output [26]. From this perspective, it is natural for the top echelons of the Brazilian judiciary to prioritize issues like procedural backlog, congestion rates, and case duration. While these indicators are crucial, it is equally important to consider the diverse regional contexts, recognizing that citizens everywhere should enjoy the same rights and opportunities.

Each Federative Unit possesses specific characteristics that distinguish it from others, influencing the expeditious and effective delivery of judicial services. When examining the territorial extension of each state, there is a substantial discrepancy in analysing structural challenges and conditions for vulnerable populations to exercise their citizenship. For instance, comparing a state like Sergipe, with a territorial extension of 21,938 km², to Pará, whose extension is 1,245,870 km² [20], is nonsensical. Pará, due to its vast territorial expanse, convenient market access, and advanced forest management, stands as the largest producer of native wood in Brazil [27].

Faced with this complex reality, efforts should be directed towards bringing the judiciary closer to citizens residing in the interior of the Amazon, aiming to humanize the provision of justice. Consequently, the national goals should evolve to include metrics that measure the effective outreach of the Judiciary, extending beyond mere procedural control.

Humanized judicial provision should be a cornerstone of sound judicial governance, particularly in regions marked by high geographical and structural complexity, such as the Brazilian Amazon rainforest. Hence, careful attention and support must be directed towards management techniques and tools capable of positively impacting the entire judicial system, alleviating issues related to low demand and precarious access to justice for those most in need [28].

3. Methods

The empirical research unfolded in two distinct stages. The initial phase involved a comprehensive analysis of contextual factors surrounding the investigation, employing PESTEL analysis. This methodological tool, known for its discursive approach, offered a panoramic view through six dimensions: political, economic, social, technological, environmental, and legal [29]. While this multidisciplinary approach provides a broad understanding, it may prove counterproductive when scrutinizing issues essential for justifying the very existence of jurisdiction and addressing the root causes of the investigated phenomena in the context of access to justice, sustainability, and the well-being of the local population [15]. The initial analysis relied on statistical data and documents sourced from official databases.

The subsequent stage involved participant observation and a focus group with riverside dwellers in the municipality of Porto Moz, Pará, Brazil. This community hosts an estimated population of 1,000 inhabitants. Participant observation, integrated into the data collection process, played a pivotal role in interpreting the study’s results. The focus group convened in the riverside community of Itapéua, situated approximately 24 hours by river from the urban area of Porto de Moz.
The focus group script was meticulously crafted through participant observation and insights gleaned from the PESTEL analysis. This approach aimed to comprehend the myriad obstacles and barriers confronting riverside communities concerning access to justice. Contextual data, particularly the findings from the municipality of Porto de Moz in the 17 Sustainable Development Goals outlined by the UN’s 2030 Agenda, played a pivotal role in shaping the interview script. With 169 targets, these goals seek to guide public authorities in addressing issues related to poverty, hunger, and environmental conservation, ensuring a dignified life for all [30].

To carry out the focus group, people were selected based on representativeness and diversity criteria, ensuring that the sample adequately reflected the opinion of the riverside population of Porto de Moz. To select the participants, initially, community leaders recognized by the local government and by the inhabitants of the Itapéua community were invited. Selection criteria included a minimum age of over 18 years, a minimum length of residence in the community of over 5 years, and active participation in community activities. Based on the stipulated criteria, 5 leaders from the riverside community of Itapéua were identified. The methodology was conducted in accordance with the ethical principles established in the Declaration of Helsinki and its application was submitted to the National Committee for Ethics in Research with Human Beings, according to Certificate of Presentation of Ethical Appreciation 68582723.1.0000.5169, allowing critical evaluation and replication by others researchers, ensuring the validity and reliability of the results.

The focus group was initiated through invitations extended to leaders of the Itapéua Community. The focus group was comprised of five participants, all acknowledged local leaders: a) the community coordinator (Participant 1); b) a schoolteacher (Participant 2); c) two community agents (Participants 3 and 4); and d) the president of a local association (Participant 5). Participants were requested to provide informed consent by signing a consent form (ICF) before being randomly seated around a table. A structured questionnaire was then presented, covering their individual perspectives on several topics: a) general conditions of the community; b) available public services; c) use of technology; d) access to justice services; e) barriers and facilitators to accessing justice; and f) the humanized service provided by the Judiciary. The discussion, spanning approximately 60 minutes, was carefully conducted to encourage all participants to share their views, and the audio recording of the session was transcribed for subsequent analysis.

