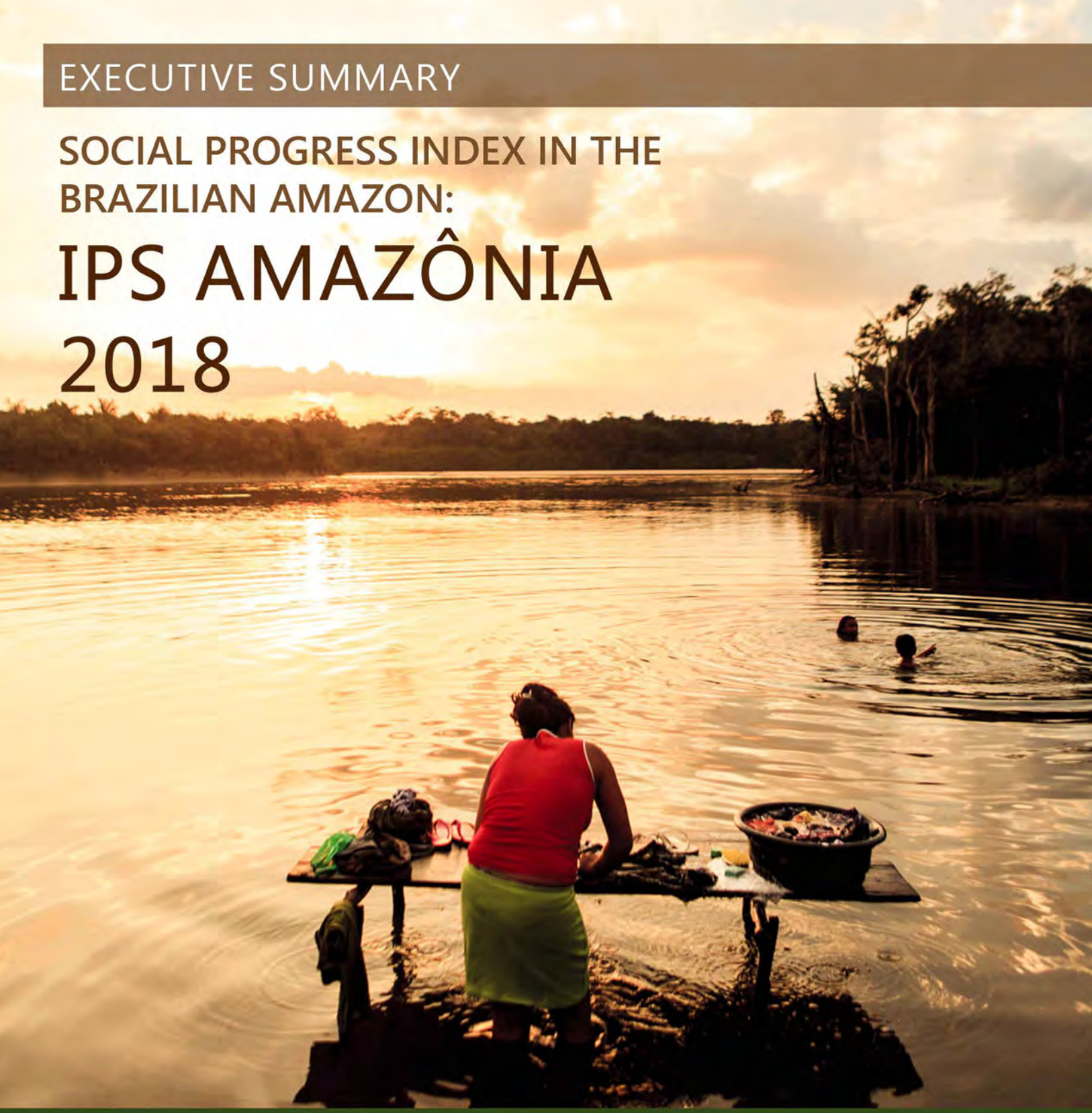
EXECUTIVE SUMMARY

SOCIAL PROGRESS INDEX IN THE BRAZILIAN AMAZON:

IPS AMAZÔNIA 2018



Daniel Santos, Marcelo Mosaner, Danielle Celentano
Renan Moura and Adalberto Veríssimo

Imazon
#PROGRESSO SOCIAL BRASIL
SOCIAL PROGRESS IMPERATIVE
Fundación Avina

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Authors
Daniel Santos, Marcelo Mosaner, Danielle Celentano,
Renan Moura e Adalberto Veríssimo

Text Editing
Tatiana Corrêa Veríssimo
(tativerissimo@uol.com.br)

Cover
Stefânia Costa

Graphic Design
Borboleta - Comunicação e Marketing
(borboleta.service@gmail.com)

Social Progress Index in the Brazilian Amazon IPS Amazônia 2018

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Contact us
Trav. Dom Romualdo de Seixas, 1698 - Edifício Zion Business, 11º andar
Bairro Umarizal – CEP: 66.055-200 - Belém – Pará – Brasil
+55 91 3182-4000
www.imazon.org.br

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LIST OF ACRONYMS

Anatel	National Telecommunications Agency
CIMI	Indigenist Missionary Council
CPT	Pastoral Land Commission
Denatran	National Traffic Department
GDP	Gross Domestic Product
GHG	Greenhouse Gases
HDI	Human Development Index
IBGE	Brazilian Agriculture and Ranching Research Company
Ideb	Institute for Basic Education Development
Imazon	Amazon Institute of People and the Environment
Inep	National Institute for Educational Studies and Research
Inpe	National Space Research Agency
Ipea	Institute for Applied Economic Research
ISA	Instituto Socioambiental
KMO	Kaiser-Meyer-Olkin
MC	Ministry of Cities
MCTI	Ministry of Science, Technology, Innovation and Communications
MS	Ministry of Health
PCA	Principal Component Analysis
SEEG	System for Estimating Greenhouse Gas Emissions
SPI	Social Progress Index
TSE	Higher Electoral Court
UNDP	United Nations Development Program

INTRODUCTION

The Social Progress Index – SPI (Índice de Progresso Social – SPI in Portuguese) in a holistic manner measures the social and environmental progress of territories (countries, states, municipalities, districts, etc.). That index is the result of a partnership between academics at major research institutes such as the Massachusetts Institute of Technology (MIT), Harvard University (United States) and University of Oxford (United Kingdom). Various countries and subnational territories around the world have been adopting it. The SPI was conceived based on the understanding that development measures are insufficient when based only on economic indicators since economic growth without social progress results in environmental degradation, exclusion and social conflicts.

The SPI offers a different approach in the area by emphasizing results (outcomes) instead of investments (inputs). One should note that the low emphasis on results brings about institutional fragmentation and a variety of viewpoints (often with a strong ideological bias) that prove to be resistant to efforts, mediation and evaluation. Furthermore, the SPI is a robust method with the capacity of integrating a broad range of indicators and presenting them in a didactic manner, spatially distributed and comparable. In that way, it is possible to inform efforts by society, the government and private sector to enhance social progress.

The IPS Amazônia, originally published in 2014 under Imazon leadership[1], presented a detailed X-ray of the social and environmental status of all 772 Amazon municipalities for that year. It was the first state and municipal levels initiative done in the world. In fact, the institute developed an adaptation of the global scale SPI (countries) for the subnational scale. Others states, counties, districts and cities are adopting the SPI at the European Union, the United States, countries of Central America, Asia and Africa.

The SPI is made up of exclusively social and environmental indicators aggregated into three dimensions (Basic Human Needs, Foundations of Wellbeing and Opportunities) and 12 components. To that end, public data made available by governmental institutions or organized civil society make up the SPI. Since 2014, Imazon has worked with the #Progresso Social Brasil network and the Social Progress Imperative in preparing and disseminating the SPI in the Brazilian Amazon[2], referred to throughout this report only as the Amazon (Amazônia). Thus, as a first initiative, IPS Amazônia 2018 is also a product of this partnership and is available at the www.imazon.org.br and www.progressosocial.org.br sites. Furthermore, the data and results broken down at a municipal level are available at www.ipsamazonia.org.br. the IPS Amazônia 2018 reveals that there has been a slight reduction in the index compared to IPS Amazônia 2014: from 57.31 to 56.52. Overall, the Amazon region still faces numerous social and environmental problems, including worsening public safety, precarious basic sanitation and access to treated water, deficiencies in higher education, little guarantee for individual rights and the recent increase in deforestation. Other results:

- The IPS Amazônia 2018 (56.52) continues to be well below the general average of the SPI Brasil 2018 (67.18).
- Of the 12 components of IPS Amazônia, five worsened from 2014 to 2018 *(environmental quality, health and wellbeing, personal safety, tolerance and inclusion and individual rights)*. For the same period, three components remained identical and four presented improvements *(nutrition and basic medical care, access to information and communication, access to basic knowledge and individual freedom and choice)*.

1 https://imazon.org.br/en/publicacoes/social-progress-index-for-the-brazilian-amazon-ips-amazonia-2014-executive-summary/

2 The Brazilian Amazon (Amazônia Legal) occupies 59% of Brazilian territory (5 million square kilometers) and is made up of nine states (Acre-AC, Amazonas-AM, Amapá-AP, Maranhão-MA, Mato Grosso-MT, Pará-PA, Rondônia-RO, Roraima-RR and Tocantins--TO) and 772 municipalities (IBGE, 2017; IBGE, 2015). The region has 27.5 million inhabitants, who represent 13.2% of the Brazilian population (IBGE, 2018a). The region harbors one of the largest ethnic and cultural diversities in the world totaling more than 170 indigenous peoples with a population estimated at around 400 thousand persons (IBGE, 2010). Although the region has a small share of the national economy, with only 8.6% of the Gross Domestic Product (GDP) for Brazil (IBGE, 2018b), its wealth in natural resources, environmental services and biodiversity is incalculable.

INTRODUCTION

- The average rate for the *personal safety* component worsened in the Amazon from 2014 to 2018, dropping from 54.71 to 52.28. That is due to the significant rise in the homicide rate for the region.
- Most of the municipalities (59%) had a reduction in the IPS Amazônia 2018 compared to the 2014 scores. Among the ones that reduced their indexes are the following: Parintins (AM), Itaituba (PA), São Félix do Xingu (PA), Altamira (PA), Belém (PA), Manaus (AM), Canaã dos Carajás (PA), Boa Vista (RR), Porto Velho (RO) and Imperatriz (MA).
- Only 30% of the municipalities had an increase in the SPI, among them are Tailândia (PA), Bacabal (MA), Parauapebas (PA), Terra Santa (PA) and Faro (PA).
- In 11% of municipalities, the SPI remained stable as was the case with Ourém (PA), Novo Progresso (PA), Paranatinga (MT), Coari (AM), Planalto da Serra (MT) and Centro Novo do Maranhão (MA).
- Among the Amazon states, Mato Grosso (59.13), Rondônia (58.51) and Tocantins (57.44) presented the best results in IPS Amazônia 2018, although none of the nine states surpassed the national average. There was a small improvement in the SPI from 2014 to 2018 in Acre (54.18), Maranhão (55.02), Pará (55.57) and Roraima (54.84).
- The Amazon municipalities are classified into five groups according to their results in the IPS Amazônia 2018. In the first group, 25 of them possess the best indicators (average SPI of 64.64). Some capitals are in this group: Cuiabá (MT), Palmas (TO), Belém (PA) and São Luís (MA). Although they present the best results, all the municipalities in this group, except Cuiabá, performed lower than the Brazilian average.
- The second group has 159 municipalities with an average SPI of 60.96. The state capitals Macapá (AP), Rio Branco (AC) and Porto Velho (RO) are in that group.
- The third group encompasses 281 municipalities with an average SPI of 57.31. That group includes Marabá (PA), Ariquemes (RO), Juruena (MT) and Imperatriz (MA).
- In the fourth group are 250 municipalities with critical levels of social progress with an average SPI of only 53.58. Among them are Novo Progresso (PA), Coari (AM) and Altamira (PA).
- Finally, the fifth group corresponds to the 57 municipalities with the lowest levels of social progress in the Amazon: Their indexes have an average equal to 49.63. The worst ones are Jordão (AC), Lábrea (AM) and Bom Jesus do Araguaia (MT).
- There is a positive correlation between per capita income and SPI. However, economic performance alone is not sufficient for explaining the social progress of a municipality, because the relation between the two is not linear. Some municipalities with very low per capita income present a relatively high SPIs in relation to other ones in the same income bracket. For example, Ipueiras (TO), Porto Rico do Maranhão (MA) and Santa Cruz do Arari

INTRODUCTION

(PA) had among the 40 best indexes in the regional ranking, even though they presented a rather low per capita income in comparison to the capitals.

- On the other hand, several municipalities with income above the regional average presented some of the lowest SPI levels in 2018. For example, Campos de Júlio (MT) had the best per capita income in the Amazon but was ranked only 231st in the SPI in 2018.
- There is no correlation between deforestation and social progress measured by the SPI. On the contrary, deforestation results in social, environmental and economic damages to the municipalities.

The IPS Amazônia 2018 summarizes a broad range of indicators and presents a detailed profile of each one of the Amazon municipalities. That enables civil society, leaders in the private sector, opinion leaders, researchers and public leaders (municipal, state and federal) to guide their actions and investments using a broad diagnosis of Amazon municipalities and states. For the 2018 edition, we updated 25 of the 43 indicators utilized in the IPS Amazônia 2014.

CAVEATS

As the IPS Amazônia 2014, the 2018 version applies an analyze of the 772 Amazonian municipalities. Some characteristics such as the size of their territories (for example, Altamira is the largest municipality in the world in terms of land area), the long distance between the rural areas and headquarters, the presence of isolated communities, indigenous peoples and quilombolas can generate differences in terms of social performance. Consequently, a prominent variation in the quality of life and social wellbeing between them can occur. Unfortunately, since the secondary indicators are not available and sufficient for analysis, it is not possible to generate the IPS Amazônia with secondary data at a submunicipal scale.

Likewise, there are considerable differences between rural and urban zones for the majority of indicators, and, it is generally not possible to tease out the analysis of those geographical divisions, because they account for the entire municipal population.

However, some SPI indicators consider that disparity, such as environmental sanitation. In those cases, a specific SPI for those rural populations or communities may be prepared using research in primary data that respond to the principles and structure of the index. A clear example of that was the study done about the SPI for communities in the municipality of Carauari (AM) in 2015[3]. It should also be noted that municipal indicators do not necessarily reflect the situation of indigenous peoples and traditional populations that live in the Amazon region. The concept of social progress for those peoples is differentiated due to their way of life. Even so, the indigenous peoples are present in the SPI calculation for the components *environmental quality* (Protected Areas) and *tolerance and inclusion* (violence against indigenous persons).

The maps that demonstrate the results of IPS Amazônia 2018 (dimensions and components for the municipalities) follow the same classification utilized in the 2014 report, that being the Natural Breaks classification method that allowed them to be prepared based on colors. We again note that those maps do not necessarily reflect the situation of traditional peoples and communities isolated in terms of municipal seats. Large territorial extension municipalities have relatively small populations in the Amazon, while the capitals and mid-sized cities have greater demographic density.

The Amazon also has municipalities covered by cerrado vegetation, which have a distinct social and economic dynamic compared to forest areas. The Cerrado biome occupies part of Maranhão, approximately half of the Mato Grosso and the Tocantins states. It is not possible to extrapolate the development performance of municipalities in Cerrado to the ones in forested areas of the Amazon Biome.

Finally, the IPS Amazônia 2018 also utilized 18 indicators taken from the IBGE 2010 Demographic Census. Three components have only indicators from that source: *water and sanitation, shelter* and *access to higher education*. Thus, they have the same performance as the IPS Amazônia 2014.

3 http://www.progressosocial.org.br/wp-content/uploads/2015/07/Resumo-Executivo-IPS-Comunidades.pdf

WHY IS IT IMPORTANT TO MEASURE THE SOCIAL PROGRESS IN THE AMAZON?

Despite all the natural wealth of the Amazon, its population made up of around 27.5 million persons (IBGE, 2018a), live with a low quality of life, expressed in social and economic indicators that are lower than those in the rest of Brazil. That is because the model for development in the region consists of the predatory use of natural resources, illegal deforestation (Figure 1), social conflicts and economic underdevelopment. Furthermore, the Amazon suffers from an insufficient presence of public services, especially in the rural zone, and precarious infrastructure.

Unlike other indexes that measure social performance in the region, such as the Human Development Index (HDI), the SPI is obtained only from social and environmental indicators. That makes it better to evaluate the results obtained in social progress and only then compare them to economic indicators.

Additionally, the higher frequency of updates with the IPS Amazônia contributes toward capturing the rapid dynamic of transformations in the region, including the social impacts of major projects, works and public and private investments.

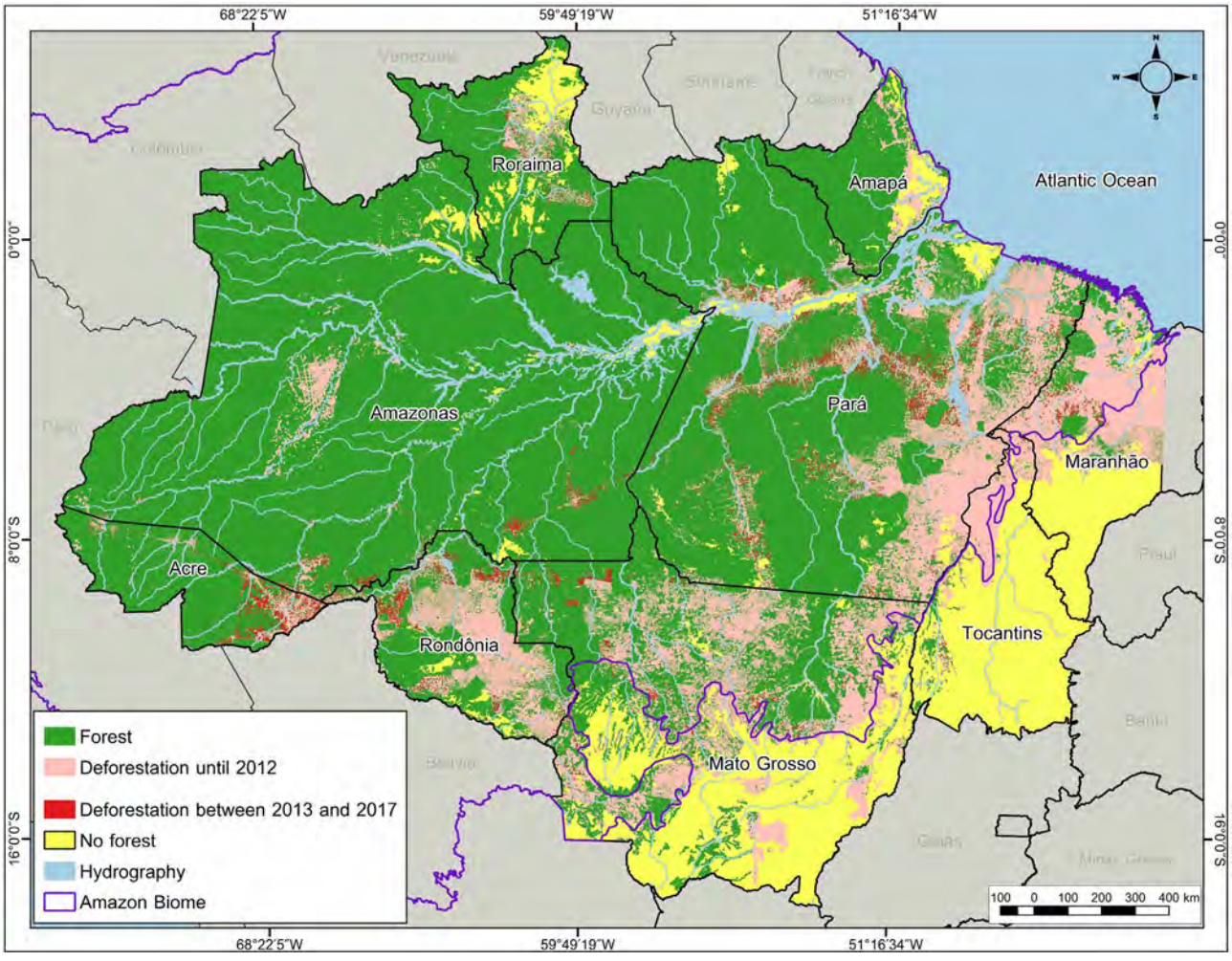


Figure 1. The Amazon: territories, deforestation and biomes (forests and non-forests).

ABOUT THE SOCIAL PROGRESS INDEX IN THE AMAZON

The Social Progress Imperative defines social progress as the "capacity of society to satisfy the basic human needs, establish the structures that guarantee the quality of life to citizens and give opportunities so that all individuals can achieve their maximum potential" (Social Progress Imperative, 2014).

