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# Empty pocket, empty plate: riverside dwellers' perceptions of eating practices in the COVID-19 pandemic

## *Doeu no bolso e faltou no prato: percepções de ribeirinhos do Amazonas sobre práticas alimentares na pandemia de COVID-19*

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### ABSTRACT

#### Objective

To understand the perceptions of riverside dwellers in Amazonas about the effects of the COVID-19 pandemic on the economy and food practices.

#### Methods

Qualitative study carried out in 2022, during the 4th wave of the pandemic, with an intentional sample and saturation criteria. A sociodemographic and health profile questionnaire during the pandemic, the Brazil Economic Classification Criteria Questionnaire and a semi-structured script were applied. The transcripts of the semi-structured interviews and the field diaries of the participant observation were analyzed using Thematic Content Analysis divided into three stages: pre-analysis; exploration of the material and treatment of the results; interpretation and conclusion.

#### Results

The findings indicate that during the pandemic, the changes in the eating practices of the 12 riverside dwellers interviewed (seven women and five men) were the result of a drop in sales, lower earnings, higher food prices and the consequent reduction and/or exclusion of items available in the urban area that complemented their meals. Food from fishing and family farming guaranteed their sustenance during this period.

#### Conclusion

The results show that riverside dwellers in the Amazon were among the groups most impacted by the restrictive measures of the COVID-19 pandemic, with regard to eating practices and the economy. Their perceptions also demonstrate the accentuation of social inequalities and the mismanagement of public authorities in this period.

**Keywords:** Amazon. COVID-19. Food security. Rural Population. Vulnerable Populations.

## RESUMO

### Objetivo

Compreender as percepções de ribeirinhos do Amazonas sobre os efeitos da pandemia de COVID-19 na economia e práticas alimentares.

### Métodos

Estudo qualitativo realizado em 2022, durante a 4ª onda da pandemia, com amostra intencional e critério de saturação. Aplicou-se um questionário sociodemográfico e de perfil de saúde de populações ribeirinhas durante a pandemia, Questionário Critério de Classificação Econômica Brasil e um roteiro semiestruturado. As transcrições das entrevistas semiestruturadas e os diários de campo da observação participante foram analisados por meio da Análise de Conteúdo Temática dividida em três etapas: pré-análise; exploração do material e tratamento dos resultados; interpretação e conclusão.

### Resultados

Os achados indicam que na pandemia as transformações nas práticas alimentares dos 12 ribeirinhos entrevistados (sete mulheres e cinco homens) decorreram da defasagem das vendas, diminuição dos ganhos, elevação dos preços dos alimentos e consequente redução e/ou exclusão de itens disponíveis na zona urbana que complementavam as refeições. Os alimentos oriundos da pesca e da agricultura familiar garantiram a alimentação nesse período.

### Conclusão

Os resultados apresentam que ribeirinhos do Amazonas estiveram entre os grupos mais impactados pelas medidas restritivas da pandemia de COVID-19, no que se refere às práticas alimentares e economia. As percepções também manifestam a acentuação das desigualdades sociais e má gestão do poder público nesse período.

**Palavras-chave:** Amazônia. COVID-19. Segurança alimentar. População rural. Populações vulneráveis.

## INTRODUCTION

On March 11, 2020, the World Health Organization (WHO) declared the Coronavirus Disease 2019 (COVID-19) pandemic, an infection caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), a member of the coronavirus family [1,2]. The ease of transmission and the lethality associated with the progression of symptoms significantly impacted the global economic and political systems and led to the collapse of healthcare systems worldwide [3]. The number of confirmed cases globally exceeded 186,411,011, with over 14.9 million deaths reported [4]. By 2024, Brazil had recorded 34 million infections, and the death toll surpassed 700,000 [5].

In 2021, the state of Amazonas was considered the global epicenter of the disease and gained international attention because of the rapid increase in population mortality rates [6,7]. The number of deaths related to COVID-19 in Amazonas between March and August 2020 was also higher than the national average compared to the same period in the previous year [8], highlighting the vulnerability of this population.

Faced with the exponential rise in infections and the absence of effective pharmaceutical interventions to contain the virus, the WHO recommended social isolation. In regions where infection rates were rapidly increasing, lockdown measures were implemented, both of which were adopted by Brazilian state governments [9]. The economy was severely impacted, and in countries and regions marked by inequality, the effects on physical and mental health were particularly pronounced [10,11].