The data gathered during the focus group underwent thorough transcription and analysis employing the ATLAS.ti software. This tool, with its functionalities designed for quantitative data treatment and content analysis systematization, proved instrumental in the process. Indeed, the content analysis brought forth distinctiveness in the following themes: a) access to justice, b) obstacles and barriers, c) humanization of justice, and d) resources and structure. The correlation and influence of each theme underscored that achieving access to justice in a riverside community in the Amazon is intricately linked to local structural conditions and the Judiciary’s humanized approach to citizens residing in these areas.

Themes explored in the focus group were methodically categorized and coded based on participants’ statements, resulting in 12 quotes related to the theme “Access to Justice,” 18 to “Barriers and Challenges,” 12 to “Humanization of Justice,” and 26 to “Resources and
Structure.” Consequently, a total of 68 quotes emerged (some correlating with more than one theme) from the 50 responses provided by the participants.

4. Results

Established as an independent municipality on November 9, 1890, by Decree No. 218 of the Pará state government, Porto de Moz encompasses a population of 42,456 residents and spans 17,423 km² of land [20]. The municipality of Porto de Moz confronts challenges in advancing 14 out of the 17 Sustainable Development Goals (SDGs) outlined in the 2030 Agenda. This predicament underscores a situation demanding heightened attention and concerted efforts from the local government to address the issues associated with the SDGs. Concerning compliance with these goals, Porto de Moz is ranked 5,488 out of the total 5,570 Brazilian municipalities, positioning it as one of the nation’s most economically disadvantaged and structurally deficient cities [31].

In the face of these adversities, the Judiciary, along with other integral components of the justice system, encounters numerous challenges in securing access to justice for citizens dwelling not only in the municipal urban centre but also in the isolated riverside communities nestled within the heart of the Amazon rainforest. This study undertakes a comprehensive analysis of the existing conditions in the municipality of Porto de Moz, aiming to paint a comprehensive picture that elucidates the landscape of access to justice for riverside communities within the municipality, as elucidated later in this article. The ensuing sections delineate a range of factors that constitute the current context of the municipality.

The political landscape in Porto de Moz remains relatively stable, marked by apparent republican dialogue among elected officials in local executive and legislative positions. In the 2020 municipal election, Porto de Moz counted 21,345 voters, with 84.6% (18,063) participating. Of those who cast their votes, a mere 2.6% (463) chose to vote blank or nullify their votes, indicating that 97.4% (17,600 voters) expressed their support for their preferred candidates. These statistics underscore a substantial level of political engagement and participation within the population [32].

From the perspective of access to justice, the Electoral Court plays a significant role. The 82nd Electoral Zone of Porto de Moz, responsible for local-level elections, oversees 82 polling stations distributed across 35 locations in the municipality—eight in the urban area and 27 in the rural expanse [33]. The substantial infrastructure deployed for local-level elections, encompassing the acquisition of state-of-the-art satellite data transmission equipment and the recruitment of technical personnel to ensure the functionality of electoral systems, enabled the Judiciary to effectively cover 100% of the polling stations. This ensured the constitutional right to vote, even in the most remote communities beset by significant structural deficiencies.

Porto de Moz’s Gross Domestic Product (GDP) stands at R$348.5 million, distributed across various sectors: 57.3% originates from public administration, 22.1% from agriculture, 17.3% from services, and 3.3% from industry. The municipality’s GDP per capita is R$8,300, which falls below the state of Pará’s average of R$24,800 [20]. In 2020, the average monthly salary for Porto de Moz’s working population was equivalent to 1.9 minimum wage. The proportion of employed individuals relative to the total population was 6.4%, ranking 80 out of 144 and
83 out of 144 among other municipalities in the state, respectively. Nationally, it stands at 2,558 out of 5,570 and 4,720 out of 5,570, respectively.

The Sustainable Development Index for Cities highlights significant challenges in Porto de Moz, particularly concerning Sustainable Development Goal 8 (Decent work and economic growth). Challenges manifest in GDP per capita and the local unemployment rate [31], directly impacting social program enrolment, the percentage of individuals surviving on a quarter of a minimum wage, and those living below the poverty line.