The SPI is a comprehensive and innovative method for measuring social performance at all levels of society (from the community to global scale) with the use of exclusively social and environmental indicators. Public and transparent data provide a precise diagnosis of the social progress of territories, aiding decision-makers in the choice of better public policies and investments. It also enables comparisons of performance between municipalities within the same income bracket and, mainly, assess if they have been capable of transforming economic development into better social results (Social Progress Imperative, 2018). The SPI possesses four principles (Social Progress Imperative, 2018a):

The SPI Principles

1. Exclusively social and environmental indicators: our aim is to measure social progress directly, rather than utilize economic proxies or outcomes. By excluding economic indicators, we can, for the first time, rigorously and systematically analyze the relationship between economic development (measure for example by income or GDP per capita) and social development. Prior efforts to move "beyond GDP" have comingled social and economic indicators, making it difficult to disentangle cause and effect.

2. Outcomes not inputs: our purpose is to measure the outcomes that matter to the lives of real people, not the inputs. For example, we want to measure a country's health and wellness achieved, not how much effort is expended nor how much the country spends on healthcare.

3. Holistic and relevant to everybody: we strive to create a holistic measure of social progress that encompasses the many aspects of the health of societies. Most previous efforts have focused on the poorest countries, for understandable reasons. But knowing what constitutes a successful society for any territory, including high-income countries, states, counties or municipalities, is indispensable for charting a course for all societies.

4. Actionable: The IPS aims to be a practical tool that helps leaders and practitioners in government, business, and civil society to implement policies and programs that will drive faster social progress. To achieve that goal, we measure outcomes in a granular way that focuses on specific areas that can be implemented directly.

The IPS Amazônia, like the global index, is a structure in three dimensions and 12 components. Each one of the components covers from two to five indicators (Figure 2)[4]. That structure enables classification and scoring of a municipality (or even neighborhoods or communities), states, regions and countries. Furthermore, in the case of IPS Amazônia, it is possible to analyze the strong and weak points between different municipalities. Its transparency and structure allow decision-makers to establish strategic

4 In IPS Amazônia there are exceptionally only two indicators in one of the components, *access to information and communications*, due to the lack of more indicators for this theme with a municipal breakdown.

ABOUT THE SOCIAL PROGRESS INDEX IN THE AMAZON

priorities, acting according to the most relevant issues in their territories (Social Progress Imperative, 2018). To calculate it, the IPS Amazônia consists of 43 indicators from reliable sources. The index ranges from zero (worst) to 100 (best) and corresponds to a simple average of the social progress indexes of the three Dimensions (Basic Human Needs, Foundations of Wellbeing and Opportunities). Likewise, the Dimensions correspond to the simple average of the Components indexes, which were generated using the Principal Component Analysis (PCA)[5] method among the indicators. In version 2018 of the IPS Amazônia, it was possible to update 25 of the 43 indicators utilized in 2014.

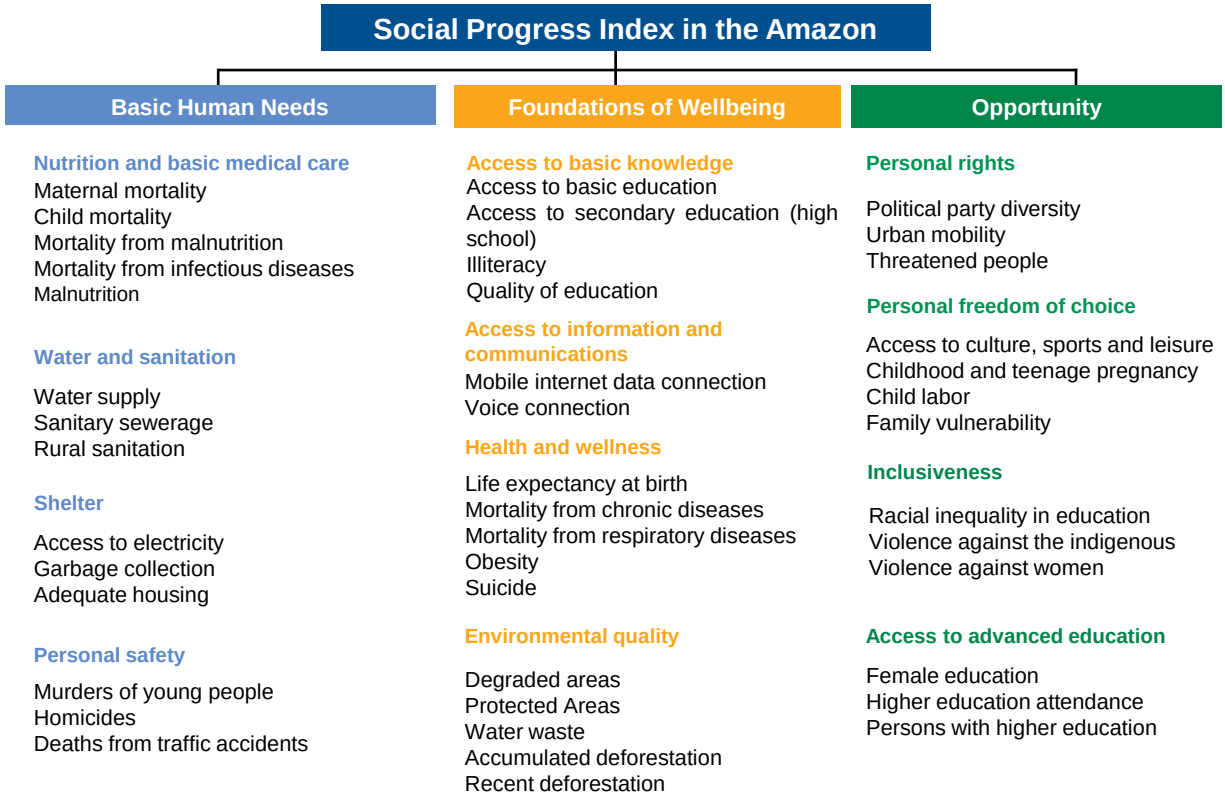
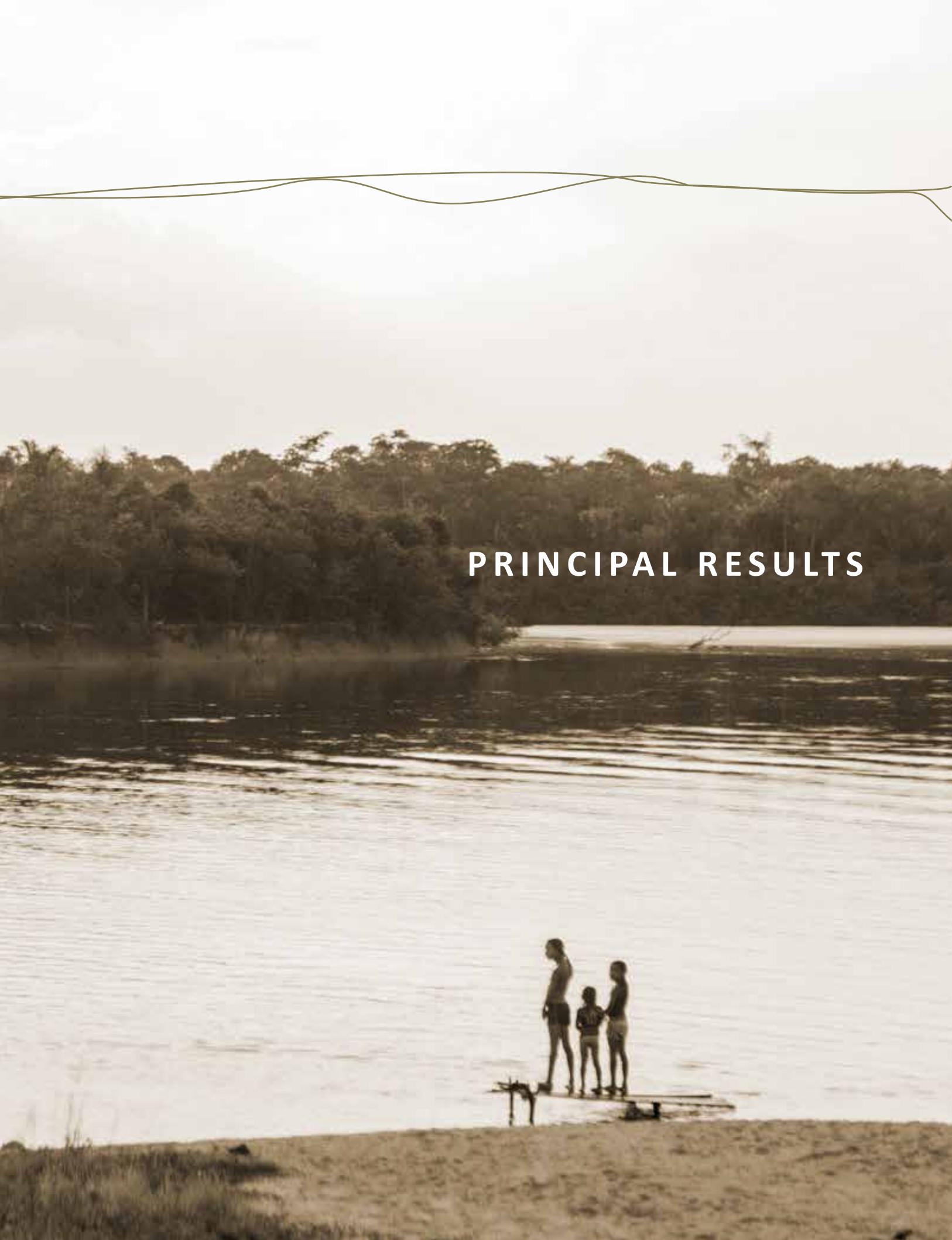


Figure 2. Structure of IPS Amazônia (dimensions, components and indicators)[6].

5 The Kaiser Meyer-Olkin (KMO) and Cronbach's alpha analyses were used to verify the validity and reliability of the PCA for all of the components, as established in the SPI methodology SPI (SPI, 2014; SPI, 2018, entre outros). See details in Appendix 2 and in Santos et al. (2014).

6 For more details regarding the indicators that make up the SPI, see Appendix 2.



PRINCIPAL RESULTS

OVERALL SPI FOR THE AMAZON

With an SPI equal to 56.52 in 2018, the Amazon remained below the national average (67.18) and even recorded a slight reduction in comparison to the IPS Amazônia 2014 (57.31) (Table 1). That drop in performance did not affect only the Amazon region, but the rest of the country as well. According to the global 2018 SPI ranking (Social Progress Imperative, 2018b), Brazil, which occupied the 46th position in 2014, dropped to 49th in 2018 among 146 countries, behind neighboring countries such as Argentina, Uruguay and Chile (Social Progress Imperative, 2014).

Among the dimensions in the Amazon, Dimension 2 (Foundations of Wellbeing) had the best result with an average index of 62.61 in 2018. With an intermediate position, Dimension 1 (Basic Human Needs) was the only one presenting a slight improvement over the last four years: reaching 59.21 compared to 58.75 in 2014. As for Dimension 3 (Opportunities), it again obtained the worst performance, with an index of only 47.75. This dimension is the one with the higher disparity between the Amazon and the rest of the country, demonstrating precariousness in *access to advanced education*, *personal rights*, *personal freedom and choice, inclusiveness*.

The states of Mato Grosso (59.13), Rondônia (58.51) and Tocantins (57.44) presented the best average indexes in the IPS Amazônia 2018. However, those states saw a sharper social perfomance drop in 2018 when compared with 2014 results of the others. Acre (54.18), Maranhão (55.02), Pará (55.57) and Roraima (54.84) states achieved a slight improvement in their respective indices in 2018, considered stable in relation to 2014. The indexes of Amazonas (54.92) and Amapá (56.80) states decreased (Table 2). Throughout the region, no state obtained an IPS Amazônia or Dimensions index higher than the national averages. Besides that disparity, one can observe that there is high variation between the maximum and minimum SPI values among the municipalities of each state (Figure 3).

Table 1. IPS Amazônia 2018 results.

		Brazilian Amazon		Brazil	
		2014	2018	2014	2018
IPS Amazônia		**57.31**	**56.52**	**67.73**	**67.21**
Dimension 1. Basic Human Needs		**58.75**	**59.21**	**71.60**	**73.52**
Components	Nutrition and basic medical care	35.35	35.35	74.87	74.87
	Water and sanitation	72.48	72.48	92.03	92.03
	Shelter	72.46	76.73	80.01	80.98
	Personal safety	54.72	52.28	39.49	46.19
Dimension 2. Foundations of Wellbeing		**64.84**	**62.61**	**70.42**	**68.82**
Components	Access to information and communications	53.36	54.24	63.44	66.67
	Access to basic knowledge	60.61	61.22	67.13	68.76
	Health and wellness	70.57	65.66	68.35	62.90
	Environmental quality	74.85	69.29	82.76	76.95
Dimension 3. Opportunity		**48.33**	**47.75**	**61.18**	**59.20**
Components	Personal rights	19.10	19.10	33.76	33.76
	Personal freedom and choice	45.22	43.89	65.39	59.19
	Inclusiveness	64.41	64.81	81.99	82.11
	Access to advanced education	64.58	63.19	63.59	61.74

OVERALL SPI FOR THE AMAZON

Table 3. Profile of the five SPI groups in Amazon municipalities.

	SPI groups in Amazon					Amazon
	1º (dark green)	2º (light green)	3º (yellow)	4º (orange)	5º (red)	
Number of the municipalities	25	159	281	250	57	772
Municipalities area (millions of km²)	0.09	0.93	1.18	1.97	0.86	5.04
Population (millions of inhabitants)	6.51	6.98	6.58	6.21	1.21	27.49
IPS Amazônia 2018	64.64	60.96	57.31	53.58	49.63	56.52
Dimension 1. Basic Human Needs	71.71	65.27	59.92	55.65	49.00	59.21
Dimension 2. Foundations of Wellbeing	69.28	67.14	63.90	59.11	56.1	62.61
Dimension 3. Opportunity	52.94	50.47	48.11	45.98	43.80	47.75
GDP at current prices (billions R$ in 2016)	182.95	173.02	99.18	70.43	11.75	498.93
Per capita income (R$/year in 2010)	8,301.07	5,956.29	4,265.67	3,412.82	2,727.66	4,354.81

The second group consists of 159 municipalities with an average SPI equal to 60.96 (light green on the map). Those municipalities total almost 19% of the territory, hold a population of around 7 million inhabitants (25%) and contribute 32% of the regional GDP. The capitals Macapá (AP), Rio Branco (AC) and Porto Velho (RO) are in this group.

The third group encompasses 281 municipalities (yellow on the map) with an average SPI of 57.31. Those municipalities hold 6.6 million inhabitants (24%), occupy 24% of the territory and represent 19% of the region's GDP. Over the last four years, this has incorporated the highest number of municipalities, since it had 194 in 2014. This group includes municipalities that did not achieve an improvement in social progress, despite good economic performance.

In the fourth group 250 municipalities have critical levels of social progress with an average SPI of only 53.58 (orange on the map). Those municipalities total 39% of the territory, 23% of the total population and account for 13% of the Amazon GDP. Among the municipalities with critical SPI are Novo Progresso

IPS AMAZÔNIA OF MUNICIPALITIES

(PA), Divinópolis do Tocantins (TO), Oiapoque (AP), Coari (AM) and Altamira (PA).

Finally, the fifth group (red on the map) corresponds to the 57 municipalities with the lowest levels of social progress in the Amazon, with an average SPI equal to 49.63. Those municipalities hold 1.2 million inhabitants (5%), account for only 2% of the GDP and occupy 17% of the territory. The states of Maranhão and Pará have the highest number of municipalities in this group (37% and 19%, respectively). The worst IPS Amazônia 2018 results are in Jordão (AC), Lábrea (AM), Alto Alegre (RR), Bom Jesus do Araguaia (MT) and Lagoa Grande do Maranhão (MA).

OVERALL SPI FOR THE AMAZON

Table 2. Results of IPS Amazônia and dimensions for 2014 and 2018 by state.

States	IPS Amazônia		Basic Human Needs		Foundations of Wellbeing		Opportunities	
	2014	2018	2014	2018	2014	2018	2014	2018
Acre	54.09	54.18	54.04	57.13	62.59	62.20	45.66	43.22
Amazonas	54.92	54.75	58.15	60.05	62.47	60.03	44.14	44.16
Amapá	56.80	56.42	61.86	63.22	60.92	62.64	47.61	43.41
Maranhão	54.97	55.02	57.88	57.69	61.29	59.94	45.75	47.43
Mato Grosso	61.37	59.13	61.60	62.41	68.99	63.99	53.52	50.99
Pará	55.40	55.57	57.11	57.23	63.22	62.15	45.87	47.34
Rondônia	59.21	58.51	56.77	57.98	70.01	66.70	50.86	50.86
Roraima	54.38	54.84	55.10	56.60	61.53	66.04	46.50	41.89
Tocantins	59.46	57.44	60.50	60.24	67.27	64.51	50.60	47.57
Brazil	**67.73**	**67.18**	**71.60**	**73.52**	**70.42**	**68.82**	**61.18**	**59.20**
Amazon Region	**57.31**	**56.52**	**58.75**	**59.21**	**64.84**	**62.61**	**48.33**	**47.75**

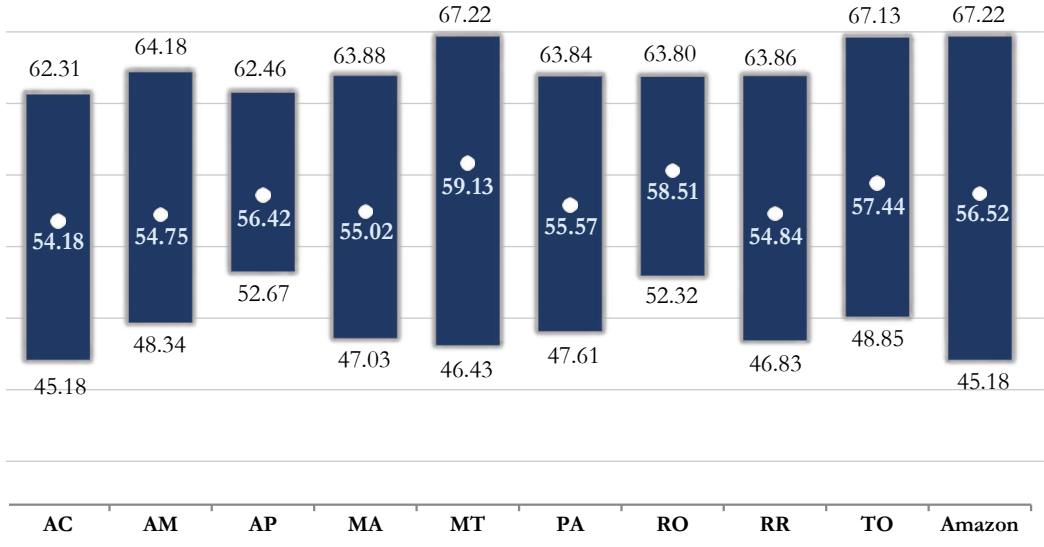


Figure 3. Variation of the SPI in the Amazon and in the states in 2018 (minimum, average and maximum).

IPS AMAZÔNIA OF MUNICIPALITIES

The Amazon municipalities fall into five groups according to their results in the IPS Amazônia 2018 (Figure 4 and Table 3). In the first group are 25 municipalities with the best indices (dark green on the map), where the average SPI is 64.64. They cover 22% of the region's territory (IBGE, 2017), have a population of 6.5 million inhabitants (24% of the Amazon population) and account for 34% of the region's GDP (IBGE, 2018a; IBGE, 2018b). Six capitals are in this group: Cuiabá (MT), Palmas (TO), Manaus (AM), Belém (PA), São Luís (MA) and Boa Vista (RR). Although those municipalities had the best results in the region, their performance was lower than the Brazilian average except for Cuiabá. In 2014, 87 municipalities represented that group as opposed to only 25 municipalities in 2018. Therefore, more than two-thirds of municipalities in that group had a reduction in social progress over the last four years (Appendix 1).