From a socioeconomic perspective, rural populations, particularly small-scale farmers, saw their income severely compromised because of difficulties in marketing their products and the impact of the virus on health, which hindered their ability to maintain family farming activities [12]. Despite being a crucial component of the food system, family farming has historically received limited

attention from public policies and government investments. To address this, strategic alternatives were proposed to support family farming, including the development of conduct guidelines and informational materials about the virus for designated trading areas, the distribution of masks and hand hygiene supplies, the implementation of rural credit programs, and the adoption of virtual platforms for the commercialization of agricultural products [13].

Food practices were significantly affected during the implementation of social isolation measures across various countries. Populations exhibited changes in dietary behaviors, food preparation methods, and the quality and availability of food in the market. Additionally, the variety of foods was reduced in regions with higher infection rates [14]. The crisis triggered by COVID-19 marked Brazil's return to the Hunger Map, a period characterized by the weakening of social organization and government actions to curb rising unemployment and poverty rates. Vulnerable populations were disproportionately affected by the increased cost of unprocessed foods and faced greater challenges in the acquisition of food items in sufficient quantity and quality [15].

Data from the *II Inquérito Nacional sobre Insegurança Alimentar no Contexto da Pandemia da COVID-19 no Brasil* (II VIGISAN, Second National Survey on Food Insecurity in the Context of the COVID-19 Pandemic in Brazil) revealed that the northern region had the highest rate of severe Food Insecurity (FI) (25.7%), with 18.6% of rural residents experiencing hunger [16]. Consequently, the riverine population of Amazonas faced the dual impact of economic hardship and the catastrophic state of public health and funeral services during the first two years of the pandemic in the region [6].

The Amazonian riverine population has a unique way of life shaped by the ethnocultural fusion of various peoples, particularly indigenous ancestors, in terms of healing practices, food practices, and transportation methods. From the construction of their homes to the production and preparation of regional foods, these practices reflect the profound symbolic relationships they have established with the forest and the river: as sources of life and as life itself [17]. For traditional riverine communities in Amazonas, who are part of the “populations of the rural forests, and waters” [18], inequalities are exacerbated by the noticeable difficulty in accessing essential services such as healthcare, education, food, security, employment, transportation, and others [19–21].

Regarding food practices, the main challenges faced by this population include their distance from urban centers, the seasonal flooding and receding of rivers that affect food availability, and the inability to store perishable food for extended periods due to limited access to electricity and the consequent lack of refrigeration appliances [20,22].

While studies on riverine populations have been conducted, none have specifically explored their food practices during the pandemic. This study highlights the perceptions of these communities, which require complex logistics for research implementation [21]. As outlined, given the changes imposed by the pandemic, the economic crisis, and the factors that characterize the vulnerability of riverine populations, the objective of this study was to understand the perceptions of Amazonian riverine communities regarding the effects of the COVID-19 pandemic on the economy and food practices.

## METHODS

This study is part of a master's dissertation on the perceptions of Amazonian riverine communities regarding the effects of the COVID-19 pandemic. This part of the research focuses on perceptions and aspects of food. This is a descriptive, observational field study of a qualitative nature with intentional sampling, conducted in July 2022, during the fourth wave of COVID-19, in

riverine communities of Coari in the Amazon state, which has 70,616 inhabitants and 224 communities [23]. This municipality is 467 km from the state capital, Manaus. The first author traveled by river for approximately 30 hours to reach Coari. From Coari, the communities were accessed by small boat, a journey of four hours.

This study was approved by the Research Ethics Committee of the Universidade Federal de São Paulo, No. 5.315.669, Certificate of Presentation of Ethical Appreciation - CAAE: 55829222.2.0000.5505. The 32 recommendations proposed by the Consolidated Criteria for Reporting Qualitative Research [24] were followed. In order to receive authorization from community leaders to conduct the study, the first author made contact on the cell phone of leaders she knew due to assistance provided at the beginning of the pandemic. The messages were sent in January 2022 and contained information about the objectives and methods of the study. In February 2022, when the leaders were in the urban area and had telephone signal, the messages were read and the authorizations were signed. The river dwellers included their formalized participation by signing the Informed Consent Form.