Given this data, it is evident that promoting access to justice extends beyond the purview of the Judiciary and sophisticated procedural instruments. The marked deficiencies in a scenario like Porto de Moz necessitate the development of integrated, cross-cutting solutions capable of rendering the justice system effective in instigating socially relevant changes [15].

Concerning social factors, the municipality grapples with significant challenges related to SDGs 1 (no poverty), 2 (zero hunger), 3 (good health and well-being), 4 (quality education), 5 (gender equality), and 10 (reduced inequalities) [31]. A notable aspect is the Municipal Human Development Index for Education (MHDI-E). With an MHDI of 0.322, Porto de Moz ranks 5,542 out of 5,570, placing it among the municipalities with the lowest education indicators in Brazil, particularly in terms of school dropouts [31].

Examining Porto de Moz’s “Gini Coefficient,” which is currently at 0.59, sheds light on the underlying causes of structural deficiencies and poverty in the municipality. The Gini Coefficient gauges the level of inequality in per capita household income distribution. Its scale ranges from 0 (zero), indicating no inequality with identical incomes for all individuals, to 1 (one), signifying maximum inequality with one individual holding all societal income [31]. The low indicator suggests precarious and deficient income distribution concentrated within a limited group of individuals with greater purchasing power.

Through participant observation, this study revealed that owing to its structural layout and isolation within the Amazon rainforest, the population of Porto de Moz encounters significant challenges in both obtaining and delivering goods and services to and from the city. Positioned in a secluded region within the heart of the Amazon rainforest, Porto de Moz is solely accessible by small boats and planes, lacking roads or highways across its territory. The municipality’s precarious accessibility significantly impacts the provision of technology to the local population (Figure 1). While official figures are unavailable, an estimated 50% of inhabitants reside in rural areas, spread across 137 riverside communities along the Amazonas, Xingu, Guajará, Jarauçu, and Aquiqui rivers. Access to these communities is exclusively by river, requiring boat journeys that can span up to 60 hours from the urban centre.

In situations characterized by pronounced social disparities and restricted access to fundamental social rights, the process of judicialization emerges as a pivotal factor in ensuring a baseline of justice, well-being, and social cohesion, particularly for the most marginalized social segments [15]. In Porto de Moz, the isolation of the majority of the municipality’s riverside communities introduces a myriad of challenges for their residents, prompting them to avoid extensive and costly journeys to the urban centre whenever possible. Consequently, inhabitants often opt to remain within their communities, even at the expense of their rights as citizens.
As a result, access to justice and sustainable development within the municipality becomes confined primarily to individuals residing in urban areas or those situated in riverside communities that are relatively closer to major centres. This situation underscores that the predominant challenge facing judicial policies in Brazil concerning access to justice is not merely to facilitate entry into the judiciary or establish a fair legal order but to address the uneven distribution of access. In essence, the objective is to deliver justice to vulnerable individuals and societal groups [34].

The municipality of Porto de Moz grapples with a state of energy vulnerability, with 23.7% of the documented households lacking access to electricity [31]. Disruptions in the electricity grid, particularly in rural areas, are often ascribed to inconsistent legal regulations and inadequate planning by public authorities [35]. These elements represent a substantial structural obstacle for residents and pose a significant challenge to local governance.

In terms of internet provision in schools, especially those in riverside communities, the municipality faces significant hurdles, exacerbating the isolation of individuals in the educational phase. Presently, only 20.4% of basic education units have internet access [31]. Participant observation unveiled that the Porto de Moz District Court, a component of the city’s Judiciary and part of the 100% digital court system, relies on satellite internet provided by the Pará State Court of Justice (TJPA). Similar to radio internet, satellite internet experiences disruptions in data quality during adverse local weather conditions, notably heavy rainfall, impacting the operational efficiency of the judicial unit.

The Verde Para Sempre Extractive Reserve (RESEX), established on November 8, 2004, amid conflicts between local traditional communities and loggers, spans an expansive 1,289,362.78 hectares [36]. As the largest extractive reserve in the country, it encompasses approximately 75% of the municipal territory of Porto de Moz.