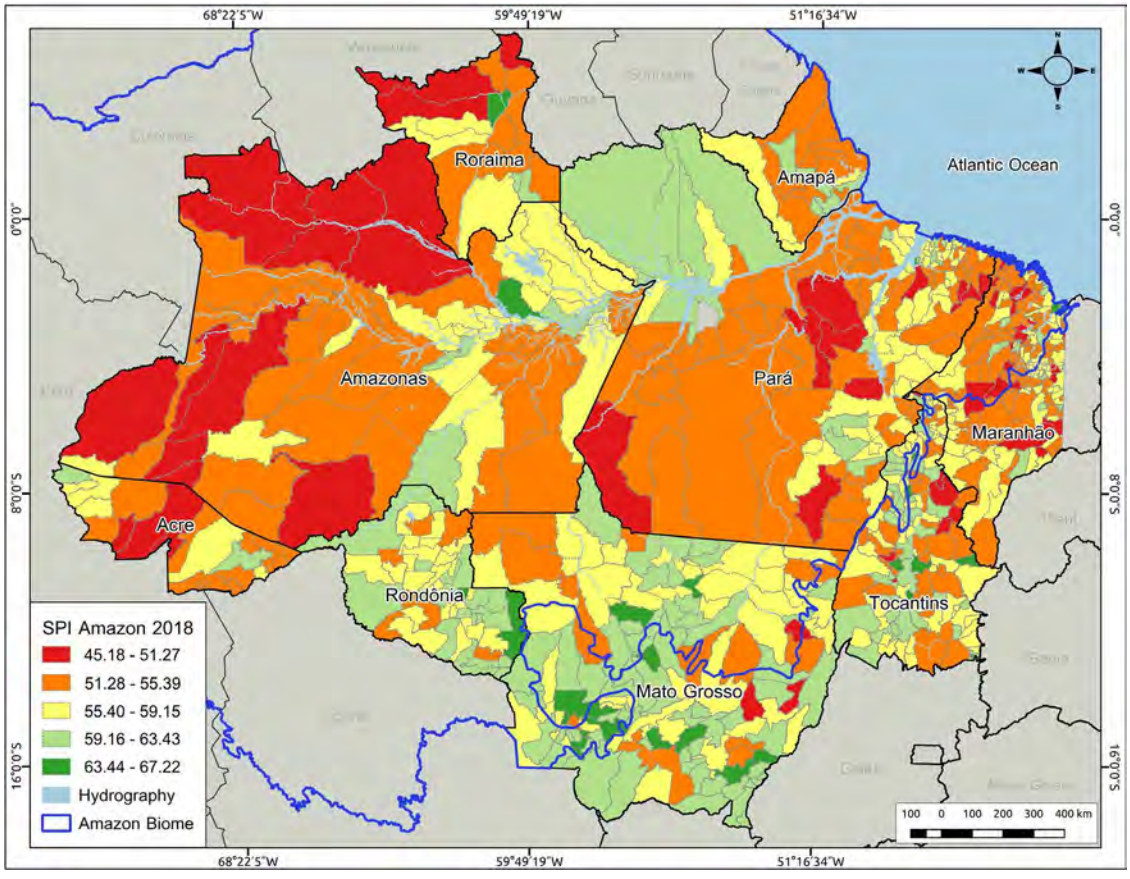


Figure 4. SPI in municipalities in the Amazon.

IPS AMAZÔNIA OF MUNICIPALITIES

Box 1 . Advances and setbacks of IPS Amazônia 2018 in the municipalities.

Among the 772 Amazonian municipalities evaluated, the majority (59%) saw their SPI reduced in comparison to 2014. Important ones suffered such a reduction, for example, such as the nine Amazon capitals: Belém (PA), Boa Vista (RR), Cuiabá (MT), Macapá (AP), Manaus (AM), Palmas (TO), Porto Velho (RO), Rio Branco (AC) and São Luís (MA). On the other hand, only 30% dos municipalities increased their SPI, including Tailândia (PA), Bacabal (MA), Parauapebas (PA), Terra Santa (PA) and Faro (PA). Finally, the SPI remained stable[7] in 2018 for 11% of municipalities, such as in Ourém (PA), Novo Progresso (PA), Paranatinga (MT), Coari (AM), Planalto da Serra (MT) and Centro Novo do Maranhão (MA) (Figure 5).

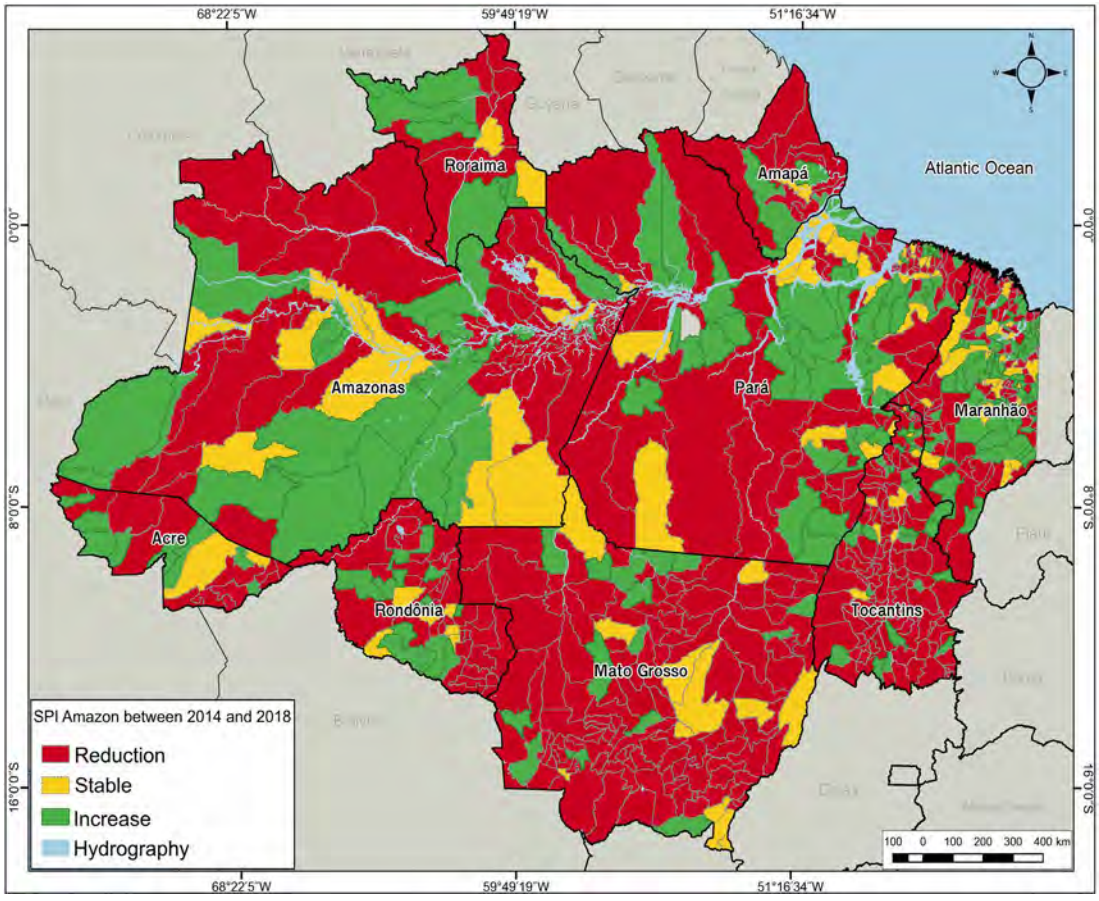


Figure 5. Variation of the SPI from 2014 to 2018 in municipalities in the Amazon.

7 A municipality with "stable" SPI is considered to be one with an increase from 0 to 1 point from 2014 to 2018.

IPS AMAZÔNIA OF MUNICIPALITIES

Strong and weak points of Amazon municipalities (scorecards)

The social progress measured by the SPI, its three dimensions, 12 components and 43 indicators may be evaluated individually for the 772 municipalities using the scorecards (Figure 6) that are available at the sites www.ipsamazonia.org.br and www.progressosocial.org.br. The scorecards present the complete results and the classification of each municipality in the regional ranking. The results receive a green (good result), yellow (neutral) or red (weak) card in relation to other municipalities in the same range of annual per capita income, as seen in the example below.

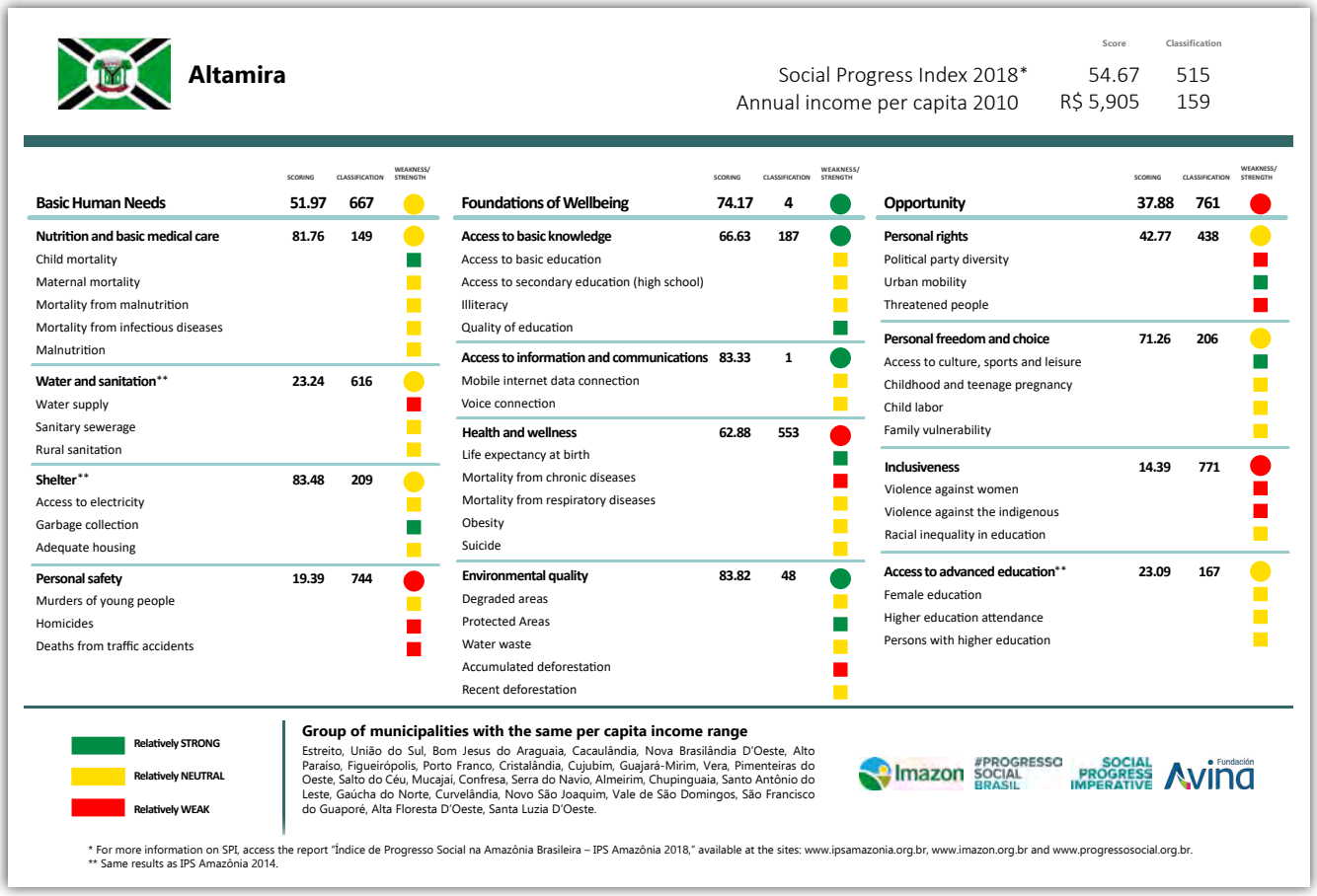


Figure 6. Scorecard for Altamira (Pará State).

SOCIAL PROGRESS AND ECONOMIC DEVELOPMENT

One of the objectives of SPI is to better understand the relationship between social progress and economic development (Social Progress Imperative, 2014). As with the 2014 report, the IPS Amazônia 2018 presents a positive correlation with per capita income (59%) in municipalities in the region. However, economic performance alone does not fully explain the social progress of a municipality, since the relation between SPI and per capita income is not linear. There is a major variation between the SPI in municipalities with the same range of per capita income (Figure 7).

Some municipalities with very low per capita income present a relatively high SPI in relation to other municipalities in the same income bracket. For example, Ipueiras (TO), Porto Rico do Maranhão (MA) and Santa Cruz do Arari (PA) are among the best 40 IPS Amazônia in the regional ranking, even presenting a very low per capita income in comparison with the capitals.

On the other hand, various municipalities with income above the regional average presented SPIs at lower levels in 2018, among them: Bom Jesus do Araguaia (MT), Cumaru do Norte (PA), Lagoa da Confusão (TO), Oliveira de Fátima (TO), Nova Nazaré (MT). Thus, although they are correlated, high economic development does not necessarily lead to social progress for an Amazon municipality. At the IPS Amazônia site, it is possible to verify the position of every municipalities with regard to the SPI and the respective per capita income brackets.

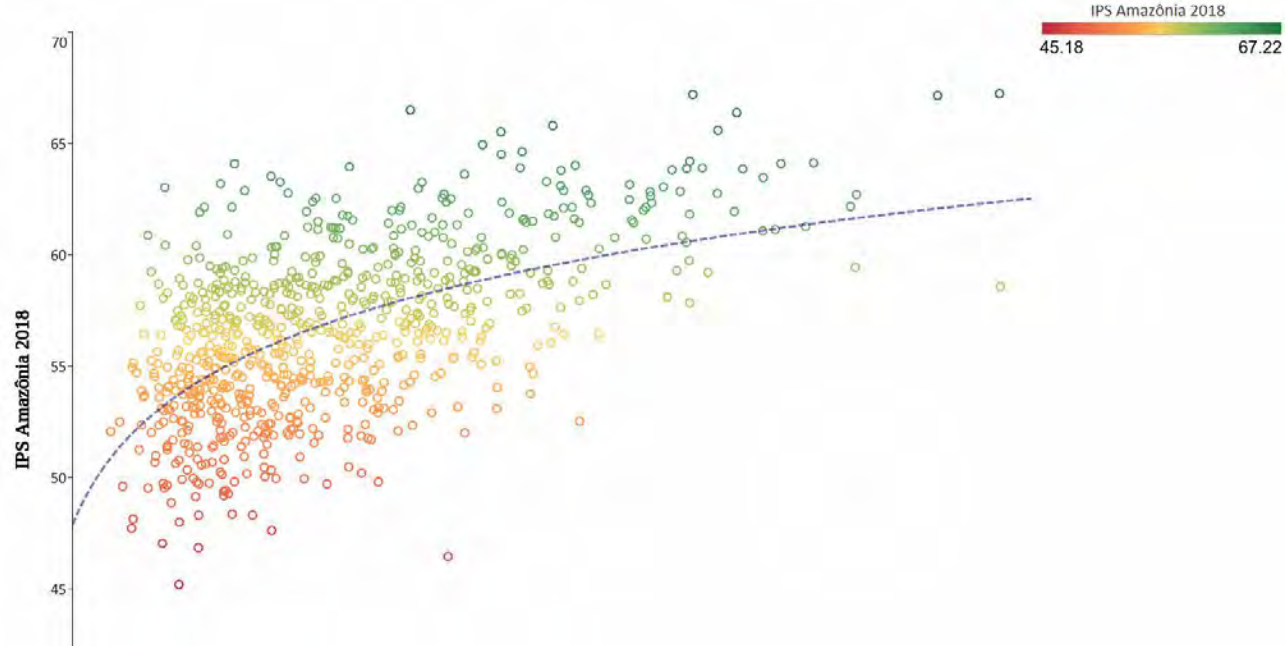


Figure 7. The relation between SPI and per capita income 2010 (UNDP, 2013) in Amazon municipalities.

SOCIAL PROGRESS AND DEFORESTATION

The Amazon has already lost around 20% of its forest (789 thousand square kilometers), the equivalent to an area larger than the Southern Brazil region or three times the São Paulo state area. From 2014 to 2018, the years for measuring IPS Amazônia, 34 thousand square kilometers of forest area suffered deforestation in the Amazon (Inpe, 2018). In 2017, Greenhouse Gas Emissions (GHG) due to deforestation represented 30% of the total emitted by Brazil (SEEG, 2018). After almost a decade of falling rates, deforestation again rose in the region beginning in 2013, reaching 7.9 thousand square kilometers in 2018 (Inpe, 2018). Deforestation is undesirable and unnecessary in the Amazon. Unnecessary because the deforested areas in the region that are abandoned or degraded are already sufficient for guaranteeing an increase in agricultural and ranching production in the future. Undesirable because deforestation represents enormous environmental and social costs and low economic return for regional development. Our analyses indicate that there is no correlation between deforestation and social progress measured by the SPI (Pearson 0,02) (Figure 8). On the contrary, deforestation leads to social, environmental and economic losses at all scales.

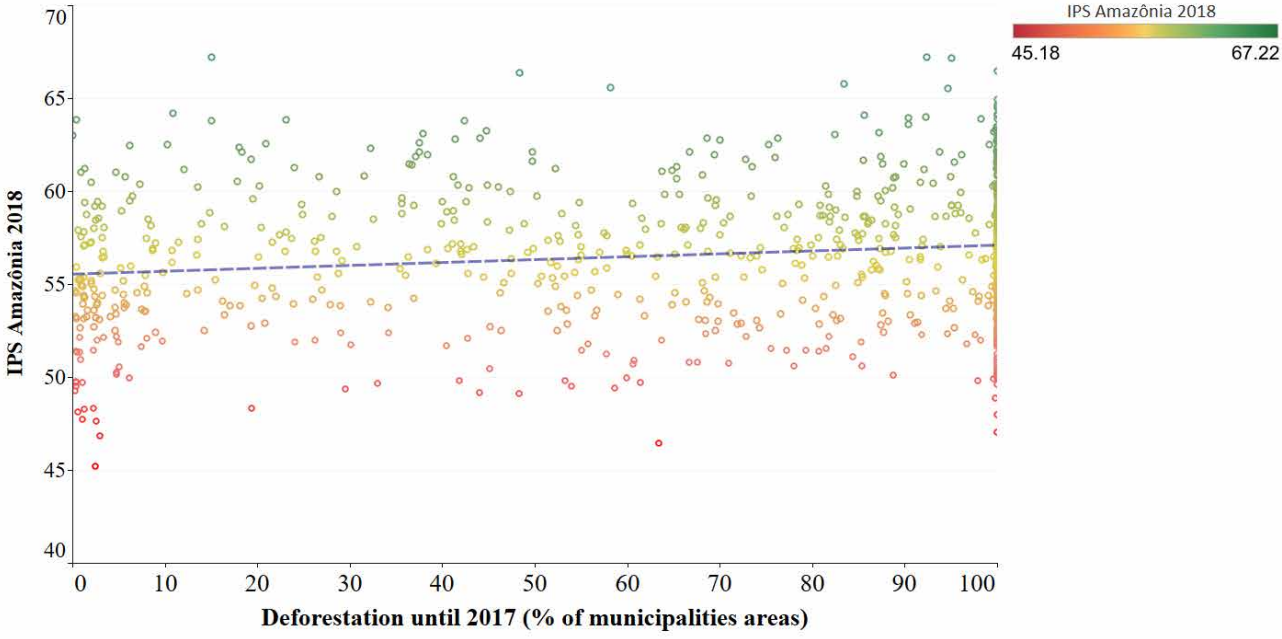


Figure 8. The relation between SPI and deforestation (Inpe, 2018) in Amazonian municipalities.

THE DIMENSIONS OF IPS AMAZÔNIA

DIMENSION 1

(Basic Human Needs)

Dimension 1 of SPI uses four components to measure if the more basic needs of a population are being guaranteed: water and sanitation, housing, nutrition and basic medical care and personal security (Figure 9). That dimension (59.21) was the only one that presented a slight improvement in comparison to 2014 (58.75).

One component of Dimension 1, *nutrition and basic medical care*, evolved between 2014 and 2018 from 72.46 to 76.73 (Table 4). However, that component still shows grave and persistent problems in the region: malnutrition, child mortality, maternal mortality and mortality from infectious diseases. As for the components *water and sanitation* and *shelter*, they have the same average indices as 2014 (35.35 and 72.48, respectively) because of the absence of updated data. These two components show the level of access of the region's population to basic services such as water supply, appropriate sewerage disposal (general network or septic tank), garbage collection, electricity and housing. Finally, the average index for the personal security component worsened from 2014 to 2018, falling from 54.71 to 52.28. In reality, the homicide rate in the Amazon increased from 32 to 42 homicides per 100 thousand inhabitants in 2009 and 2016, respectively (Figure 10).