This study included adult participants residing in riverine communities and infected by COVID-19 in the first and second waves, using the snowball technique, which involves a network of referrals starting from an initial indication [25] made by community leaders. During the sample composition, there was no refusal or withdrawal of participants. In order to guarantee anonymity, the letter "P" was assigned to male participants and the letters "PP" to female participants, numerically ordered from one to twelve. For the conclusion of the sample, the point of saturation of the interviews was considered, which refers to the absence of new elements or themes recorded in the speeches [26]. In this study, repeated contents related to the effects of the Covid-19 pandemic on the economy and food practices were considered as saturation criteria.

The sociodemographic variables used to describe the profile of the interviewees were age, sex, self-reported race/color, educational level, occupation, and social class. The information is drawn from two instruments: the "Sociodemographic Health Profile Questionnaire for Riverine Populations in the COVID-19 Pandemic", developed by the authors, and the *Questionário Critério de Classificação Econômica Brasil* (CCEB, Brazilian Economic Classification Criteria Questionnaire), which defines consumer classes A1, A2, B1, B2, C1, C2, and D-E [27]. Data collection was conducted through a semi-structured interview with open-ended guiding and probing questions, divided into the dimensions of changes in the riverine living context during the pandemic, healthcare access during the pandemic period, and understanding and coping with COVID-19.

The analyzed data regarding food practices resulted from the dimension "changes in the riverine life context during the pandemic" in the following questions: "What changed in your work (occupation) during the pandemic?"; "Did COVID-19 cause any damage to agricultural and fishing production?"; "Did you receive or financially help someone (family member and/or community member)?"; "Tell me a little about your family mealtimes after the arrival of COVID-19?"; "Was there a lack of any local food (family farming) that was previously accessible? If so, what kind?" and "Did you stop buying any of the items available in the urban area? If so, why?".

The development of the questionnaire and interview guide involved analysis by a committee of experts composed of two researchers. A pilot study was conducted with three individuals from the Amazon region to assess comprehension of the questions. The original questions were retained with modifications only to the language used. Participant observations regarding social representations, traditional practices, and environmental characteristics were recorded in the field diary [26].

The first author, who conducted all interviews, holds a degree in psychology, has experience working with vulnerable populations, and was a master's student in a health-related postgraduation

program during the data collection period. The interest in the study's topic emerged from the author's experience as a volunteer psychologist providing care to riverine communities during the first year of the pandemic.

The prior engagement enabled the first author to familiarize herself with the field where the research would be conducted, to hypothesize the main challenges faced by riverside communities affected by COVID-19, as well as to establish a rapport with the local population before the study commenced. The relationship between the researcher and the interviewee extends beyond the mere act of data collection; it also encompasses the impact of this interaction on the information that emerges and the inherent responsibility in the resulting social understanding of the issues addressed [26].

Although they understood that the research did not involve a direct benefit to them, the interviewees were interested in giving visibility to the effects of the Covid-19 pandemic on the riverine population, contributing to the development of new research in the health area and enabling future improvements of public policies aimed at the studied group.

The interviews were conducted using language adapted to local terminology, in the participants' homes, without the presence of other individuals. The administration of the instruments took approximately 40 minutes, and each session, which occurred once, was audio-recorded and transcribed verbatim. The transcriptions were returned and read back to the participants via the provided telephone contact. No significant corrections that altered the substance of the responses were made. The recorded data were under the custody of the first author, who deleted them upon completion of the transcriptions.

Thematic content analysis was selected for the processing and analysis of the data, developed in three stages as described by Minayo [26]: (a) pre-analysis: the organization of the research corpus, which consisted of interview transcripts and field diaries, was carried out. Hypotheses were revisited, and indicators (a priori codes) were identified based on the objectives to be addressed; (b) material exploration: identification of recording and context units with the delimitation of excerpts and coding. Identification of emergent codes (a posteriori); creation of the category system that gave rise to the analyzed nuclei; and (c) treatment of results, interpretation, and conclusion. It is noteworthy that the analysis process was conducted manually without the use of software. The notion of "perception" adopted by the authors for the interpretation and analysis of the data is guided by the principle of cognitive therapy, which understands perception as a product of life history and as an influence on the expression of feelings and behaviors [28].

## RESULTS AND DISCUSSION

The study included 12 riverside dwellers, comprising seven women and five men, whose characteristics are outlined in Table 1. The participants' ages ranged from a minimum of 29 years to a maximum of 54 years old. Three participants reported being single, while the others were married or in a common law union. The terms used to describe skin color were self-declared, with notable descriptors including "brown", "mixed race", "yellow", "black", and "dark-skinned". Although all participants exhibited Indigenous features, they employed distinct terms that reflect the historical processes of miscegenation and colonization in the formation of these communities [6].