*(Figure 1. Photograph of a pier in the itapéua riverside community, located in Porto de Moz, Pará, Brazil. Source: Authors’ personal archive.)*

José Gomes De Araújo Filho, Fabrício Castagna Lunardi, Adalmir De Oliveira Gomes, and Pedro Miguel Alves Ribeiro Correia

*Virtual Economics, Vol. 7, No. 2, 2024*
Given the extensive coverage of preserved native forests, Porto de Moz demonstrates positive indicators for SDG 15 (protection of life on land). Approximately 73% of the Amazon biome within the RESEX is effectively conserved, suggesting considerable potential for local sustainable development. However, the availability of management and financing instruments for environmental protection remains precarious and insufficient [31]. Particularly concerning the safeguarding of rivers and fauna, the municipality faces a critical challenge, as the percentage of sewage treated before reaching Porto de Moz’s rivers is 0%, indicating a lack of environmental sanitation. Consequently, the incidence of hospital admissions related to diseases associated with inadequate sanitation is notably high [37].

Regarding sanitation, Porto de Moz is positioned at 64 out of 144 municipalities in the state of Pará and 4,247 out of 5,570 nationally [31]. This low standing in the national ranking underscores the municipality’s significant shortcomings in terms of public policies addressing basic sanitation.

In specific relation to the judiciary’s function in the municipality, emphasis is placed on the Single Court of the District of Porto de Moz, currently managing 1,434 active cases with a Demand Response Index of 192.43% [38]. The relatively small number of pending cases raises two potential hypotheses for this performance: 1) the adoption of effective judicial governance practices in the management of the judicial unit or 2) the potential lack of access to justice for nearly half of the district’s population, residing far from the urban area and facing challenges in reaching legal institutions to assert their rights.

The findings from participant observation indicate that the institutions comprising the justice system in the municipality under investigation operate fully and regularly. However, the challenge of ensuring access to justice in a city like Porto de Moz extends beyond mere constitutional and legal regularity to encompass a complex context of poverty, isolation, and structural intricacies. The subsequent section presents the outcomes of the focus group.

4.1. Focus Group Results

The PESTEL analysis successfully provided an overview of the challenges faced by the population of Porto de Moz, thus delineating the scope of the study. The subsequent focus group aimed to explore how geographical barriers, along with inadequate resources and infrastructure, directly impact access to justice in riverside communities. The discussion topics in the focus group were designed to validate the data obtained from the PESTEL analysis. Participants had the opportunity to express their views on various issues presented.

Regarding the initial discussion topic, “personal perception of the community itself and the available public services,” all participants unanimously expressed a positive sentiment about living in their respective communities. Despite facing challenges, they emphasized a preference for the tranquillity of their routine over the bustling life characteristic of larger urban centres. Notably, one participant highlighted the community’s food sources as a positive aspect.
“I feel good too. We have a history here, as we have been born and raised in this community. Our food is natural. We eat fish and the flour we produce right here. I’ve spent some time in the city, but I prefer my community.” (P2)

According to the group, the community has only one local school that exclusively caters to primary education. Additionally, there are two community health agents tasked with gathering information for the Municipal Health Department. Their responsibilities include visiting families and providing guidance on potential risk situations. A significant concern raised by one participant revolves around the failure or delay in rescuing the sick, leading to unfortunate fatalities in the community, as expressed in Participant 4’s report.

“My job is to gather information and pass it on to the health department. I’m also in charge of visiting families and advising them about the diseases and dangers they may be exposed to. In cases of urgency and emergency, we contact the hospital to request rescue, but unfortunately, this may fail or take too long. We’ve already seen people die because of a lack of timely care and referral to the city.” (P4)

Regarding the second discussion topic, “obstacles and barriers to access to justice,” the majority of the group highlighted geographical isolation as their primary challenge. This is attributed to the riverside residents’ reluctance to travel to Porto de Moz due to high transportation costs, the precariousness of boats, and the extended travel time, which can reach up to 30 hours, depending on hydrological and meteorological conditions. The local economy is centred on fishing and subsistence farming, which significantly constrains the income of the community. Beyond contributing to local poverty, the isolation also markedly impacts sustainable development and the ability to access the rights provided by public authorities and justice. The following excerpt encapsulates this predicament.