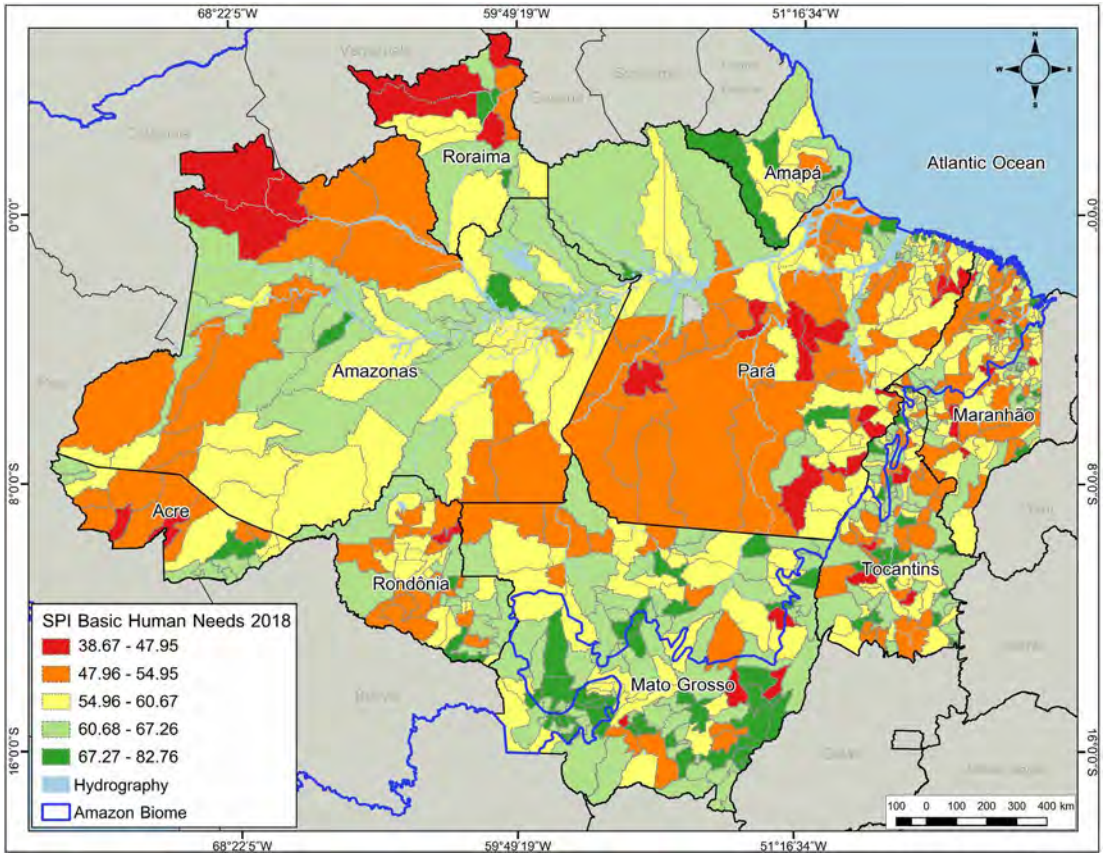


Figure 9. Dimension 1 (Basic Human Needs) in Amazonia municipalities.

THE DIMENSIONS OF IPS AMAZÔNIA

Table 4. SPI of components of the Basic Human Needs dimension of the IPS Amazônia in 2014 and 2018.

States	Nutrition and basic medical care		Water and sanitation	Shelter	Personal safety	
	2014	2018			2014	2018
Acre	70.66	76.37	28.42	68.95	48.11	54.77
Amazonas	73.89	78.01	30.98	67.49	60.24	63.73
Amapá	78.80	81.33	33.11	84.03	51.51	54.42
Maranhão	68.63	73.25	38.60	61.99	62.28	56.93
Mato Grosso	73.34	78.69	36.94	85.04	51.09	48.99
Pará	76.01	78.66	31.10	69.39	51.92	49.76
Rondônia	75.68	79.40	21.02	80.01	50.36	51.49
Roraima	75.82	77.77	42.00	58.40	44.18	48.23
Tocantins	70.28	75.16	41.82	76.84	53.08	47.13
Brazil	**80.01**	**80.98**	**74.87**	**92.03**	**39.49**	**46.19**
Amazon Region	**72.46**	**76.73**	**35.35**	**72.48**	**54.72**	**52.28**

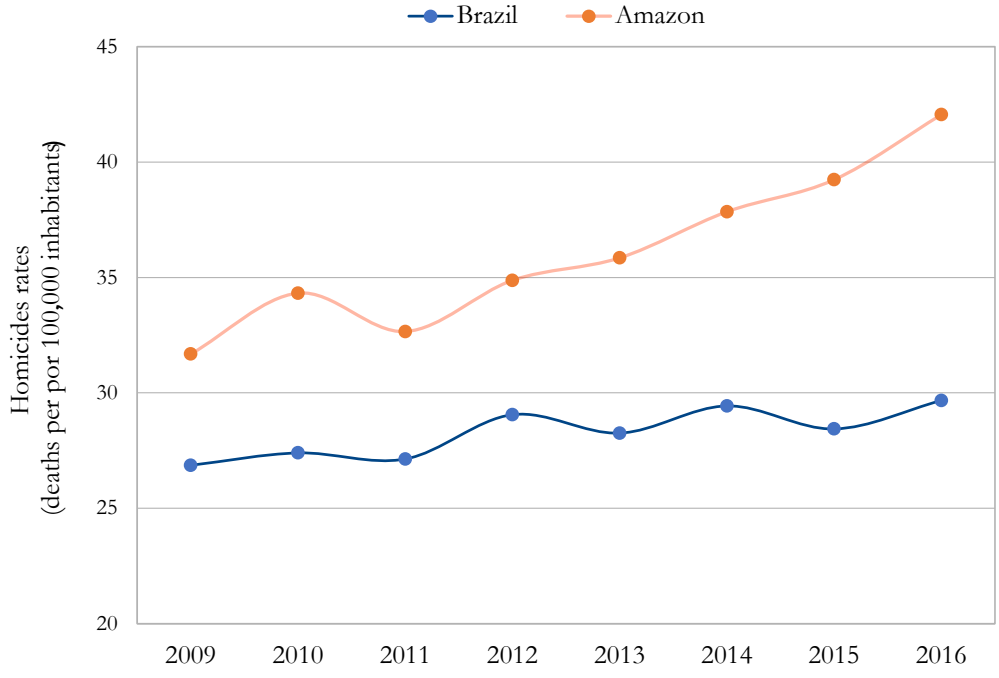


Figure 10. Homicide rate (deaths per 100 thousand inhabitants) in the Amazon and Brazil from 2009 to 2016 (BRASIL, 2018).

THE DIMENSIONS OF IPS AMAZÔNIA

DIMENSION 2

(Foundations of Wellbeing)

Dimension 2 of the SPI shows whether or not the Amazon municipalities have the necessary structure for guaranteeing social wellbeing (Figure 11). It has four essential components: access to basic knowledge, access to information and communications, health and wellness and environmental quality. This dimension has the best result (62.52) in IPS Amazônia 2018.

Among the components of this dimension, the average index of *access to information and communications* improved slightly from 2014 to 2018, going from 53.35 to 54.24. However, this component has the worst result in Dimension 2 and highest disparity in relation to the

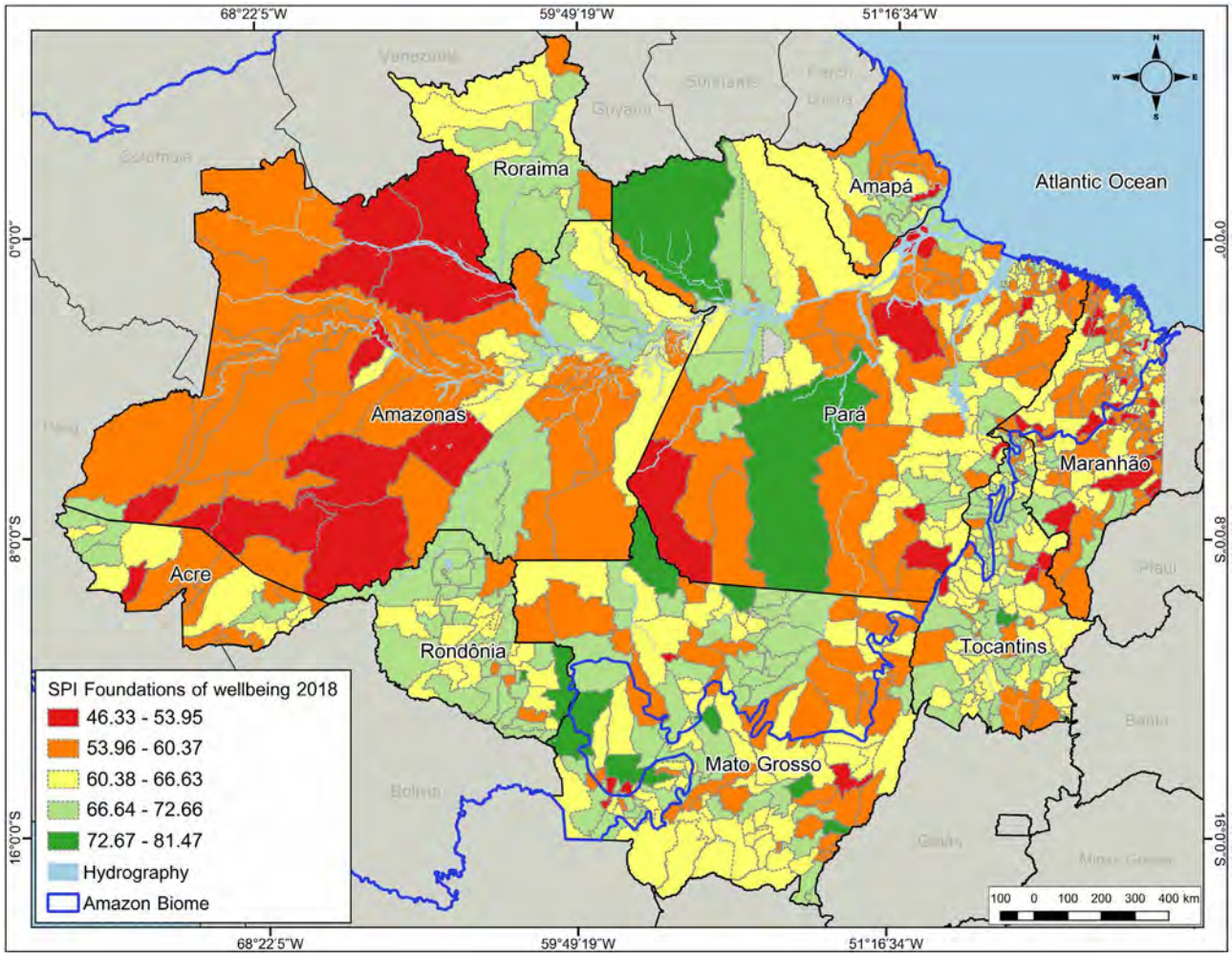


Figure 11. Dimension 2 (Foundations for Wellbeing) in Amazon municipalities.

THE DIMENSIONS OF IPS AMAZÔNIA

national average (66.67). On the other hand, the indexes for the components *environmental quality* and *health and wellness* worsened from 2014 to 2018 (Table 5). The first fell from 74.85 to 69.29, since it was greatly influenced by the increase in deforestation and forest degradation during the period, while the second fell from 70.57 to 65.66, the result of worsening rates of mortality due to chronic diseases, respiratory diseases and suicides utilized in this component (Table 6).

Table 5. SPI of the components of the dimension Foundations of Wellbeing of the IPS Amazônia in 2014 and 2018.

States	Access to basic knowledge		Access to information and communications		Health and wellness		Environment quality	
	2014	2018	2014	2018	2014	2018	2014	2018
Acre	56.43	57.59	43.41	51.86	68.81	64.52	81.72	74.82
Amazonas	56.06	56.35	32.69	32.38	73.89	69.88	87.24	81.53
Amapá	62.17	62.22	19.91	39.96	72.64	69.67	88.95	78.69
Maranhão	56.85	57.87	53.44	55.55	68.47	64.56	66.39	61.80
Mato Grosso	65.59	66.63	61.27	53.10	72.92	65.32	76.16	70.93
Pará	58.20	58.01	44.74	50.57	72.35	68.70	77.58	71.31
Rondônia	64.95	67.35	64.97	65.52	71.67	63.02	78.46	70.89
Roraima	55.89	56.19	32.59	62.70	72.44	66.86	85.19	78.43
Tocantins	64.33	64.30	66.62	64.09	67.05	63.28	71.07	66.36
Brazil	**67.13**	**68.76**	**63.44**	**66.67**	**68.35**	**62.90**	**82.76**	**76.95**
Amazon Region	**60.61**	**61.22**	**53.36**	**54.24**	**70.57**	**65.66**	**74.85**	**69.29**

Table 6. Mortality rates (deaths per 100 thousand inhabitants) in the Amazon and Brazil in 2012 and 2016 (BRASIL, 2018).

Indicator	Year	Amazon Region	Brazil
Mortality from chronic diseases	2012	44.72	74.83
	2016	51.26	79.83
Obesity	2012	35.70	40.00
	2016	40.63	44.93
Mortality from respiratory diseases	2012	35.15	65.59
	2016	45.02	76.69
Suicides	2012	4.15	5.32
	2016	4.63	5.55

THE DIMENSIONS OF IPS AMAZÔNIA

DIMENSION 3

(Opportunity)

Dimension 3 of SPI estimates the level of access to rights and liberties, the capacity of citizens for making personal decisions and the level of prejudices or hostility that keep them from achieving full potential in society. This dimension has four components: *personal rights*, *personal freedom and choice*, *inclusiveness* and *access to advanced education*. As it was in IPS Amazônia 2014, this is the dimension with the worst result in the Amazon, with an average index of only 47.75, while in rest of Brazil presented an index of 59.20 (Figure 12).

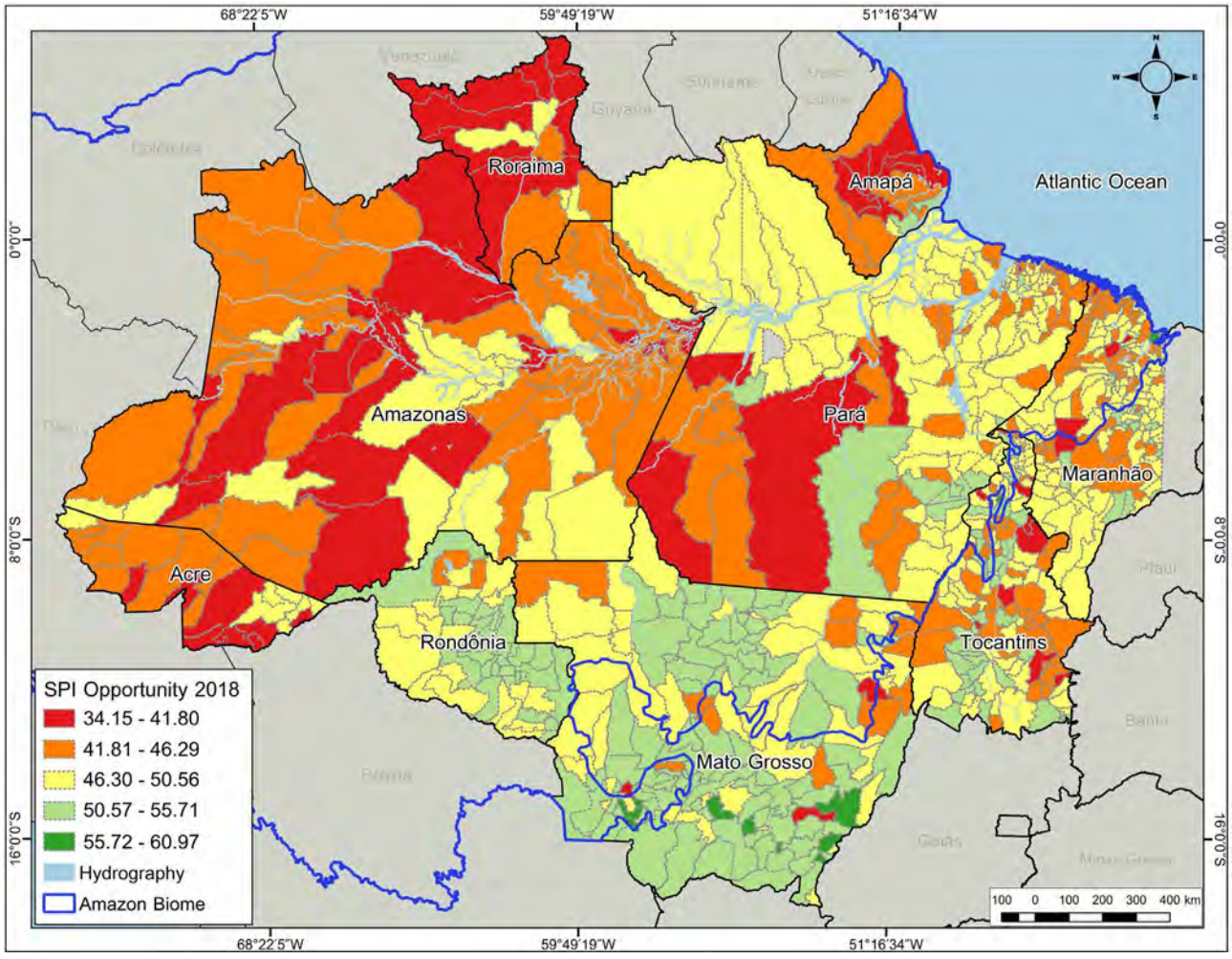


Figure 12. Dimension 3 *(Opportunity)* in Amazonia municipalities.

THE DIMENSIONS OF IPS AMAZÔNIA

The component *access to higher education* is the worst among all of the SPI components, with a result of only 19.10 (the national average is 33.76). As with the *water and sanitation* and *shelter* components, this component has results equal 2014, since the update of its indicators did not occur in recent years according to offical sources. The component *inclusiveness in* 2018 is the only one with an average (63.19) slightly better than Brazil (61.74). However, it has worse results in comparison to to 2014.

As for the component *personal rights*, it worsened slightly from 2014 to 2018, falling from 45.22 to 44.15. This component includes indicators for urban mobility, political party diversity and threatened persons.

Personal freedom and choice remained stable: from 64.41 to 64.81. The indicators of this component are access to culture, sports and leisure; childhood and teen pregnancy; child labor; and family vulnerability (Table 7).

Table 7. SPI for components of the opportunity dimension of the IPS Amazônia in 2014 and 2018.

States	Personal rights		Personal freedom and choice		Inclusiveness		Access to advanced education
	2014	2018	2014	2018	2014	2018	
Acre	41.53	41.37	61.88	61.25	61.22	52.26	18.00
Amazonas	39.59	40.27	57.37	57.01	63.53	63.28	16.08
Amapá	40.47	39.68	58.22	58.39	70.32	54.16	21.42
Maranhão	42.62	42.60	61.38	61.92	63.16	69.38	15.81
Mato Grosso	50.43	46.99	72.08	72.28	66.62	59.73	24.96
Pará	43.98	42.96	60.98	62.16	63.41	69.16	15.10
Rondônia	48.01	45.99	71.11	71.27	64.04	65.90	20.28
Roraima	42.84	41.05	56.62	57.36	66.48	49.11	20.05
Tocantins	47.46	45.40	66.70	66.90	65.93	55.68	22.31
Brazil	**65.39**	**59.19**	**81.99**	**82.11**	**63.59**	**61.74**	**33.76**
Amazon Region	**45.25**	**43.91**	**64.43**	**64.83**	**64.58**	**63.18**	**19.12**

CONCLUSION

CONCLUSION

Four years have passed since the launch of the first edition of the IPS Amazônia in 2014; however, the results from 2018 indicate that the region continues to have low levels of social progress, clearly incompatible with its natural wealth and strategic importance for Brazil. In fact, the Amazon faces a severe crisis of social progress with an SPI (56.52) well below the SPI for Brazil (67.18). Of the 772 municipalities, only Cuiabá (MT) has an SPI slightly higher than the average for Brazil. That demonstrates that the pattern of development experienced in the Amazon so far has not been sufficient to improve the quality of life for its inhabitants in comparison with the rest of Brazil. The majority of the population subsists with a low quality of life, while at the same time the exuberant forest is replaced by deforested landscapes, chaotic cities and affected by growing violence, precarious sanitation, education of low quality and other ills.

The Amazon is living in a perverse combination of low social progress, high environmental degradation and sub-economic development. In other words, we are losing one of our greatest treasures in exchange for nothing. The region represents almost 60% of Brazilian territory but contributes less than 9% of the Brazilian GDP. Furthermore, it emits around 41% of the GHGs in Brazil. That high level of emissions is mostly the result of deforestation. The economy, for its part, involves low added value and is linked to illegality and informality. It is thus, the worst of worlds: massive environmental degradation, precarious and chaotic social situation and little generation of wealth.

There is no single solution for resolving the complex issues in the Amazon, but any strategy to be pursued must take three factors into account. First, we have already deforested all the land that we need for developing agriculture, ranching, mining and infrastructure. It is therefore entirely possible to generate wealth in the Amazon and supply work and benefits to its approximately 27 million inhabitants without deforesting new areas. Achieving that goal depends primarily on developing and utilizing new technologies and existing techniques to make better use of the land already deforested. It is time to seek a more intelligent model for economic growth that does not depend on destroying the forest. Second, the economic and strategic value of the forest is immense and continues to grow, as does our increasingly expanding understanding of that intrinsic value, even though we do not not acknowledge the biodiversity in the region properly. Third, Amazon needs to attract quality investments, win markets that consume only products with higher added value from areas free of deforestation.

In fact, Brazilians and worldwide consumers want to buy products that are "free of deforestation". There is enormous pressure coming from the markets to eliminate products coming from deforested areas. For example, the Consumer Goods Forum is an initiative of some of the largest global companies that have committed to zero deforestation 2020. In other words, from that date on, those companies will cease to buy any beef, soy, palm oil, timber or paper that come from recently deforested areas.

We believe that the best way to achieve social progress in the Amazon is to seek the end of deforestation, dynamize the economy based on sustainable use of natural resources, invest in infrastructure to improve quality of life and guarantee better opportunities for the region's 27 million inhabitants. The IPS Amazônia is a useful tool for guiding public policies and other actions to benefit the Amazon population.