Regarding educational attainment, only P1 and P10 reported completing basic education, while PP4 and PP5 had completed higher education (both were teachers in their communities).

**Table 1** – Characterization of participants.

N	Participant	Age	Sex	Self-reported race/color	Occupation	Social class*
1	P1	30	Male	Mixed race	Fisherman/Farmer	DE
2	PP2	48	Female	Brown	Fisherwoman/Farmer	DE
3	PP3	29	Female	Dark-skinned	Fisherwoman/Farmer	DE
4	PP4	32	Female	Black	Teacher	C2
5	PP5	36	Female	Mixed race	Teacher	C2
6	P6	37	Male	Yellow	Fisherman/Farmer	DE
7	P7	44	Male	Mixed race	Fisherman/Farmer	DE
8	PP8	29	Female	Dark-skinned	Fisherwoman/Farmer	DE
9	PP9	54	Female	Dark-skinned	Fisherwoman/Farmer	DE
10	P10	46	Male	Mixed race	Community health agent	DE
11	P11	47	Male	Mixed race	Pathology technician	DE
12	PP12	39	Female	Black	Fisherwoman/Farmer	DE

Note: \*According to Questionário Critério de Classificação Econômica Brasil (CCEB, Brazilian Economic Classification Criteria Questionnaire). N: Refers to the number of participants.

The primary occupations reported were agriculture and fishing. P10 worked as a Community Health Agent, and P11 was a pathology technician responsible for identifying and referring cases of malaria.

The participants were classified into the two lowest socioeconomic strata, C2 and DE, based on the scoring system of the CCEB [27]. No points were assigned for car ownership; however, a total of 22 canoes, 14 motorboats, and 5 boats were reported. The classification proposed by the CCEB does not encompass the full range of characteristics of the riverine population, resulting in an unrealistic classification of the investigated group. It is noteworthy that riverine communities are not included in the group considered to be in a state of destitution, as they derive their sustenance and housing from the land, forests, and rivers. However, these resources are insufficient to overcome the barriers to improving their quality of life [20].

Regarding the qualitative data, three thematic nuclei emerged from the thematic content analysis: “Daily Bread”; “Empty Pocket”; and “Empty Plate”. The following will present the eating practices prior to the pandemic, which were grouped under the thematic nucleus “Daily Bread”, and the transformations of these practices due to the economic crisis and virus protection measures, which gave rise to the thematic nuclei cores “Empty Pocket” and “Empty Plate”. It is noteworthy that the title of the present study emerged from the statement of one of the participants, P7 (44 years old). He aptly represents the riverside experience during the pandemic and its nuances: *“I didn’t change my activity, because there’s not much to change here, right? [...] it became harder for us to sell and when we did sell, it was cheaper, right? [...] the only thing that decreased was our money, right? It hit us in the pocket and left us with an empty pocket and an empty plate”* (P7, 44 years old).

## Daily bread

Interviews revealed the riverine lifestyle and its constant human-nature interaction. For this population, the river is vital for housing (floating houses), serves as a pathway enabling social encounters, and is a source of subsistence [6].

Regarding food practices, participants reported that their diet predominantly included fish, flour, and game meats, as demonstrated in studies with riverine populations living in communities remote from urban areas [20,29]. The main items on the table were regional foods related to subsistence and income generation (Figure 1), as described in the statement of PP9 (54 years old):

“Here our life is agriculture. It’s cassava, pineapple, sugarcane, manioc, cará de planta (a type of tuber). We plant everything, to eat and to sell”. For P6 (37 years old): *“Only if it’s a chicken we have from here, a duck, right? But what is eaten most is fish. With vegetables and flour, just that”*.



**Figure 1** - Flour prepared for consumption and sale.

Note: Authors' personal archive.

While observing the host preparing breakfast, the first author documented the preparations and unique aspects of the house's kitchen. Noteworthy observations included the family gathered to eat, fish and flour being served in the morning, the use of a brazier instead of a stove (Figure 2), and açai being processed manually.

*“Six in the morning and everyone is at the table. [Person's name] is frying the fish, the açai pulp being extracted by the son using the wooden utensil that generates friction between the fruits. Some are seated on the bench, others on the floor. The dish is served: fish, flour, and açai”* (Field Diary 4).