“We can’t afford to buy cooking oil. But when we do, no one wants to spend the whole day in that river in the pouring rain just to get to the city.” (P1)

Concerning the third discussion topic, “access to justice and humanization of judicial services,” the participants lack awareness of the term “access to justice.” Many are unfamiliar with the courthouse’s location and where they can seek legal counsel. They highlighted a sense of abandonment, emphasizing their lack of contact information for the Judiciary, the Public Prosecutor’s Office, or the Public Defender’s Office. The participants suggested that humanizing legal services could commence with improved accessibility, including the expansion of itinerant initiatives to cater to the riverside population.

One participant shared that, despite the intermittent presence of a legal professional being valuable, community disputes are often resolved by community leaders themselves. The following excerpt illustrates part of this narrative.

“No one in the community pursues any legal cases. Everyone is 90% evangelical, so no one wants trouble with anyone else. When something happens, they call us, and we go there and sort things out.” (P3)

Regarding the fourth discussion topic, “use of technology,” community leaders emphasized its significant importance. The community benefits from an internet access point at the municipal school, provided by the Chico Mendes Institute for Biodiversity Conservation (ICMBIO), along with...
with access to a public telephone and solar energy panels. However, concerning the internet signal, one participant noted its inferior quality, falling short of meeting local demands.

“The internet connection at school is very bad, and we hardly ever use it. It’s very difficult to send messages because the reception comes and goes. When it rains in the community, the connection goes down. As well as the whole community using the internet, other people from neighbouring communities end up coming to use it too.” (P5)

In terms of electricity usage, a participant in the group highlighted the malfunction of several solar panels, resulting in numerous challenges for the community.

“We have several houses with solar energy panels, but many still don’t have power. In these, people still use oil lamps.” (P3)

The narratives from the focus group participants vividly depicted the challenges they encounter, where public services prove largely inefficient, the cost of commuting to the urban area is prohibitive, and limited access to technology hampers the local population’s ability to exercise fundamental citizenship rights. The findings of the PESTEL analysis were substantiated through the residents’ perspectives. According to them, the available services, encountered obstacles, existing technology, and the humanization of judicial provision are intricately linked, collectively exerting a negative impact on the accessibility of justice in riverside communities. Figure 2 provides a comprehensive overview of the constructs directly influencing access to justice, as emphasized in the empirical research. The integrated perspective on these factors, as revealed by the focus group, was meticulously developed using the ATLAS.ti software, establishing the correlation of each factor with the primary theoretical framework.

**Figure 2.** An integrated perspective on factors influencing access to justice for riverside communities
Source: Prepared by the authors using ATLAS.ti.

The results also revealed that the primary barriers to access to justice include: i) geographical challenges, stemming from the substantial difficulties faced by riverside communities in
reaching the urban area of the municipality, achievable only by small boat; ii) technological
hindrances, arising from the unreliable internet signal, significantly limiting access to virtual
public services, the majority of which are already provided online; iii) constraints in the energy
infrastructure, impeding basic activities such as lighting, food refrigeration, and access to
information and communication; and iv) the absence of public authorities, leading to a lack of
security and pronounced isolation of riverside communities, thereby complicating access to
resources and opportunities.

On the contrary, it was observed that the primary facilitators of access include: i) public-private
partnerships, designed to address local needs and promote equitable and sustainable
development in riverside communities; ii) itinerant justice initiatives, aimed at narrowing the
gap between the judiciary and traditional communities in the Amazon region, fostering a more
humane and equitable legal system; and iii) digital inclusion points, serving as accessible and
humanized spaces for riverside dwellers to gather information and participate in procedural
activities, particularly in isolated and hard-to-reach locations.

5. Discussion

The results of this study present important data on access to justice and digital inclusion in
riverside communities in the Amazon. This section discusses the importance of the findings in
light of theoretical approaches, assesses whether the results support the initial hypothesis,
and seeks to contribute to the debate on the topic.

The data collected indicates that access to justice in riverside communities in the Amazon is
greatly influenced by geographic, social, and economic barriers. These findings are consistent
with literature that highlights the challenges faced by isolated populations in remote regions
[2]. The PESTEL analysis, in turn, revealed that political, economic, social, technological,
environmental, and legal factors play crucial roles in the formation of these barriers.