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APPENDICES

APPENDIX 1

IPS AMAZÔNIA AND DIMENSIONS OF AMAZON MUNICIPALITIES IN 2018[8]

Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Cuiabá	MT	1	67.22	76.57	66.94	58.14
Palmas	TO	2	67.13	75.84	72.94	52.61
Combinado	TO	3	66.48	73.14	74.24	52.05
Tangará da Serra	MT	4	66.37	71.29	72.74	55.06
Rio Branco	MT	5	65.78	70.56	70.24	56.54
Nova Santa Helena	MT	6	65.58	74.25	66.76	55.71
Barra do Bugres	MT	7	65.51	72.65	69.85	54.01
Guiratinga	MT	8	64.92	73.06	67.08	54.63
Pontal do Araguaia	MT	9	64.62	68.64	73.01	52.20
Glória D'Oeste	MT	10	64.49	70.83	65.31	57.34
Manaus	AM	11	64.18	72.11	71.50	48.93
Lucas do Rio Verde	MT	12	64.11	73.11	73.64	45.58
Paraíso do Tocantins	TO	13	64.08	68.64	70.76	52.83
São Félix do Tocantins	TO	14	64.07	78.40	66.84	46.97
São José dos Quatro Marcos	MT	15	64.00	64.49	71.53	55.97
Carmolândia	TO	16	63.93	67.10	63.73	60.97
Colinas do Tocantins	TO	17	63.88	72.60	69.70	49.35
São Luís	MA	18	63.88	70.67	64.44	56.53
Boa Vista	RR	19	63.86	74.99	70.08	46.50
Belém	PA	20	63.84	72.66	67.01	51.85
Vilhena	RO	21	63.80	65.80	73.17	52.42
Porto dos Gaúchos	MT	22	63.77	66.86	70.91	53.54
Presidente Médici	RO	23	63.60	69.27	68.54	52.98
Ipueiras	TO	24	63.51	82.76	60.49	47.27
Campo Verde	MT	25	63.45	66.35	70.50	53.51
Pedro Afonso	TO	26	63.27	73.08	69.22	47.50
Nova Rosalândia	TO	27	63.25	69.28	66.80	53.67
Alvorada d'Oeste	RO	28	63.24	64.48	69.88	55.38
Porto Rico do Maranhão	MA	29	63.17	74.57	66.26	48.69
Mirassol d'Oeste	MT	30	63.14	68.73	67.16	53.54
Santa Carmem	MT	31	63.08	67.29	70.84	51.11
Colíder	MT	32	63.03	69.75	65.34	54.00

8 Caveat: the colors (dark green, light green, yellow, Orange and red) used in the table to indicate the group in the IPS Amazônia to which the municipality belongs use the SPI scoring as their basis. That does not mean that the municipality also occupies that same group in the three dimensions of the SPI. In other words, a municipality may be classified as dark green (group 1) in the SPI, but have different colors for the dimensions (for example, group 2 or 3), components and indicators (expressed in the scorecards).

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IPS AMAZÔNIA AND DIMENSIONS OF AMAZON MUNICIPALITIES IN 2018

Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Santa Cruz do Arari	PA	33	63.01	75.17	64.96	48.90
Fátima	TO	34	62.96	73.35	66.78	48.74
Pontes e Lacerda	MT	35	62.87	66.83	69.41	52.36
Araputanga	MT	36	62.87	68.88	69.22	50.49
Rio da Conceição	TO	37	62.86	77.31	68.79	42.49
Gurupi	TO	38	62.83	64.43	71.52	52.54
Jaciara	MT	39	62.82	67.69	64.67	56.09
Arari	MA	40	62.75	69.81	69.12	49.33
Campo Novo do Parecis	MT	41	62.74	64.90	68.21	55.10
Cristalândia	TO	42	62.71	68.71	68.40	51.01
Primavera do Leste	MT	43	62.69	69.01	67.96	51.10
Várzea Grande	MT	44	62.67	70.54	65.03	52.44
Ji-Paraná	RO	45	62.62	65.24	70.68	51.93
Pimenteiras do Oeste	RO	46	62.53	68.41	71.41	47.76
Santa Fé do Araguaia	TO	47	62.52	68.84	69.41	49.32
Planalto da Serra	MT	48	62.52	70.47	65.33	51.75
Apiacás	MT	49	62.50	62.18	76.71	48.60
Macapá	AP	50	62.46	65.46	69.16	52.76
Terra Santa	PA	51	62.37	71.96	67.10	48.04
Ponte Branca	MT	52	62.35	78.88	57.38	50.78
Figueirópolis	TO	53	62.35	68.17	68.15	50.72
Rio Branco	AC	54	62.31	68.72	68.01	50.20
Alto Araguaia	MT	55	62.31	65.76	69.39	51.78
Nova Mutum	MT	56	62.15	62.87	71.62	51.96
Belterra	PA	57	62.12	67.06	70.59	48.73
Magalhães Barata	PA	58	62.12	75.23	67.61	43.53
Indiavaí	MT	59	62.12	69.76	60.16	56.44
Matupá	MT	60	62.11	63.23	70.49	52.62
Araguaína	TO	61	62.11	63.25	72.01	51.06
Nova Olímpia	MT	62	62.09	67.69	66.37	52.20
Primavera de Rondônia	RO	63	61.98	60.50	73.44	52.00
Pimenta Bueno	RO	64	61.98	66.75	66.20	52.99
Novo Alegre	TO	65	61.97	67.17	66.56	52.20
Rondonópolis	MT	66	61.93	68.31	65.99	51.50
Lavandeira	TO	67	61.93	67.78	66.04	51.97
Cedral	MA	68	61.90	70.45	66.95	48.30

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Comodoro	MT	69	61.86	61.76	74.10	49.71
Denise	MT	70	61.86	68.84	64.72	52.02
Porto Nacional	TO	71	61.82	71.65	69.80	44.01
Barra do Garças	MT	72	61.80	69.38	58.88	57.14
Aguiarnópolis	TO	73	61.77	73.85	70.26	41.18
Ananás	TO	74	61.73	71.33	66.89	46.97
Parauapebas	PA	75	61.72	69.69	65.86	49.61
Santo Antônio do Leste	MT	76	61.64	60.03	73.11	51.79
Alto Garças	MT	77	61.60	65.66	65.13	54.01
Nova Canaã do Norte	MT	78	61.60	64.24	67.62	52.93
Cáceres	MT	79	61.55	66.92	64.24	53.47
Sucupira	TO	80	61.54	68.49	65.56	50.58
Água Boa	MT	81	61.54	69.70	60.80	54.12
Itiquira	MT	82	61.48	66.28	65.96	52.22
São Luiz	RR	83	61.47	70.03	65.32	49.06
Guarantã do Norte	MT	84	61.45	62.13	71.57	50.64
Rolim de Moura	RO	85	61.44	62.01	67.90	54.40
Guaraí	TO	86	61.42	62.21	70.42	51.64
Formoso do Araguaia	TO	87	61.39	64.75	70.59	48.84
Vera	MT	88	61.33	60.70	68.30	54.99
Jauru	MT	89	61.33	67.30	62.23	54.46
Cabixi	RO	90	61.32	59.22	69.74	55.00
Porto Velho	RO	91	61.25	63.67	69.39	50.67
Oriximiná	PA	92	61.23	62.59	73.07	48.03
Alto Paraguai	MT	93	61.22	59.16	71.72	52.77
Alto Boa Vista	MT	94	61.20	68.94	66.47	48.18
Luciára	MT	95	61.18	75.78	63.96	43.79
São João da Baliza	RR	96	61.17	64.89	70.86	47.77
Paço do Lumiar	MA	97	61.14	69.20	64.66	49.57
Sapezal	MT	98	61.12	68.55	62.98	51.84
São Valério da Natividade	TO	99	61.12	58.55	71.68	53.12
Sinop	MT	100	61.06	63.15	69.40	50.61
Serra do Navio	AP	101	61.00	73.91	68.89	40.20
Santana	AP	102	60.99	66.34	66.76	49.87
Bernardo do Mearim	MA	103	60.90	68.78	63.07	50.86
Santa Filomena do Maranhão	MA	104	60.86	71.20	65.79	45.59
Itacajá	TO	105	60.85	64.52	68.43	49.59

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
São José de Ribamar	MA	106	60.84	68.68	64.28	49.56
Alto Taquari	MT	107	60.82	62.98	69.76	49.72
Alta Floresta d'Oeste	RO	108	60.81	58.84	68.53	55.08
Nova Maringá	MT	109	60.78	64.39	68.89	49.04
Arenápolis	MT	110	60.77	62.17	66.79	53.34
Itaporã do Tocantins	TO	111	60.76	68.69	68.81	44.79
Guajará-Mirim	RO	112	60.75	63.96	71.90	46.41
Cláudia	MT	113	60.75	60.34	71.11	50.81
São Felipe d'Oeste	RO	114	60.72	59.94	70.15	52.06
Cacoal	RO	115	60.69	62.19	64.80	55.09
Feliz Natal	MT	116	60.54	61.24	70.35	50.04
Porto Esperidião	MT	117	60.49	55.52	70.73	55.21
Humaitá	AM	118	60.48	65.15	69.45	46.83
Araguanã	MA	119	60.42	68.58	65.09	47.58
Loreto	MA	120	60.38	62.96	66.90	51.29
Pindorama do Tocantins	TO	121	60.36	61.04	68.46	51.57
Mâncio Lima	AC	122	60.35	61.78	72.43	46.83
Angico	TO	123	60.32	59.55	68.82	52.58
Santa Inês	MA	124	60.31	66.51	63.60	50.80
Juscimeira	MT	125	60.30	64.25	63.87	52.78
Araguaçu	TO	126	60.28	59.12	69.06	52.66
Colorado do Oeste	RO	127	60.27	64.58	61.89	54.35
Diamantino	MT	128	60.26	60.51	67.21	53.05
Santarém	PA	129	60.25	64.12	68.70	47.93
Salinópolis	PA	130	60.24	68.12	66.20	46.40
Espigão d'Oeste	RO	131	60.22	60.49	68.31	51.85
Nobres	MT	132	60.19	59.17	68.65	52.74
Novo Mundo	MT	133	60.18	54.29	75.39	50.86
Pedra Preta	MT	134	60.13	64.65	60.88	54.85
Pedreiras	MA	135	60.10	66.90	61.71	51.69
Torixoréu	MT	136	60.04	67.37	56.95	55.79
Poconé	MT	137	60.03	62.10	66.01	51.97
Taipas do Tocantins	TO	138	60.00	70.46	64.38	45.16
Ananindeua	PA	139	59.98	63.51	66.54	49.89
Cerejeiras	RO	140	59.97	61.26	68.77	49.87
Nova Lacerda	MT	141	59.95	60.58	68.73	50.55
Bernardo Sayão	TO	142	59.94	64.27	63.32	52.22

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Goianorte	TO	143	59.89	65.48	64.79	49.39
Crixás do Tocantins	TO	144	59.87	55.71	69.61	54.27
Santarém Novo	PA	145	59.85	67.96	66.62	44.97
Água Azul do Norte	PA	146	59.85	59.09	68.14	52.31
Rio Maria	PA	147	59.84	56.52	70.98	52.01
Dom Aquino	MT	148	59.83	64.29	61.50	53.69
Peixe	TO	149	59.79	62.70	66.61	50.05
Governador Luiz Rocha	MA	150	59.75	66.95	63.00	49.32
Tapurah	MT	151	59.72	70.88	62.28	46.02
Filadélfia	TO	152	59.72	58.59	69.45	51.11
Óbidos	PA	153	59.72	59.74	71.02	48.39
Castanhal	PA	154	59.71	63.92	64.23	50.98
Cacaulândia	RO	155	59.71	55.26	71.31	52.57
São José do Rio Claro	MT	156	59.69	63.56	63.58	51.94
Araguatins	TO	157	59.65	60.36	67.62	50.96
Araguainha	MT	158	59.63	66.01	55.90	56.98
Itacoatiara	AM	159	59.59	64.25	71.11	43.40
Brasilândia do Tocantins	TO	160	59.55	65.38	63.02	50.26
Lambari d'Oeste	MT	161	59.54	65.89	61.58	51.15
Ouro Preto do Oeste	RO	162	59.49	60.95	63.96	53.56
Alenquer	PA	163	59.47	59.41	71.23	47.78
Curuçá	PA	164	59.44	68.79	63.92	45.62
Ferreira Gomes	AP	165	59.43	60.57	72.28	45.43
Sorriso	MT	166	59.42	62.18	66.25	49.83
Anori	AM	167	59.40	62.47	65.96	49.76
Alta Floresta	MT	168	59.37	60.29	65.05	52.76
Nova Brasilândia	MT	169	59.33	60.79	63.62	53.59
Guimarães	MA	170	59.33	61.30	68.65	48.04
Quatipuru	PA	171	59.28	66.79	66.64	44.43
Itanhangá	MT	172	59.27	61.58	64.97	51.27
Canarana	MT	173	59.27	65.83	61.43	50.55
Miracema do Tocantins	TO	174	59.25	66.51	67.33	43.91
Pau d'Arco	TO	175	59.24	59.90	70.17	47.65
Tucuruí	PA	176	59.23	62.61	68.85	46.23
Pequizeiro	TO	177	59.23	59.99	66.98	50.71
Alto Alegre do Pindaré	MA	178	59.22	63.67	66.23	47.76
Teixeirópolis	RO	179	59.22	53.84	70.29	53.53

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Cocalinho	MT	180	59.21	63.44	62.11	52.08
Ipiranga do Norte	MT	181	59.19	69.89	57.13	50.57
Almeirim	PA	182	59.18	66.07	61.63	49.85
Ribeirãozinho	MT	183	59.17	68.60	59.47	49.45
Urucurituba	AM	184	59.17	65.72	69.07	42.71
Urupá	RO	185	59.15	60.96	65.54	50.96
Tupiratins	TO	186	59.15	65.28	60.82	51.36
Xinguara	PA	187	59.14	57.59	68.55	51.29
Açailândia	MA	188	59.06	62.91	64.86	49.40
São José do Povo	MT	189	59.05	63.76	57.51	55.90
Bacabal	MA	190	59.01	64.52	62.91	49.60
São Pedro dos Crentes	MA	191	59.00	57.35	69.68	49.97
Dueré	TO	192	58.98	62.88	63.07	51.00
Figueirópolis d'Oeste	MT	193	58.98	60.91	62.39	53.64
Acorizal	MT	194	58.97	64.93	61.72	50.27
Presidente Kennedy	TO	195	58.96	65.17	65.80	45.90
São Salvador do Tocantins	TO	196	58.94	59.89	68.84	48.11
Juruena	MT	197	58.91	59.10	70.00	47.64
Alvarães	AM	198	58.91	68.53	62.18	46.03
Rio dos Bois	TO	199	58.91	62.19	63.73	50.80
Tocantinópolis	TO	200	58.90	61.95	67.56	47.18
Augustinópolis	TO	201	58.85	60.06	66.83	49.65
Colares	PA	202	58.84	61.34	68.07	47.11
Porto Franco	MA	203	58.84	61.47	65.75	49.29
Palmeirópolis	TO	204	58.81	65.65	68.90	41.88
Mãe do Rio	PA	205	58.80	64.54	61.45	50.42
Juara	MT	206	58.79	61.39	63.95	51.04
Conquista d'Oeste	MT	207	58.79	69.21	56.43	50.74
Araguaiana	MT	208	58.78	69.09	57.72	49.53
Governador Eugênio Barros	MA	209	58.78	67.26	61.55	47.51
Vale do Paraíso	RO	210	58.75	60.46	61.81	53.99
São Geraldo do Araguaia	PA	211	58.75	58.05	69.68	48.51
Barcarena	PA	212	58.74	64.75	65.64	45.83
Ponta de Pedras	PA	213	58.73	65.44	62.44	48.31
Porto Alegre do Tocantins	TO	214	58.71	61.54	69.26	45.34
Dom Pedro	MA	215	58.71	64.28	59.39	52.46
Presidente Médici	MA	216	58.71	64.32	63.93	47.87

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Imperatriz	MA	217	58.70	64.34	61.89	49.86
São Roberto	MA	218	58.67	60.16	62.05	53.81
Santa Luzia d'Oeste	RO	219	58.67	64.86	58.68	52.47
Axixá	MA	220	58.66	60.90	66.54	48.53
Nova Timboteua	PA	221	58.66	63.65	64.27	48.05
Estreito	MA	222	58.65	62.42	64.33	49.20
Ariquemes	RO	223	58.65	57.70	66.58	51.67
Nova União	RO	224	58.65	56.15	67.60	52.19
Marcelândia	MT	225	58.65	60.36	68.37	47.21
Aragominas	TO	226	58.62	59.15	66.33	50.39
Barão de Melgaço	MT	227	58.62	57.88	64.91	53.06
Riachinho	TO	228	58.62	58.73	61.57	55.55
Lima Campos	MA	229	58.61	64.76	62.51	48.57
Capanema	PA	230	58.58	66.77	59.29	49.68
Campos de Júlio	MT	231	58.55	61.49	64.72	49.45
Bom Jesus do Tocantins	PA	232	58.55	59.88	68.04	47.73
Governador Archer	MA	233	58.54	60.24	63.20	52.19
Presidente Figueiredo	AM	234	58.54	61.91	71.35	42.35
Vitória do Jari	AP	235	58.51	71.12	60.30	44.12
Alto Alegre dos Parecis	RO	236	58.51	56.19	69.22	50.11
Lago dos Rodrigues	MA	237	58.48	61.72	64.50	49.23
Colmeia	TO	238	58.48	60.48	62.74	52.22
Benedito Leite	MA	239	58.48	69.82	55.66	49.95
Igarapé Grande	MA	240	58.47	61.38	62.69	51.35
Aurora do Tocantins	TO	241	58.47	62.94	65.47	47.00
Salto do Céu	MT	242	58.46	62.69	60.40	52.30
Caapiranga	AM	243	58.46	64.83	62.64	47.92
Maracanã	PA	244	58.44	59.01	68.79	47.53
Jaú do Tocantins	TO	245	58.41	52.93	71.18	51.12
Terra Alta	PA	246	58.37	56.93	71.13	47.04
Porto Estrela	MT	247	58.34	68.68	56.21	50.12
Parecis	RO	248	58.33	52.45	71.98	50.54
Lago do Junco	MA	249	58.31	61.37	65.61	47.94
Palmeiras do Tocantins	TO	250	58.30	56.44	70.11	48.35
Trizidela do Vale	MA	251	58.30	65.93	62.96	46.01
Jatobá	MA	252	58.30	71.90	53.94	49.06
Monte Negro	RO	253	58.28	56.41	66.91	51.53

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Bom Lugar	MA	254	58.28	57.78	66.57	50.47
Juruti	PA	255	58.25	59.29	65.24	50.21
Nova Monte Verde	MT	256	58.24	53.57	68.64	52.51
Buriti do Tocantins	TO	257	58.24	67.03	60.20	47.48
Marituba	PA	258	58.24	61.71	64.62	48.37
Jaru	RO	259	58.22	55.42	66.59	52.66
Capixaba	AC	260	58.22	61.62	66.04	47.01
Governador Edison Lobão	MA	261	58.21	64.27	64.14	46.23
Nova Xavantina	MT	262	58.19	68.48	52.73	53.37
Cariri do Tocantins	TO	263	58.15	55.64	65.27	53.53
São Pedro da Cipa	MT	264	58.14	65.03	60.91	48.49
Pium	TO	265	58.13	62.98	69.55	41.84
Guajará	AM	266	58.12	58.87	67.76	47.73
Luzinópolis	TO	267	58.10	58.96	63.94	51.42
Itapecuru Mirim	MA	268	58.10	63.60	61.67	49.02
Juína	MT	269	58.08	56.15	71.64	46.45
Cotriguaçu	MT	270	58.04	52.64	71.66	49.82
Nova Brasilândia d'Oeste	RO	271	58.04	53.19	68.71	52.22
Augusto Corrêa	PA	272	58.03	62.08	64.99	47.03
Rondon do Pará	PA	273	58.03	57.81	67.67	48.62
Nhamundá	AM	274	58.03	64.14	62.25	47.69
Miranorte	TO	275	58.00	61.70	64.21	48.09
Cachoeira do Arari	PA	276	57.98	65.79	60.90	47.27
Nortelândia	MT	277	57.98	60.13	63.19	50.63
Tasso Fragoso	MA	278	57.97	54.79	71.86	47.25
Benevides	PA	279	57.94	63.90	63.19	46.72
Vila Rica	MT	280	57.93	60.94	64.49	48.35
Taguatinga	TO	281	57.89	62.58	63.12	47.97
Paranatinga	MT	282	57.89	61.02	64.36	48.29
Novo Santo Antônio	MT	283	57.88	63.21	66.88	43.56
Laranjal do Jari	AP	284	57.87	69.53	60.60	43.49
Paraibano	MA	285	57.84	56.34	62.56	54.63
Santa Rita do Trivelato	MT	286	57.83	56.12	66.06	51.30
Beruri	AM	287	57.81	65.54	65.80	42.07
União do Sul	MT	288	57.77	51.71	70.38	51.24
Novo São Joaquim	MT	289	57.77	62.89	59.30	51.11
Santa Bárbara do Pará	PA	290	57.75	59.31	65.49	48.46