Regarding the occupational shift during the flood period, P7 (44 years old) explained: *“I used to be a fisherman, but now I'm a farmer; fishing isn't good for me right now”*. Similarly, PP3 (29 years old) reported actively participating in seasonal activities alongside her husband: *“During the fishing season, we fish, and during the farming season, we come here”*. Their diet is supplemented with items purchased in urban areas, which also serve as an alternative during the low fishing season. According to PP2 (48 years old): *“Right now, fish is very scarce for us. When there's none, we go to the urban area. That's when the food situation improves”*.

The significant reduction in availability and accessibility is perceived by the participants during the flood period due to low fish capture, particularly in floating households with a higher



**Figure 2** – Brazier in a riverside home.

Note: Authors' personal archive.

number of residents of low education and income. It is necessary to consider that the changes in nature, intertwined with sustenance, make the riverine population dependent on ecosystem flows and items from city markets [30].

### **Empty pocket**

The perceived effects of COVID-19 on economic activities among riverine populations are presented in this thematic nucleus. The inability to change occupations, reduced earnings due to business closures, and the absence of consumers emerged as prominent themes in the interviews.

Consequently, the implementation of restrictive measures to contain the spread of the virus negatively impacted unemployment, poverty, and hunger rates in Brazil [15].

The scale of the economic crisis was global, but Small Rural Producers (SRPs) faced the greatest challenges in adapting to the pandemic scenario. Furthermore, public policies and investments directed towards family farming did not effectively mitigate the losses of vulnerable populations reliant on this type of activity [13,31,32].

Participants mentioned a reduction in consumers at the farmer's market during the pandemic, which supports the findings of a study that assessed changes in the general population's purchasing habits during the same period, where 53% of consumers ceased attending farmer's markets [33]. Moreover, fear of infection was a primary reason for adhering to social isolation [34] and was perceived by P7 as the cause of consumer absence, reduced sales, and decreased production brought to the city, an aspect found in studies with other populations and social contexts [31-33]. Notably, the fear of COVID-19 was more prevalent among vulnerable, low-income women with higher rates of FI [35].

*"People became more afraid, and work decreased. Those who didn't go out were afraid to leave their homes" (P7, 44 years old).*

The challenges faced by riverine populations in commercializing their products and accessing urban-restricted items involve the necessity of watercraft and high travel costs. In a study conducted with Amazonian SRP, virtual means as an alternative to reach consumers were not viable due to restricted or complete absence of internet access in the communities [32]. As a consequence of municipal decrees, sales locations and hours were limited [31], and goods began to be sold at the "beira" (Figure 3), small ports where boats are docked. To avoid contamination, riverine residents were advised to avoid trips to urban areas [32]. According to PP3 (29 years old): *"We sold at the beira. But it wasn't as busy, as strong as it used to be, it wasn't normal, right?"*

*"It was from seven to nine, and we stayed there in the corner of the market's activity, right? Everyone already prepared with their hand sanitizer, with their masks. And it was only this time period, then everything was collected" (PP2, 48 years old).*

The riverine context represents one of the many vulnerable social territories reached by income transfer policies, which provided crucial support for economic maintenance and food security during the pandemic [36]. According to PP12 (39 years old): *"So, I received my Bolsa Família (a government aid), we used that to buy our "ranchinho" (basic food basket)".* As stated by PP8 (29 years old): *"Through the Bolsa Família that I receive, and also these 150 (referring to an additional benefit). Then my husband also helps a little, right? So, we were able to live".*

*"Now, what became difficult was going to the city to sell flour, bananas, practically everything came to a standstill, and then, my brother, if it weren't for the federal government sending that little money (Emergency Aid), right? It was really tough" (P11, 47 years old).*

Indeed, the perception of riverside dwellers regarding the negative economic impacts of the COVID-19 health crisis confirms that, despite emergency measures implemented by the federal government and conflicting statements from the head of state, the safeguarding of employment, income, and access to food was overlooked [37]. In socially vulnerable territories, capitalist logic erodes the subsistence economy and impedes the development of small rural producers [12].



**Figure 3** – Regional fish sold at the Coari farmer’s market.

Note: Authors’ personal archive.

### Empty plates

This thematic nucleus addresses the changes in food practices resulting from the pandemic. In this context, the scarcity in Coari’s markets was one of the reasons for the restriction of basic food basket items sold in larger quantities. According to P6 (37 years old): “*They did not want to allow people to buy too many groceries, not even in the stores, because they were afraid, as supplies were running low*”. The restrictive measures accentuated the structural inequalities of the food system during the pandemic period [13].