The literature highlights that access to justice is a fundamental right and a means of social
inclusion [39]. The results of the empirical research confirm that, although there are efforts to
promote digital inclusion and itinerant justice actions, there is still a long way to go before these
communities can achieve their rights. The limited presence of public infrastructure and the lack
of adequate technological resources are significant obstacles for the riverside population of the
Amazon.

The central hypothesis of this study was that the implementation of digital inclusion points and
itinerant justice initiatives, together with adapted public policies, could significantly improve
access to justice for riverside communities in the Amazon. The focus group results, analysed
using ATLAS.ti software, provide evidence that partially supports this hypothesis.

Participants recognized the benefits of digital inclusion and itinerant justice initiatives, as they
cited improvements in access to legal information and basic services. However, they also
identified significant limitations, such as the intermittency of energy services and insufficient
technological infrastructure, which compromise the effectiveness of these initiatives.
The findings of empirical research highlight the need for more robust and integrated public
policies that consider the cultural and geographic specificities of riverside communities. Digital

José Gomes De Araújo Filho, Fabrício Castagna Lunardi, Adalmir De Oliveira Gomes,
and Pedro Miguel Alves Ribeiro Correia
Virtual Economics, Vol. 7, No. 2, 2024
inclusion is an important step towards improving access to justice [28], but it must be accompanied by improvements in the basic infrastructure of communities. The evidence analysed in this study suggests that a holistic approach is essential to promoting access to justice in the Amazon. However, the public sector not only focuses on expanding digital inclusion but also on structural issues such as transport, energy, and education.

6. Conclusions

This article aimed to shed light on access to justice in the Amazon region, unravelling the perspectives of riverside residents regarding the impediments and catalysts to justice services. A comprehensive literature review on the topic allowed for the identification of contemporary challenges in access to justice, offering a diagnostic exploration of the genuine adversities faced by individuals in vulnerable situations isolated within the heart of the Amazon rainforest [2; 7; 9; 40]. The PESTEL analysis portraying the panorama of Porto de Moz unveiled the distinctive features of one of Brazil’s most impoverished cities, laying bare the myriad challenges confronting public authorities across all observed indicators. Despite concerted efforts to seek solutions, the Brazilian Amazon region’s formidable geographical barriers present an arduous hurdle, rendering local sustainable development and public service provision exceedingly formidable tasks. The focus group delineated an ideal model of access to justice, prioritizing the safeguarding and expansion of rights, with a focal point on formulating community-centric public policies that prioritize individuals. The findings of the focus group harmonized with those derived from the PESTEL analysis, particularly in terms of the barriers, obstacles, and challenges encountered by the investigated population concerning access to justice. Additionally, the results unveiled the catalysts of access, underscoring the pivotal role played by various stakeholders in realizing these rights. It became evident that a substantial portion of the rights sought by riverside dwellers, despite the presence of numerous barriers, remains unexercised due to a lack of legal knowledge and the absence of legal guidance and assistance. It is also possible to observe that the use of existing technologies could help the Judiciary to expand access to justice, generating digital inclusion.

The study holds both practical and theoretical implications, paving the way for various future research endeavours. The challenges surrounding access to justice for local communities in the Amazon region were unravelled through an in-depth analysis encompassing political, economic, social, technological, and legal dimensions. This unveiled the intricate scenario faced by residents of an isolated riverside community in the heart of the Amazon. Such insights were instrumental in conducting the empirical research. The focus group underscored the dearth of available resources and structure, shedding light on existing challenges and barriers underscoring the imperative to infuse a humanized dimension into the justice system. The perspective derived from the preliminary theoretical analysis of the conditions of traditional Amazonian peoples, reinforced by the empirical findings of this study, aspires to establish a methodologically sound and dependable model for future researchers in this domain.

In charting a research agenda for forthcoming studies on access to justice in riverside communities, there is a need to amass new data from other regions of the Amazon rainforest, adopting a multicultural approach. Future empirical research should engage with members of Indigenous and Quilombola communities as key participants, and analyse how new technologies could improve access to justice. A multiculturalist lens will facilitate a more
A comprehensive analysis, encompassing not only riverside communities but the entirety of traditional peoples in the Amazon. This holistic approach ensures a nuanced understanding of the diverse socio-cultural landscapes within the region.


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