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Tupirama	TO	291	57.75	54.66	66.05	52.53
Aurora do Pará	PA	292	57.73	57.51	65.48	50.21
Gonçalves Dias	MA	293	57.73	65.60	57.15	50.45
Satubinha	MA	294	57.71	60.02	64.60	48.51
Araguanã	TO	295	57.66	63.09	67.39	42.51
Campo Novo de Rondônia	RO	296	57.66	58.10	66.71	48.17
Monte Alegre	PA	297	57.66	62.06	64.45	46.46
Breu Branco	PA	298	57.64	56.79	68.64	47.49
Sucupira do Norte	MA	299	57.63	57.63	65.82	49.43
Dianópolis	TO	300	57.62	61.95	64.68	46.24
São José do Xingu	MT	301	57.62	63.30	65.99	43.56
Mirante da Serra	RO	302	57.61	55.19	67.08	50.57
Babaçulândia	TO	303	57.60	55.73	68.07	49.02
Terra Nova do Norte	MT	304	57.60	55.09	64.23	53.47
Soure	PA	305	57.56	72.62	54.51	45.55
Sapucaia	PA	306	57.52	59.06	62.87	50.63
Santa Terezinha do Tocantins	TO	307	57.52	63.63	63.69	45.23
Xambioá	TO	308	57.51	63.23	61.91	47.40
Cantanhede	MA	309	57.49	60.35	62.63	49.48
Itapiranga	AM	310	57.49	60.80	68.47	43.19
Lajeado	TO	311	57.47	63.81	64.70	43.91
Peixoto de Azevedo	MT	312	57.46	57.14	67.16	48.07
Anamã	AM	313	57.44	63.94	61.95	46.42
Novo Horizonte do Oeste	RO	314	57.43	61.18	58.93	52.18
Praia Norte	TO	315	57.41	56.74	68.83	46.66
Rodrigues Alves	AC	316	57.40	61.81	64.78	45.61
Poxoréo	MT	317	57.38	55.40	65.34	51.41
Piraquê	TO	318	57.38	52.68	69.75	49.70
Chupinguaia	RO	319	57.36	61.67	63.51	46.90
Nova Guarita	MT	320	57.35	58.25	60.92	52.88
Rondolândia	MT	321	57.31	65.05	57.20	49.68
Candeias do Jamari	RO	322	57.30	58.14	70.28	43.47
Montes Altos	MA	323	57.28	58.33	67.42	46.09
Ponte Alta do Bom Jesus	TO	324	57.27	56.18	67.50	48.14
Araguacema	TO	325	57.27	60.96	64.21	46.63
Faro	PA	326	57.26	66.81	59.40	45.58
Iranduba	AM	327	57.26	60.85	67.02	43.90

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Silves	AM	328	57.24	63.23	68.74	39.76
Ourilândia do Norte	PA	329	57.23	62.56	64.33	44.79
São Sebastião do Uatumã	AM	330	57.20	59.12	66.78	45.69
Cururupu	MA	331	57.18	52.92	69.71	48.90
Sampaio	TO	332	57.13	70.58	57.19	43.63
Rio Crespo	RO	333	57.13	52.43	69.71	49.24
Castanheiras	RO	334	57.12	52.78	67.15	51.44
Joselândia	MA	335	57.10	59.94	59.26	52.09
Buritirana	MA	336	57.09	61.03	64.55	45.68
Codajás	AM	337	57.09	66.81	55.62	48.84
São Luís Gonzaga do Maranhão	MA	338	57.09	62.82	58.38	50.06
Olinda Nova do Maranhão	MA	339	57.06	57.11	67.01	47.07
Itaguatins	TO	340	57.04	61.04	61.59	48.50
Urucará	AM	341	57.04	64.50	61.16	45.47
Raposa	MA	342	57.03	62.05	64.26	44.77
Ribamar Fiquene	MA	343	57.02	59.61	63.93	47.52
Esperantina	TO	344	57.02	56.00	66.55	48.50
São Caetano de Odivelas	PA	345	57.01	59.90	65.39	45.74
Marabá	PA	346	57.00	59.18	64.57	47.26
Arapoema	TO	347	56.98	62.44	60.16	48.34
Carolina	MA	348	56.94	54.91	68.01	47.89
Miranda do Norte	MA	349	56.94	56.56	63.72	50.53
Santa Rosa do Tocantins	TO	350	56.93	52.55	70.05	48.18
São Bento	MA	351	56.91	64.80	57.53	48.41
Cruzeiro do Sul	AC	352	56.91	59.64	68.19	42.91
Vigia	PA	353	56.91	56.95	64.95	48.83
São Francisco do Pará	PA	354	56.90	59.07	62.71	48.91
São Félix do Araguaia	MT	355	56.90	65.33	56.50	48.87
Nova Marilândia	MT	356	56.89	58.74	66.07	45.87
Vale do Anari	RO	357	56.88	47.91	72.50	50.22
Santa Tereza do Tocantins	TO	358	56.86	54.85	67.23	48.51
São Francisco do Guaporé	RO	359	56.86	54.82	69.39	46.38
Manacapuru	AM	360	56.83	61.55	68.22	40.72
Maranhãozinho	MA	361	56.82	69.12	53.76	47.58
Fortaleza dos Nogueiras	MA	362	56.82	57.98	64.42	48.06
Codó	MA	363	56.82	59.55	62.02	48.89
Cutias	AP	364	56.79	71.10	53.67	45.61

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Santo Antônio do Tauá	PA	365	56.78	62.54	60.81	47.00
Curuá	PA	366	56.77	66.26	57.60	46.46
Ministro Andreazza	RO	367	56.76	54.32	63.26	52.71
Curvelândia	MT	368	56.76	58.08	61.55	50.65
Querência	MT	369	56.76	57.96	60.16	52.15
Maués	AM	370	56.75	57.78	66.54	45.94
Inhangapi	PA	371	56.75	55.61	66.18	48.45
Governador Jorge Teixeira	RO	372	56.74	55.51	64.18	50.55
São Félix de Balsas	MA	373	56.74	51.78	67.69	50.75
Tuntum	MA	374	56.73	63.02	58.90	48.26
Tailândia	PA	375	56.72	56.42	66.04	47.71
Aliança do Tocantins	TO	376	56.72	57.14	61.82	51.20
Tomé-Açu	PA	377	56.70	58.27	64.20	47.63
Tabaporã	MT	378	56.69	59.95	58.71	51.42
Carlinda	MT	379	56.66	54.51	66.37	49.10
Baião	PA	380	56.63	63.02	59.92	46.95
Peri Mirim	MA	381	56.62	53.32	68.12	48.43
Dom Eliseu	PA	382	56.60	59.43	60.50	49.86
Mucajaí	RR	383	56.57	55.92	67.43	46.34
Bandeirantes do Tocantins	TO	384	56.54	53.89	70.34	45.39
Canaã dos Carajás	PA	385	56.54	59.46	64.84	45.32
Porto Alegre do Norte	MT	386	56.53	56.34	61.55	51.69
Muricilândia	TO	387	56.51	62.25	67.42	39.86
Alcântara	MA	388	56.51	60.39	62.95	46.21
Campestre do Maranhão	MA	389	56.51	57.66	63.67	48.21
Itinga do Maranhão	MA	390	56.51	56.63	65.42	47.48
Santa Isabel do Pará	PA	391	56.51	61.27	59.45	48.80
Careiro da Várzea	AM	392	56.48	57.82	62.93	48.70
Alto Paraíso	RO	393	56.48	51.00	68.86	49.57
Santa Rita	MA	394	56.48	57.14	65.73	46.56
Abel Figueiredo	PA	395	56.47	59.07	59.64	50.71
Manicoré	AM	396	56.46	56.54	69.12	43.72
Rosário Oeste	MT	397	56.46	58.24	60.17	50.96
Santo Afonso	MT	398	56.45	58.18	59.28	51.91
Itaúba	MT	399	56.45	57.31	58.43	53.60
Cajari	MA	400	56.44	56.17	65.13	48.01
Santa Cruz do Xingu	MT	401	56.43	69.19	56.15	43.96

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Rorainópolis	RR	402	56.41	55.73	69.46	44.05
Olho d'Água das Cunhãs	MA	403	56.39	59.77	60.67	48.73
São Raimundo do Doca Bezerra	MA	404	56.38	58.70	64.11	46.34
Serra Nova Dourada	MT	405	56.37	62.62	56.81	49.67
Canabrava do Norte	MT	406	56.37	58.53	63.31	47.26
Feira Nova do Maranhão	MA	407	56.36	51.79	68.41	48.88
Bonito	PA	408	56.33	56.39	65.23	47.38
Fortaleza do Tabocão	TO	409	56.33	55.78	66.63	46.59
Carrasco Bonito	TO	410	56.32	70.74	55.17	43.03
Chapada dos Guimarães	MT	411	56.32	62.55	56.81	49.58
Tucumã	PA	412	56.30	62.08	61.72	45.12
Novo Acordo	TO	413	56.28	62.32	64.44	42.08
Brejinho de Nazaré	TO	414	56.28	56.85	63.56	48.42
Nova Mamoré	RO	415	56.24	53.69	65.74	49.30
Vale de São Domingos	MT	416	56.21	67.22	51.46	49.94
Curionópolis	PA	417	56.20	50.63	69.74	48.22
Salvaterra	PA	418	56.18	62.33	61.34	44.86
Ipixuna do Pará	PA	419	56.15	58.53	59.60	50.31
São Raimundo das Mangabeiras	MA	420	56.15	55.43	64.71	48.29
Cujubim	RO	421	56.12	56.82	67.03	44.52
Novo Jardim	TO	422	56.11	65.71	65.64	36.97
Alvorada	TO	423	56.11	53.33	65.77	49.22
Novo Horizonte do Norte	MT	424	56.09	62.16	51.12	55.01
Abreulândia	TO	425	56.03	60.23	61.50	46.37
Vila Bela da Santíssima Trindade	MT	426	56.03	55.99	60.73	51.37
Theobroma	RO	427	56.00	54.03	62.78	51.19
Sena Madureira	AC	428	55.99	59.66	66.53	41.77
Conceição do Araguaia	PA	429	55.98	59.05	61.71	47.19
Nazaré	TO	430	55.96	61.85	57.45	48.59
Sandolândia	TO	431	55.96	57.00	63.82	47.06
Coroatá	MA	432	55.93	56.16	63.55	48.08
Itamarati	AM	433	55.91	60.34	57.87	49.52
Nova Bandeirantes	MT	434	55.90	53.98	62.39	51.34
Cachoeirinha	TO	435	55.89	48.51	70.87	48.29
Iracema	RR	436	55.85	59.94	65.91	41.69
Igarapé-Açu	PA	437	55.82	59.39	60.02	48.04
Mateiros	TO	438	55.81	62.84	61.51	43.10

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Marianópolis do Tocantins	TO	439	55.78	54.79	63.30	49.26
Irituia	PA	440	55.76	57.89	61.17	48.23
Almas	TO	441	55.75	55.46	70.77	41.03
Rosário	MA	442	55.71	55.14	66.18	45.83
Juarina	TO	443	55.70	57.86	62.87	46.38
Timbiras	MA	444	55.69	53.66	66.75	46.67
Mocajuba	PA	445	55.66	61.78	59.01	46.18
São João da Ponta	PA	446	55.64	62.46	63.26	41.18
Bacurituba	MA	447	55.63	55.01	67.06	44.82
Rio Preto da Eva	AM	448	55.62	56.39	64.32	46.17
Bacabeira	MA	449	55.62	59.55	61.88	45.43
Balsas	MA	450	55.60	62.78	54.75	49.27
Nova Olinda do Maranhão	MA	451	55.58	51.19	68.40	47.15
Porto Walter	AC	452	55.58	53.76	70.67	42.31
São João de Pirabas	PA	453	55.57	58.29	62.98	45.44
Abaetetuba	PA	454	55.55	59.13	59.15	48.38
São Miguel do Tocantins	TO	455	55.54	57.72	59.52	49.38
Talismã	TO	456	55.53	50.26	66.59	49.72
Santa Maria do Tocantins	TO	457	55.51	63.02	56.82	46.70
Natividade	TO	458	55.50	58.10	60.76	47.64
Pindaré-Mirim	MA	459	55.48	59.05	61.05	46.36
Boa Vista do Ramos	AM	460	55.48	60.59	65.64	40.20
Cametá	PA	461	55.46	57.22	61.78	47.39
Vitória do Mearim	MA	462	55.43	62.11	57.23	46.95
Seringueiras	RO	463	55.43	54.91	64.92	46.46
Goianésia do Pará	PA	464	55.43	54.65	64.02	47.61
Bacuri	MA	465	55.41	62.14	59.60	44.48
Maracaçumé	MA	466	55.38	63.65	56.63	45.87
Gurupá	PA	467	55.38	57.43	60.94	47.77
Paragominas	PA	468	55.38	59.61	58.94	47.59
Redenção	PA	469	55.38	50.04	66.39	49.70
São Miguel do Guaporé	RO	470	55.37	53.81	60.58	51.72
Jacundá	PA	471	55.37	56.98	62.49	46.64
Santo Antônio dos Lopes	MA	472	55.36	59.74	57.58	48.77
Epitaciolândia	AC	473	55.34	66.37	58.91	40.75
Divinópolis do Tocantins	TO	474	55.33	54.16	63.94	47.88
Peixe-Boi	PA	475	55.32	53.04	65.14	47.77

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Sítio Novo do Tocantins	TO	476	55.31	57.02	60.93	47.97
Chaves	PA	477	55.27	51.04	67.70	47.07
Pacaraima	RR	478	55.27	63.59	63.09	39.12
Vitorino Freire	MA	479	55.23	56.93	60.82	47.94
Maraã	AM	480	55.23	67.25	58.14	40.30
Axixá do Tocantins	TO	481	55.22	61.19	59.15	45.33
Aripuanã	MT	482	55.21	59.16	57.33	49.15
Itaubal	AP	483	55.18	62.00	60.37	43.17
Caracaraí	RR	484	55.18	61.72	68.80	35.02
São Domingos do Maranhão	MA	485	55.17	60.78	58.46	46.26
Nova Olinda	TO	486	55.14	51.15	68.71	45.55
Serrano do Maranhão	MA	487	55.13	52.50	66.91	45.99
Anajatuba	MA	488	55.12	54.37	64.97	46.02
Nina Rodrigues	MA	489	55.09	62.87	56.21	46.20
Primavera	PA	490	55.08	63.21	57.59	44.43
Arraias	TO	491	55.07	56.75	57.25	51.21
Paranaíta	MT	492	55.06	55.37	57.85	51.97
Davinópolis	MA	493	55.05	58.82	60.19	46.15
Bom Jesus do Tocantins	TO	494	55.05	58.23	63.64	43.30
Lajeado Novo	MA	495	55.04	48.47	68.61	48.06
Marapanim	PA	496	55.04	59.92	58.87	46.32
Benjamin Constant	AM	497	55.01	65.29	57.91	41.81
Oiapoque	AP	498	54.95	63.12	59.46	42.27
Altamira do Maranhão	MA	499	54.93	60.44	55.06	49.30
Oeiras do Pará	PA	500	54.92	56.66	62.91	45.20
Lizarda	TO	501	54.92	62.78	55.40	46.59
Santo Antônio do Içá	AM	502	54.91	65.40	54.12	45.21
Palestina do Pará	PA	503	54.90	51.53	63.61	49.57
Carauari	AM	504	54.89	62.18	57.49	45.01
Caroebe	RR	505	54.89	60.05	58.45	46.16
Carutapera	MA	506	54.88	60.98	59.25	44.41
Governador Newton Bello	MA	507	54.87	57.19	60.41	47.02
Sambaíba	MA	508	54.83	59.47	57.25	47.79
Maurilândia do Tocantins	TO	509	54.83	53.77	62.10	48.61
Itapuã do Oeste	RO	510	54.79	49.80	67.40	47.18
Amaturá	AM	511	54.74	65.25	56.69	42.27
Rio Sono	TO	512	54.74	54.86	64.51	44.83

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Darcinópolis	TO	513	54.71	59.33	66.10	38.71
Jenipapo dos Vieiras	MA	514	54.69	58.24	58.22	47.61
Altamira	PA	515	54.67	51.97	74.17	37.88
Barreirinha	AM	516	54.67	60.83	60.19	42.98
Brasnorte	MT	517	54.66	57.40	59.95	46.64
Japurá	AM	518	54.62	64.65	54.14	45.07
João Lisboa	MA	519	54.61	54.70	59.65	49.49
Ponte Alta do Tocantins	TO	520	54.61	55.18	63.41	45.24
Santo Antônio do Leverger	MT	521	54.60	48.11	63.99	51.69
Bequimão	MA	522	54.57	53.20	63.32	47.19
Nossa Senhora do Livramento	MT	523	54.55	54.11	61.29	48.26
Porto Grande	AP	524	54.54	57.26	68.28	38.07
Novo Airão	AM	525	54.53	59.62	59.78	44.20
Aveiro	PA	526	54.52	51.77	70.75	41.02
Moju	PA	527	54.51	51.86	62.74	48.93
Confresa	MT	528	54.51	58.24	56.99	48.30
Capitão Poço	PA	529	54.49	54.25	60.67	48.56
Wanderlândia	TO	530	54.49	53.33	63.33	46.81
Santa Maria do Pará	PA	531	54.48	57.99	56.02	49.44
Manaquiri	AM	532	54.47	55.76	61.51	46.14
Igarapé do Meio	MA	533	54.46	61.32	59.16	42.89
Pinheiro	MA	534	54.43	57.10	56.49	49.71
Chapada da Natividade	TO	535	54.42	47.58	68.51	47.18
Curralinho	PA	536	54.42	56.10	59.99	47.17
São Bento do Tocantins	TO	537	54.40	56.85	59.73	46.62
Canutama	AM	538	54.39	60.21	55.89	47.08
Tracuateua	PA	539	54.38	50.94	66.49	45.71
Borba	AM	540	54.38	60.37	59.49	43.29
São Domingos do Araguaia	PA	541	54.38	55.74	62.53	44.87
São João Batista	MA	542	54.38	51.67	64.69	46.77
Santa Luzia	MA	543	54.36	55.97	58.39	48.71
Apicum-Açu	MA	544	54.33	50.30	64.14	48.57
Santa Terezinha	MT	545	54.33	62.91	54.40	45.69
Pedra Branca do Amapari	AP	546	54.33	56.54	64.86	41.59
Xapuri	AC	547	54.32	62.05	62.12	38.80
Itapiratins	TO	548	54.32	55.11	56.77	51.08
Monte do Carmo	TO	549	54.30	55.20	58.07	49.64

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Tonantins	AM	550	54.27	60.57	55.18	47.08
Senador Guiomard	AC	551	54.27	54.98	60.65	47.18
Coari	AM	552	54.27	59.46	56.43	46.92
São Félix do Xingu	PA	553	54.24	53.27	58.29	51.17
Bujari	AC	554	54.21	54.90	59.38	48.36
Santana do Araguaia	PA	555	54.19	56.28	56.30	49.99
Placas	PA	556	54.16	49.67	64.70	48.12
São José dos Basílios	MA	557	54.15	57.15	57.09	48.20
São Miguel do Guamá	PA	558	54.14	56.11	58.74	47.57
Caseara	TO	559	54.13	59.57	53.04	49.76
Pastos Bons	MA	560	54.11	62.30	53.47	46.56
Santa Luzia do Paruá	MA	561	54.09	65.62	49.97	46.68
Mirinzal	MA	562	54.09	55.48	60.76	46.02
Parintins	AM	563	54.08	60.35	61.32	40.57
Vargem Grande	MA	564	54.06	49.68	64.63	47.86
São João do Caru	MA	565	54.05	54.38	64.74	43.04
Brasileia	AC	566	54.04	62.38	60.12	39.61
Alto Parnaíba	MA	567	54.02	58.05	55.26	48.75
Lagoa do Tocantins	TO	568	54.02	61.47	57.84	42.75
Icatu	MA	569	54.02	52.36	62.19	47.50
Muaná	PA	570	54.00	58.85	57.27	45.89
Breves	PA	571	53.98	54.49	57.19	50.25
Lago da Pedra	MA	572	53.96	57.19	54.06	50.64
Corumbiara	RO	573	53.94	54.10	56.05	51.67
Amapá	AP	574	53.94	65.18	57.61	39.03
Senador Alexandre Costa	MA	575	53.93	54.40	60.90	46.50
Igarapé-Miri	PA	576	53.91	49.89	64.09	47.75
Senador José Porfírio	PA	577	53.89	60.00	56.61	45.07
Bujaru	PA	578	53.89	49.06	64.10	48.50
Matões do Norte	MA	579	53.88	49.57	63.64	48.42
Tefé	AM	580	53.86	66.12	56.52	38.95
Centro Novo do Maranhão	MA	581	53.86	51.80	63.68	46.10
Careiro	AM	582	53.82	58.30	60.19	42.98
Formosa da Serra Negra	MA	583	53.82	50.08	63.97	47.43
Uruará	PA	584	53.82	47.96	65.35	48.15
Costa Marques	RO	585	53.82	53.18	61.10	47.17
Santa Rita do Tocantins	TO	586	53.82	46.57	62.89	51.99