The rise in food prices in the urban area during this period was also mentioned by the participants. According to PP4 (32 years old): “[...] Like a small bunch of scallions was 10 reais”. In the field diary, the researcher stopped in Coari to buy groceries and describes: “The markets downtown have very high prices, low quality and little variety of products. Rice and beans are almost twice as expensive as in other places. It is difficult to imagine traveling long distances with the price of a liter of fuel” (Field Diary 1).

The findings obtained indicate the difficulty faced by riverine populations in supplementing their diet through the acquisition of grains, meats, and other foods available in urban areas, which acquisition was associated with better socioeconomic conditions in a study conducted in the same region [29]. During the pandemic, the difficulty of purchasing and the reduced availability of certain food products were also identified in a study carried out in different countries [14]. The most important non-perishable foods were purchased in smaller quantities, while other items were omitted from the shopping list, evidencing that food insecurity (FI) in households of low socioeconomic strata is higher compared to other social groups [34]. According to P1 (30 years old): “What we needed to bring from there (urban area), cookies, bread, biscuits, juice, all were cut out”. For PP3 (29 years old): “What we used to buy in larger quantities, we now buy less”.

Additionally, the impossibility of preserving perishable foods due to the lack of electricity in the community was also perceived as a reason for rationing meal portions. According to P6 (37 years old): “we didn’t make a little more, no... We put just enough, right? Because here there is no refrigerator, we have no electricity”. The lack of electricity in riverine communities characterizes an aspect of installed vulnerability and makes it impossible to store quality foods in households in the northern region [32].

The reports align with a study in which access and food choices were related to income and sociocultural aspects of food [38]. In this sense, vulnerable populations have greater difficulty accessing foods with important quantity, regularity, and nutritional value, which would imply a weakening of the immune response to COVID-19 [34,39]. It is worth noting that during this period, 60% of Brazilian rural households presented FI [16].

Amazonian regional foods were fundamental for the sustenance of the riverine population during the pandemic, corroborating a study in which riverine residents living distant from urban centers secured their food supply through varied species fishing [30]. Typical fruits also constituted meals during this period (Figure 4), observing seasonality. According to PP2 (48 years old): “When we stopped going (to the city), we tried to regulate what we could, which was açai, souari nut, fish, tucumã, and peach palm”. P11 (47 years old) reported: “We buy groceries, around the 20th there’s nothing left. Then what saves us is fish and the farm, right? The flour”.

The presented accounts demonstrate not only the cultural aspects present in the diet of riverine communities but also the difficulty in securing adequate food during the pandemic period. For these populations, COVID-19 brought greater difficulty in securing income and accessing items limited to urban areas. Nevertheless, the findings also reveal the strength, resilience, and environmental awareness of these communities in their interaction with nature.

The present study has as its main limitation the number of communities included. However, it stands out for its original nature, the limited number of studies focusing on riverine populations, its holistic approach to the ways of life of this community, and for shedding light on the meanings and perceptions related to coping with the COVID-19 pandemic.



**Figure 4** – “Pacovan” banana and peach palm cooked to replace bread.

Note: Authors' personal archive.

## CONCLUSION

This study gathered the perceptions of riverine communities regarding the effects of the pandemic on the economy and food practices. Food consumption in these communities is closely linked to the seasonality of fish and family farming products, which were the key elements ensuring food security during the pandemic. As observed in the general population, the restrictive measures imposed during COVID-19 had a greater impact on the most vulnerable groups.

The perception of the interviewees reinforces the findings that lower-income groups were more impacted by the restrictive measures during the COVID-19 pandemic, in economic and social terms. The riverine population, marked by vulnerability, had their food practices strongly transformed during the pandemic due to the absence and/or decrease of food from urban areas, as well as the decline in sales of their products. The findings present the resulting accentuation of social inequalities and poor public management during this period. The reported context indicates the need to strengthen policies aimed at traditional peoples and small rural producers through incentives, sustainability actions that aim to articulate local strategies to the complex Amazonian territory in guaranteeing the human right to adequate food.

Future studies should encompass more communities and participants, consider the riverine cultural richness, and promote the participatory production of knowledge in order to enable the integration, valorization, and development of these individuals in the economic sphere.

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