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IPS AMAZÔNIA AND DIMENSIONS OF AMAZON MUNICIPALITIES IN 2018

Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Barra do Corda	MA	587	53.77	54.46	63.69	43.15
Tartarugalzinho	AP	588	53.75	54.29	64.33	42.62
Nova Ubiratã	MT	589	53.74	59.20	54.10	47.94
Bela Vista do Maranhão	MA	590	53.74	64.00	53.61	43.61
Porto de Moz	PA	591	53.71	55.69	58.17	47.28
São Francisco do Brejão	MA	592	53.71	62.55	50.12	48.46
Amapá do Maranhão	MA	593	53.70	57.62	59.26	44.23
Esperantinópolis	MA	594	53.68	54.70	55.08	51.25
Itaipava do Grajaú	MA	595	53.67	53.20	62.04	45.78
São Sebastião da Boa Vista	PA	596	53.65	58.44	55.12	47.38
Acrelândia	AC	597	53.60	56.67	57.40	46.74
Melgaço	PA	598	53.59	55.16	55.35	50.27
Bom Jardim	MA	599	53.58	57.66	54.62	48.47
Ipixuna	AM	600	53.58	59.54	51.92	49.27
Tesouro	MT	601	53.56	51.83	54.10	54.77
Tarauacá	AC	602	53.55	53.65	62.69	44.33
São João do Paraíso	MA	603	53.54	57.46	55.65	47.51
Godofredo Viana	MA	604	53.54	57.89	56.60	46.12
Prainha	PA	605	53.53	54.10	59.74	46.76
São João do Araguaia	PA	606	53.43	46.57	66.37	47.35
Concórdia do Pará	PA	607	53.43	55.02	55.90	49.37
General Carneiro	MT	608	53.41	51.85	70.59	37.81
Bonfim	RR	609	53.37	53.81	66.32	39.99
Chapada de Areia	TO	610	53.36	54.47	55.69	49.92
Presidente Dutra	MA	611	53.36	52.19	59.15	48.74
Zé Doca	MA	612	53.35	53.73	62.94	43.37
Autazes	AM	613	53.33	58.83	58.97	42.18
Buriticupu	MA	614	53.32	54.70	59.52	45.73
São Pedro da Água Branca	MA	615	53.30	58.57	54.82	46.49
Santa Maria das Barreiras	PA	616	53.28	57.99	53.67	48.19
Pracuúba	AP	617	53.24	59.45	58.46	41.81
Normandia	RR	618	53.22	53.43	71.08	35.15
Limoeiro do Ajuru	PA	619	53.22	58.21	54.12	47.33
Anajás	PA	620	53.18	52.03	58.76	48.74
Campos Lindos	TO	621	53.16	54.65	62.86	41.99
Ribeirão Cascalheira	MT	622	53.16	55.21	59.97	44.28
Tapauá	AM	623	53.13	64.66	53.70	41.03

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Barrolândia	TO	624	53.12	53.02	58.87	47.48
Calçoene	AP	625	53.12	58.63	59.98	40.75
Silvanópolis	TO	626	53.11	58.73	55.12	45.47
Poção de Pedras	MA	627	53.10	61.11	49.38	48.82
São João do Soter	MA	628	53.09	49.60	60.95	48.73
Alto Alegre do Maranhão	MA	629	53.09	57.78	54.63	46.86
Marechal Thaumaturgo	AC	630	53.09	51.28	66.17	41.81
Ulianópolis	PA	631	53.07	53.53	59.50	46.19
Reserva do Cabaçal	MT	632	53.03	67.13	51.04	40.93
Colniza	MT	633	53.03	51.00	61.87	46.21
Palmeirândia	MA	634	53.03	54.92	64.03	40.14
Jangada	MT	635	53.01	47.08	60.26	51.70
Cidelândia	MA	636	52.98	61.23	49.64	48.07
Viseu	PA	637	52.98	58.44	55.07	45.44
Santa Luzia do Pará	PA	638	52.96	52.88	55.63	50.38
Dois Irmãos do Tocantins	TO	639	52.91	51.36	65.05	42.32
Gaúcha do Norte	MT	640	52.90	53.18	54.72	50.81
Senador La Rocque	MA	641	52.90	61.05	47.80	49.84
Bannach	PA	642	52.88	58.62	53.58	46.44
Cândido Mendes	MA	643	52.85	55.31	57.57	45.66
Boa Vista do Gurupi	MA	644	52.84	58.47	56.96	43.08
Plácido de Castro	AC	645	52.83	57.55	64.17	36.78
Piçarra	PA	646	52.79	47.24	60.36	50.79
Cantá	RR	647	52.75	46.85	68.00	43.41
Paranã	TO	648	52.69	52.95	55.13	49.99
Uarini	AM	649	52.69	64.26	53.45	40.35
Novo Repartimento	PA	650	52.69	49.19	61.26	47.62
Mazagão	AP	651	52.67	57.07	57.15	43.79
Conceição do Tocantins	TO	652	52.65	54.80	57.47	45.69
Bom Jesus das Selvas	MA	653	52.65	56.10	55.08	46.78
Turiaçu	MA	654	52.63	51.91	62.06	43.91
Pirapemas	MA	655	52.53	54.97	59.98	42.63
Porto Acre	AC	656	52.51	54.31	55.42	47.80
Novo Progresso	PA	657	52.51	52.10	59.38	46.05
Pio XII	MA	658	52.49	56.13	50.83	50.50
Central do Maranhão	MA	659	52.49	45.25	65.96	46.24
Bagre	PA	660	52.49	53.70	57.90	45.85

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Fernando Falcão	MA	661	52.48	53.49	60.93	43.04
Aparecida do Rio Negro	TO	662	52.44	52.83	60.47	44.02
Buriti Bravo	MA	663	52.43	57.08	51.98	48.22
Ourém	PA	664	52.41	56.31	54.97	45.93
Boca do Acre	AM	665	52.40	57.47	54.44	45.29
Tocantínia	TO	666	52.38	51.72	63.76	41.65
Machadinho d'Oeste	RO	667	52.37	52.69	56.37	48.06
Presidente Juscelino	MA	668	52.34	57.79	52.92	46.31
Pedro do Rosário	MA	669	52.33	54.20	62.50	40.29
Buritis	RO	670	52.32	48.33	60.83	47.81
Sítio Novo	MA	671	52.30	46.87	59.37	50.64
Eldorado dos Carajás	PA	672	52.26	47.30	62.46	47.03
Nova Iorque	MA	673	52.25	57.02	48.31	51.40
Tabatinga	AM	674	52.19	63.31	57.89	35.36
Nova Ipixuna	PA	675	52.18	48.02	61.30	47.23
Bragança	PA	676	52.16	58.02	52.29	46.17
Apuí	AM	677	52.15	52.08	57.16	47.22
Juruá	AM	678	52.10	62.61	54.73	38.97
Lago Verde	MA	679	52.10	53.58	58.84	43.89
Itaituba	PA	680	52.08	54.33	56.63	45.27
Viana	MA	681	52.07	54.33	59.33	42.56
Marajá do Sena	MA	682	52.06	46.34	62.35	47.47
Cajapió	MA	683	52.00	54.27	53.10	48.64
Couto de Magalhães	TO	684	52.00	57.61	55.79	42.60
Rurópolis	PA	685	52.00	48.81	56.12	51.06
Castanheira	MT	686	51.98	48.35	57.74	49.86
Nova Colinas	MA	687	51.98	46.95	61.77	47.24
Manoel Urbano	AC	688	51.98	53.88	59.96	42.11
Riachão	MA	689	51.96	58.64	49.95	47.28
Trairão	PA	690	51.94	44.61	66.69	44.54
Brejo Grande do Araguaia	PA	691	51.89	54.39	53.32	47.98
Assis Brasil	AC	692	51.88	61.93	56.34	37.36
Medicilândia	PA	693	51.88	48.00	58.15	49.48
Paulo Ramos	MA	694	51.87	53.13	52.59	49.89
São Mateus do Maranhão	MA	695	51.86	53.12	54.26	48.20
Palmeirante	TO	696	51.85	46.64	67.00	41.91
Governador Nunes Freire	MA	697	51.80	59.06	52.72	43.61

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Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
Pau d'Arco	PA	698	51.78	47.92	60.80	46.64
Pugmil	TO	699	51.76	53.84	63.87	37.58
Graça Aranha	MA	700	51.76	55.14	49.29	50.84
Lagoa da Confusão	TO	701	51.76	52.62	56.85	45.80
Brasil Novo	PA	702	51.69	47.23	59.03	48.80
Conceição do Lago-Açu	MA	703	51.66	51.48	60.22	43.30
Fortuna	MA	704	51.62	54.99	47.83	52.05
Nova Olinda do Norte	AM	705	51.61	54.04	57.29	43.51
Grajaú	MA	706	51.54	55.69	55.10	43.84
São Vicente Ferrer	MA	707	51.52	49.61	57.85	47.09
Floresta do Araguaia	PA	708	51.46	43.82	63.98	46.58
São Domingos do Capim	PA	709	51.46	56.27	52.54	45.57
Presidente Sarney	MA	710	51.43	50.50	57.89	45.90
Novo Aripuanã	AM	711	51.43	52.14	55.42	46.72
Vila Nova dos Martírios	MA	712	51.37	54.91	55.06	44.16
Afuá	PA	713	51.36	53.22	52.91	47.95
Fonte Boa	AM	714	51.36	54.51	54.80	44.77
Pauini	AM	715	51.34	56.54	51.67	45.80
Morros	MA	716	51.23	55.04	52.13	46.53
Cachoeira do Piriá	PA	717	51.23	44.13	59.94	49.61
Centro do Guilherme	MA	718	51.10	57.66	51.51	44.14
Colinas	MA	719	51.04	49.13	57.52	46.49
São Paulo de Olivença	AM	720	50.96	51.37	56.80	44.73
Barra do Ouro	TO	721	50.93	50.69	61.63	40.47
Vitória do Xingu	PA	722	50.91	50.77	57.26	44.71
Capinzal do Norte	MA	723	50.81	55.73	46.84	49.86
Luís Domingues	MA	724	50.80	58.85	53.90	39.64
Goiatins	TO	725	50.79	49.00	62.32	41.05
Monção	MA	726	50.77	52.15	54.72	45.43
Santa Helena	MA	727	50.68	49.51	56.17	46.35
Presidente Vargas	MA	728	50.67	49.70	55.02	47.29
Turilândia	MA	729	50.61	51.29	54.24	46.31
Arame	MA	730	50.59	56.03	46.51	49.24
Envira	AM	731	50.56	52.40	53.78	45.49
Nova Nazaré	MT	732	50.46	43.72	60.89	46.78
Centenário	TO	733	50.44	49.16	53.35	48.81
Brejo de Areia	MA	734	50.32	49.46	55.71	45.80

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IPS AMAZÔNIA AND DIMENSIONS OF AMAZON MUNICIPALITIES IN 2018

Municipality	State	Ranking	IPS Amazônia	Basic Human Needs	Foundations of Wellbeing	Opportunity
São Domingos do Azeitão	MA	735	50.31	50.29	55.06	45.60
Lábrea	AM	736	50.24	58.75	51.74	40.22
Oliveira de Fátima	TO	737	50.18	49.47	57.00	44.07
Feijó	AC	738	50.16	49.37	58.37	42.74
Garrafão do Norte	PA	739	50.12	40.21	65.51	44.64
Monte Santo do Tocantins	TO	740	50.03	46.05	60.63	43.40
Portel	PA	741	49.95	51.34	51.70	46.80
Matinha	MA	742	49.95	53.01	53.06	43.77
Campinápolis	MT	743	49.93	41.16	63.33	45.32
Tufilândia	MA	744	49.90	49.56	53.65	46.49
Junco do Maranhão	MA	745	49.79	46.74	56.20	46.43
Cumaru do Norte	PA	746	49.79	46.49	57.77	45.10
Acará	PA	747	49.78	48.24	55.17	45.92
Jutaí	AM	748	49.73	53.88	54.81	40.49
Atalaia do Norte	AM	749	49.72	49.09	54.64	45.42
Penalva	MA	750	49.70	47.14	58.10	43.85
São Gabriel da Cachoeira	AM	751	49.69	46.20	57.97	44.89
Mirador	MA	752	49.64	49.31	53.82	45.78
Cachoeira Grande	MA	753	49.59	53.09	51.28	44.40
Nova Esperança do Piriá	PA	754	49.52	44.41	62.22	41.93
Santa Isabel do Rio Negro	AM	755	49.51	52.98	53.06	42.50
Itupiranga	PA	756	49.41	48.26	56.80	43.16
Amarante do Maranhão	MA	757	49.36	52.83	61.12	34.15
Barcelos	AM	758	49.26	52.51	53.59	41.68
Pacajá	PA	759	49.17	42.35	56.45	48.71
São Sebastião do Tocantins	TO	760	49.12	49.75	56.24	41.37
Recursolândia	TO	761	48.85	50.41	52.78	43.37
Eirunepé	AM	762	48.34	50.71	55.86	38.44
Anapu	PA	763	48.30	41.39	61.80	41.69
Santa Rosa do Purus	AC	764	48.29	46.84	57.05	40.98
Uiramutã	RR	765	48.12	47.38	59.27	37.72
Peritoró	MA	766	47.98	41.89	53.21	48.85
Amajari	RR	767	47.71	38.67	65.75	38.70
Jacareacanga	PA	768	47.61	50.70	53.40	38.72
Lagoa Grande do Maranhão	MA	769	47.03	50.88	46.33	43.89
Alto Alegre	RR	770	46.83	42.00	60.83	37.66
Bom Jesus do Araguaia	MT	771	46.43	40.26	58.78	40.27
Jordão	AC	772	45.18	43.75	52.95	38.84

APPENDIX 2

METHODOLOGY FOR CALCULATING THE IPS AMAZÔNIA

The SPI calculation follows the methodology prepared by the Social Progress Imperative, detailed in the report IPS Amazônia 2014 (Santos et al., 2014). The 12 components of the structure of the index contain 43 indicators selected by Imazon in 2014, included in the three dimensions. The SPI corresponds to the simple average of the values for social progress in those three dimensions. For its part, each one of them follows the average of the indices obtained for the four components that each one has. The PCA between the indicators resulted in the weights to calculate the indexes for them . The following steps were necessary to enable comparability between the SPI 2014 and 2018:

- Perform the same adjustments in some indicators occurring in the SPI 2014, transforming them from the original unit to ordinal, in order to avoid having discrepant values distorting the weights in the factorial analysis of some components.
- Estimate values for indicators for some municipalities by resorting to a regression process applied at the component level. In exceptional situations, qualitative and group cutoff estimates are applied. Limiting the regression to the indicators for the components makes it possible to preserve the signal provided by the indicator to the calculation of the factorial analysis of the component.
- Other adjustments: maximum and minimum in updated indicators for the components *nutrition* and *basic medical care and personal security*; adjustments for indicator categorization of the components *access to infomation and communications* and *inclusiveness*.
- The Kaiser-Meyer-Olkin (KMO) and Cronbach's alpha analyses verified the validity and reliability of each component among the updated indicators. In general, the values obtained for 2018 are similar to those for 2014, except for the Cronbach's alpha of the component *nutrition and basic medical care*.
- The weights obtained in the PCA for the indicators for calculating the index in 2014 are the same for version 2018.
- The non-updated indicators derived from the IBGE 2010 Census and the Human Development Atlas of UNDP and Ipea at the municipal level were maintained. Therefore, the indices for the respective components are equal to those of the SPI 2014.
- To prepare the scorecards and analysis of the relation between SPI and economic development, the use of the per capita income indicator obtained from the IBGE 2010 Census was maintained.

APPENDIX 3

SOURCES AND DEFINITIONS OF INDICATORS

[NOTE: The changes in the boxes below are to provide consistency in Table style]

Box 1. Detailing of indicators of the dimension Basic Human Needs of the IPS Amazônia.

Dimension	Component	Indicator	Definition	Unit	Year	Website link	Source	Updated?
Basic Human Needs	Nutrition and basic medical care	Child mortality	Number of children who do not survive until the fifth year of life	Deaths per thousand live births	2010	is.gd/RywdO2	UNDP and Ipea	
		Maternal mortality	Number of women who died for any reason related to or aggravated by pregnancy, at birth or up to 42 days after the end of gestation.	Maternal deaths per 100 thousand live births	2016	Maternal deaths: is.gd/a98yuB	Ministry of Health	
		Mortality from infectious diseases	Mortality rate caused by various infectious diseases together (tuberculosis, HIV/AIDS, malaria, dengue, Hansen's disease, hepatitis B, hepatitis C, Chagas's disease and others.	Deaths per 100 thousand inhabitants	2016	Deaths: https://is.gd/uPFe2Q		
		Mortality from malnutrition	Mortality rate for population due to lack of ingesting food.	Deaths per 100 thousand inhabitants	2016	Deaths: is.gd/uPFe2Q Population 2016: https://is.gd/H8qIQk		
		Malnutrition	Population of all ages below ideal weight and Body Mass Index (BMI).	% of population	2017	is.gd/t8P1c2		
	Water and sanitation	Water supply	Population with water supply service through a general distribution network	% of population	2010	http://is.gd/F0t1Ec	IBGE	
		Sanitary sewerage	Population with basic sanitation, including channeled sewage systems and septic tanks.	% of population	2010	http://is.gd/F0t1Ec		
		Rural sanitation	Difference between the percentage of rural population with water facilities and the average percentage of rural population with water facilities of the group of 30 municipalities with a similar rural population.	Difference % of rural population with access to water	2010	http://is.gd/F0t1Ec		

Updated indicators

IBGE Census or Pnud/Ipea indicators

Box 1. Detailing of indicators of the dimension Basic Human Needs of the IPS Amazônia (Continuation).

Dimension	Component	Indicator	Definition	Unit	Year	Website link	Source	Updated?
Basic Human Needs	Shelter	Access to electricity	Population living in permanent private households with electric illumination.	% of population	2010	is.gd/RywdO2	UNDP and Ipea	
		Garbage collection	Population living in permanent private households with garbage collection.	% of population	2010	http://is.gd/F0t1Ec	IBGE	
		Adequate housing	Population living in permanent private households with walls of brick or finished wood.	% of population	2010	is.gd/RywdO2	UNDP and Ipea	
	Personal safety	Murder of young people	Number of homicides of young people in the youth age range (up to 24 years) defined as death deliberately inflicted on one person by another person.	Deaths by 100 thousand inhabitants. Scored on a scale of 1-6: 1 = 0 2 = 1 - 6 3 = 6 - 10 4 = 10 - 20 5 = 20 - 40 6 > 40	2016	Number of homicides: https://is.gd/uPFe2Q Population 2016: https://is.gd/H8qlQk	Ministry of Health	
		Homicides	Number of homicides defined as death deliberately inflicted on one person by another person.	Deaths by 100 thousand inhabitants. Scored on a scale of 1-6: 1 = 0 2 = 1 - 6 3 = 6 - 10 4 = 10 - 20 5 = 20 - 40 6 > 40	2016	Number of homicides: https://is.gd/uPFe2Q Population 2016: https://is.gd/H8qlQk		
		Deaths from traffic accidents	Death rate from traffic accidents. A traffic accident is an accident with a vehicle occurring on a public route. Traffic accidents do not include accidents on water and air or space accidents.	Deaths by 100 thousand inhabitants.	2016	Death from traffic accidents: https://is.gd/uPFe2Q Population 2016: https://is.gd/H8qlQk		

Updated indicators

IBGE Census or Pnud/Ipea indicators

Box 2. Detailing of indicators of the dimension Foundations of Wellbeing of the IPS Amazônia.

Dimension	Component	Indicator	Definition	Unit	Year	Website link	Source	Updated?
Foundations of Wellbeing	Access to basic knowledge	Access to basic education	Ratio between the number of persons ages 6 to 17 enrolled in basic education and the total of that same age group multiplied by 100.	% of net attendance in basic education	2010	is.gd/RywdO2	UNDP and Ipea	🟥
		Access to secondary education (high school)	Ratio between the number of persons in the age group of 15 to 17 years attending regular graded high school and the total population of that same age range multiplied by 100. Persons aged 15 to 17 attending a 4th year of high school were considered as having already concluded that level of education.	% of net attendance in secondary education	2010	is.gd/RywdO2		🟥
		Illiteracy	Ratio between the population age 15 or more who cannot read or write a simple note.	% of the population age 15 or more	2010	is.gd/RywdO2		🟥
		Quality of education	Ideb is an indicator created by the federal government to measure the quality of teaching in schools. It is calculated using the school approval rate (passing) and the average performance on tests applied by Inep.	Ideb (0-10)	2015	ideb.inep.gov.br/	Inep	🟩
	Access to information and communications	Mobile data internet connection	Connection rate: evaluates to what point the consumer can access the data network internet via mobile phone.	% of connections made successfully. Scored on a scale of 0-5. 0 = 2% 1 = 2% - 79% 2 = 80% - 96% 3 = 96% - 98% 4 = 98% - 99% 5 = 99% - 100	2017	is.gd/A1J5TG	Anatel	🟩
		Voice connection	Voice connection rate: evaluates to what point the consumer can access the voice network to make calls on a mobile phone.	% of connections made successfully. Scored on a scale of 0-5. 0 = 2% 1 = 2% - 79% 2 = 80% - 96% 3 = 96% - 98% 4 = 98% - 99% 5 = 99% - 100	2017	is.gd/A1J5TG		🟩

🟩 Updated indicators 🟥 IBGE Census or Pnud/Ipea indicators

Box 2. Detailing of indicators of the dimension Foundations of Wellbeing of the IPS Amazônia (continuation).

Dimension	Component	Indicator	Definition	Unit	Year	Website link	Source	Updated?
Foundations of Wellbeingdo	Health and wellness	Life expectancy at birth	Average number of years that a person should live from birth if they remain constant throughout life. The level and pattern of mortality prevailing in the year of the Census.	Years	2010	is.gd/RywdO2	UNDP and Ipea	
		Mortality from chronic diseases	Mortality occurring from cardiac diseases, diabetes and cancer. Chapter CID-10: II Neoplasia (tumors); Morb. List CID-10: Chronic rheumatic heart disease, essential hypertension (primary), other hypertensive diseases, acute myocardial infarction, other ischemic heart diseases, diabetes mellitus. Data refer only to hospital morbidity.	Deaths per 100 thousand inhabitants	2016	Deaths: is.gd/uPFe2Q Population 2016: is.gd/H8qlQk	Ministry of Health	
		Mortality from respiratory diseases	Deaths from respiratory diseases.	Deaths per 100 thousand inhabitants	2016	Deaths: is.gd/uPFe2Q Population 2016: is.gd/H8qlQk		
		Obesity	Persons with obesity by age range. Corresponds to the population with body mass index (BMI) of 30 kg/m^3 or higher (estimate by age) of both sexes.	% of population	2017	is.gd/t8P1c2		
		Suicide	Mortality rate from suicide. Corresponds to number of the deaths due to the intentionally self provoked lesion.	Deaths per 100 thousand inhabitants	2016	Deaths: is.gd/uPFe2Q Population 2016: is.gd/H8qlQk		
	Environmental quality	Degraded area	Percentage of municipal cover with exposed soil, overgrown pasture, degraded pasture, mined and deforested area.	%	2014	is.gd/jjJTxH	Inpe and Embrapa	
		Protected Areas	Percentage of Protected Areas (Conservation Units, Indigenous Lands) in the municipality.	%	2017	is.gd/DkkkdY	Socioenvironmental Institute (ISA)	
		Accumulated deforestation	Total deforestation: deforestation estimates generated by Prodes based on annual mapping of a large set of Landsat 5/TM or similar satellite images, covering the entire extent of the Amazon.	%	2017	is.gd/VFiXPP	Inpe	
		Recent deforestation	Percentage of the difference between total deforestation and recent deforestation (last three years available: 2015, 2016, 2017).	%	2015, 2016, 2017	is.gd/VFiXPP	Inpe	
		Water waste	Percentage of Protected Areas (Conservation Units, Indigenous Lands) of the Municipality.	%	2016	is.gd/SMcH5i	Ministry of the Cities	

Updated indicators IBGE Census or Pnud/Ipea indicators

Box 3. Detailing of indicators of the Opportunities dimension of the IPS Amazônia. Oportunidades do IPS Amazônia.

Dimension	Component	Indicator	Definition	Unit	Year	Website link	Source	Updated?
Opportunities	Personal rights	Political party diversity	Party diversity. Percentage of parties elected over parties that participated in last municipal elections.	%	2016	is.gd/LrOwwe	TSE	
		Urban mobility	Rate of existence of buses.	Number of buses per one thousand inhabitants	2017	is.gd/9evGSt	Denatran	
		Threatened people	Rate of persons with death threats	Number of death threats per 100 thousand inhabitants	2016	is.gd/uegKus	CPT	
	Personal freedom and choice	Access to culture, sports and leisure	Existence of a library, theatre, cultural center or structures in stadiums in the municipality in order to promote culture and sport for people in the municipality.	Categorical: 0 = no structure 1 = one 2 = two 3 = three 4 = all structures	2014	is.gd/2ONIZI	IBGE	
		Childhood and teenage pregnancy	Women up to 17 years of age who have had children.	% of women	2010	is.gd/RywdO2	UNDP and Ipea	
		Child labor	Children ages 10 to 14 who are economically active.	% of the population between 10 and 14 years old	2010	is.gd/RywdO2		
		Family vulnerability	Women heads of household, who have not completed basic education and have at least 1 child under age 15 living in the household.	% of mothers	2010	is.gd/RywdO2		
	Inclusiveness	Racial inequality in education	Population 15 years of age or older of black and brown races who concluded at least basic education.	% of the population 15 years of age or more	2010	is.gd/RywdO2	IBGE	
		Violence against women	Cases of domestic violence, sexual and other forms of violence against women.	Cases per 100 thousand inhabitants	2014	is.gd/9myrVH	Ministry of Health	
		Violence against the indigenous	Cases of any type of violence against indigenous peoples.	Cases per one thousand indigenous persons. Scored on a scale of 1-3: 1 = 0 - 20 2 = 21 - 40 3 > 40	2016	is.gd/9qVBn2	Cimi	
	Access to advanced education	Female education	Women 15 years of age or more with completed basic education or more.	% of female population aged 15 or more	2010	is.gd/RywdO2	IBGE	
		Higher education attendance	Persons in the 18-24 year age range attending higher education (undergraduate, specialization, masters or doctorate).	% of population aged 18-24 years	2010	is.gd/RywdO2	UNDP and Ipea	
		Persons with higher education	Population age 25 years or more who concluded at least undergraduate level in higher education.	% of population aged over 25 years	2010	is.gd/RywdO2		

Updated indicators

IBGE Census or Pnud/Ipea indicators

APPENDIX 3

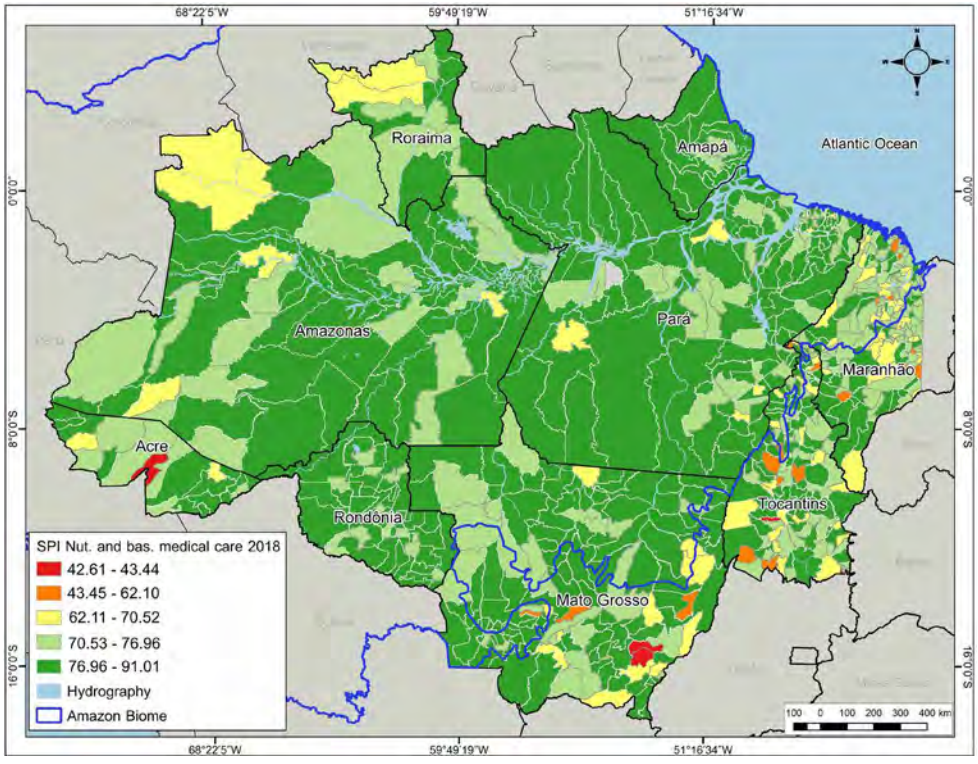
SOURCES AND DEFINITIONS OF INDICATORS

APPENDIX 4

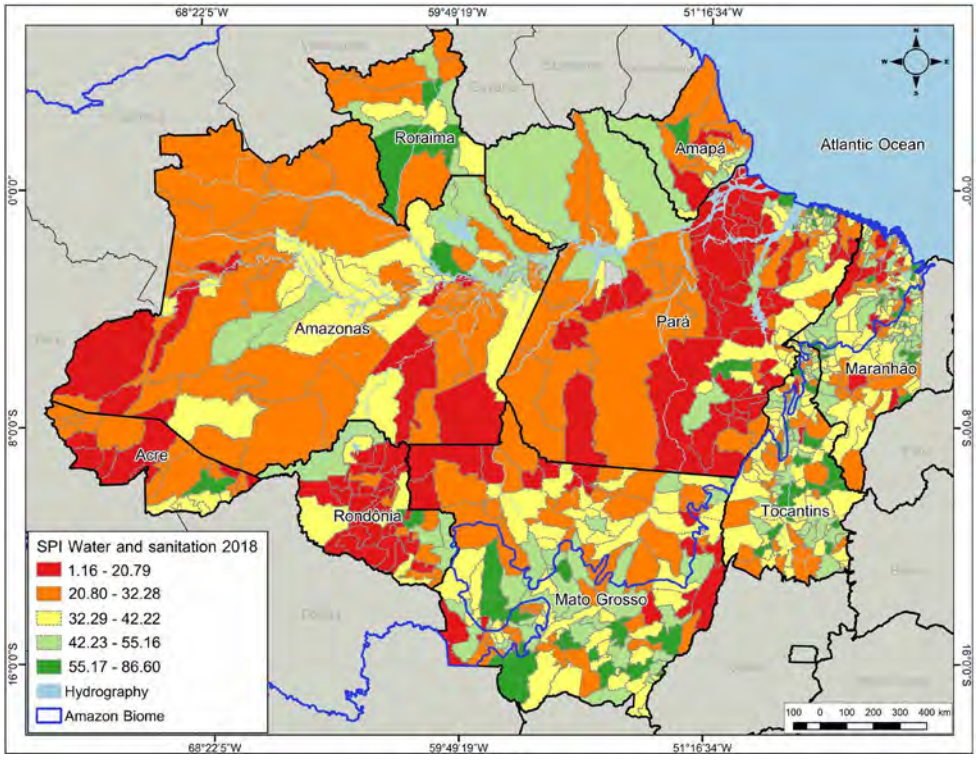
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 1.
BASIC HUMAN NEEDS

Nutrition and basic medical care



Water and sanitation

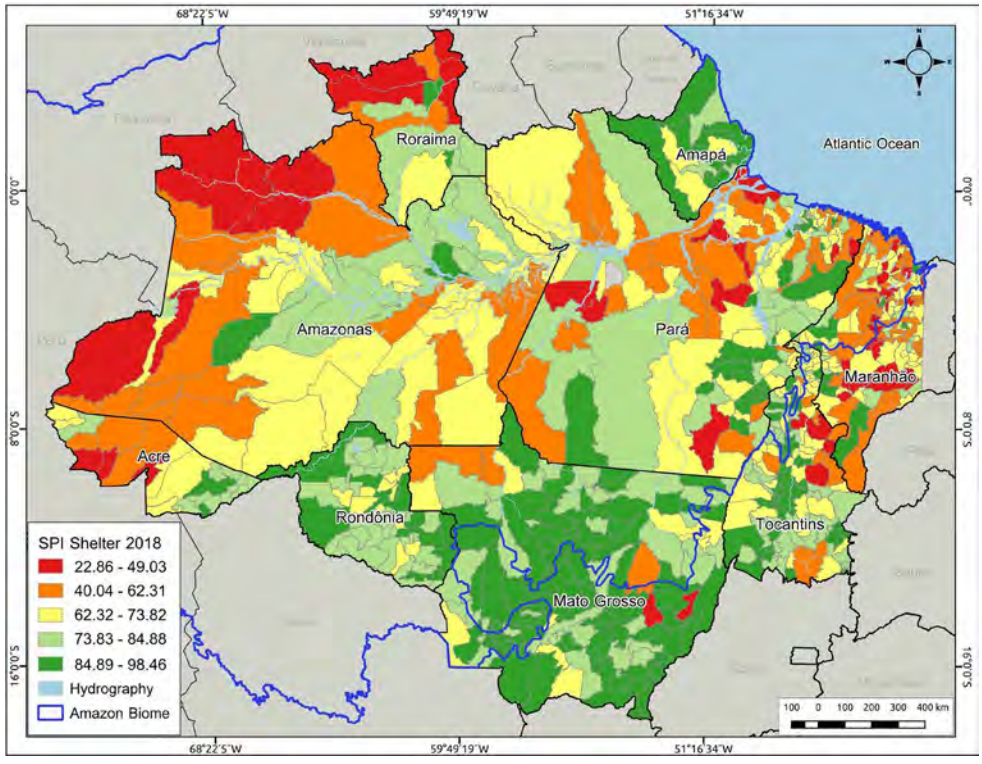


APPENDIX 4

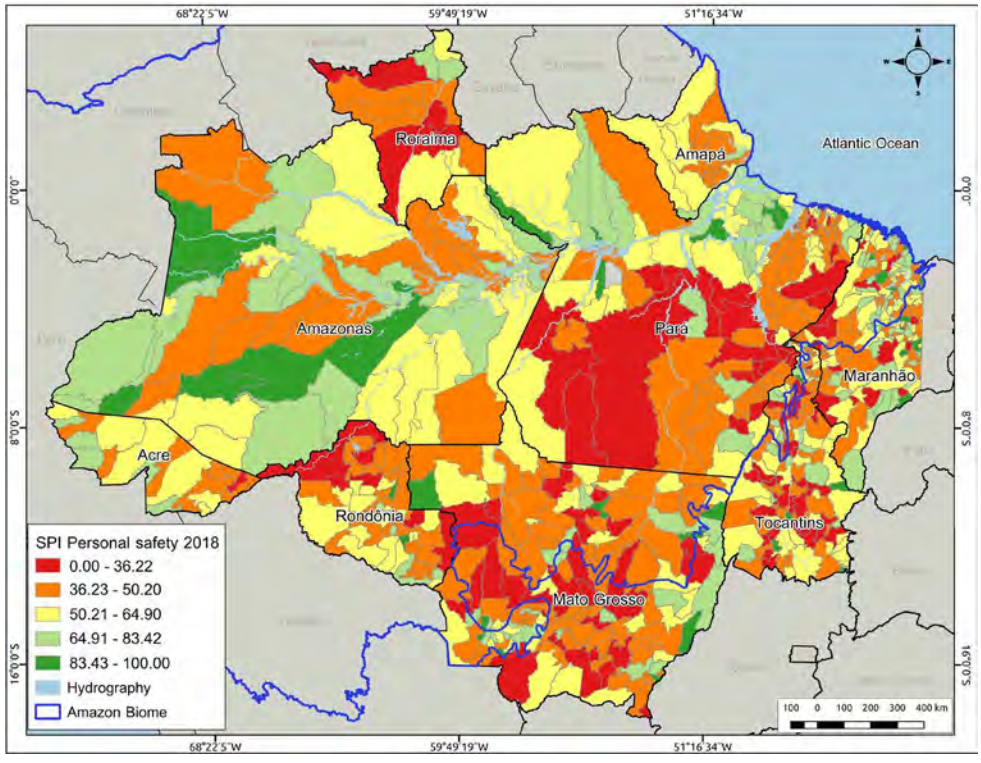
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 1.
BASIC HUMAN NEEDS

Shelter



Personal safety

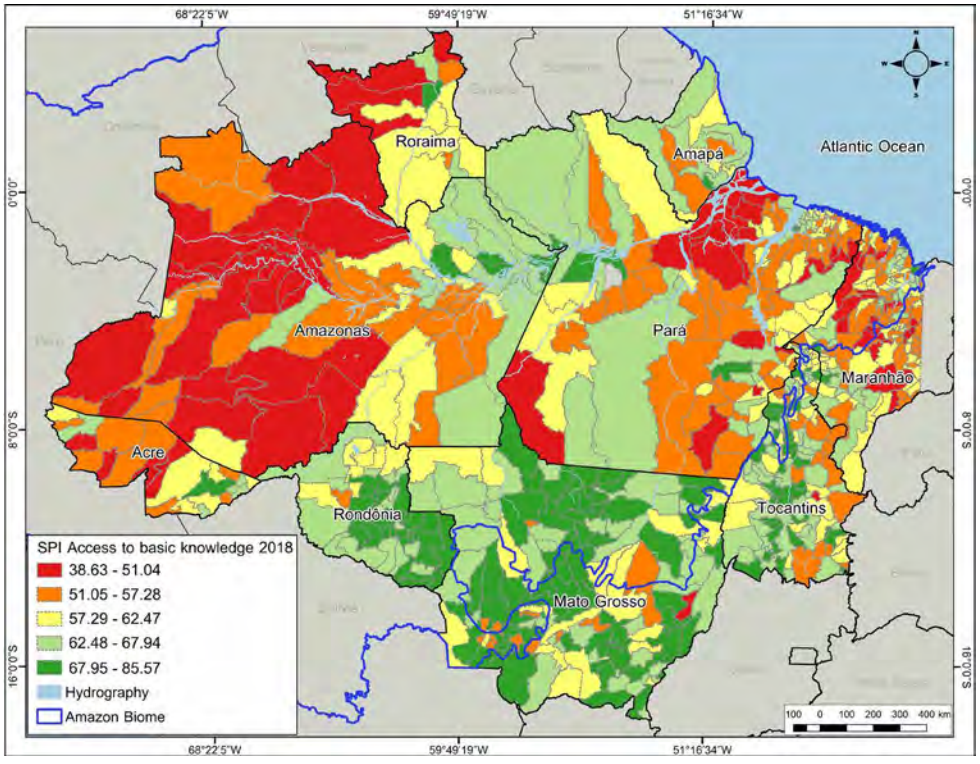


APPENDIX 4

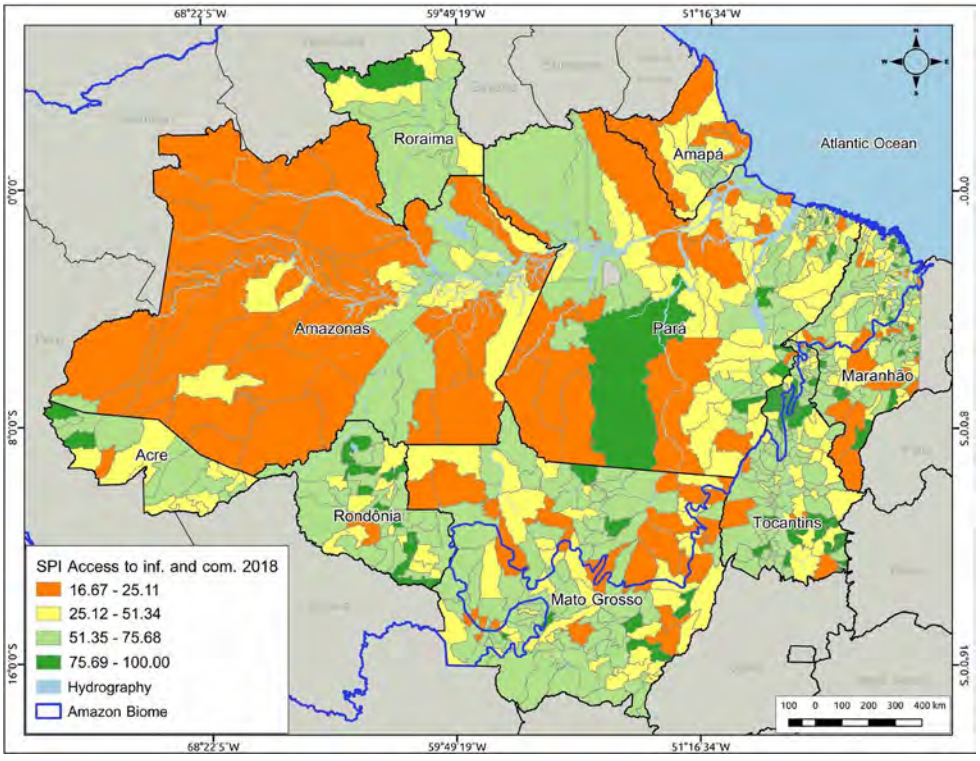
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 2.
FOUNDATIONS of WELLBEING

Access to basic knowledge



Access to information and communications

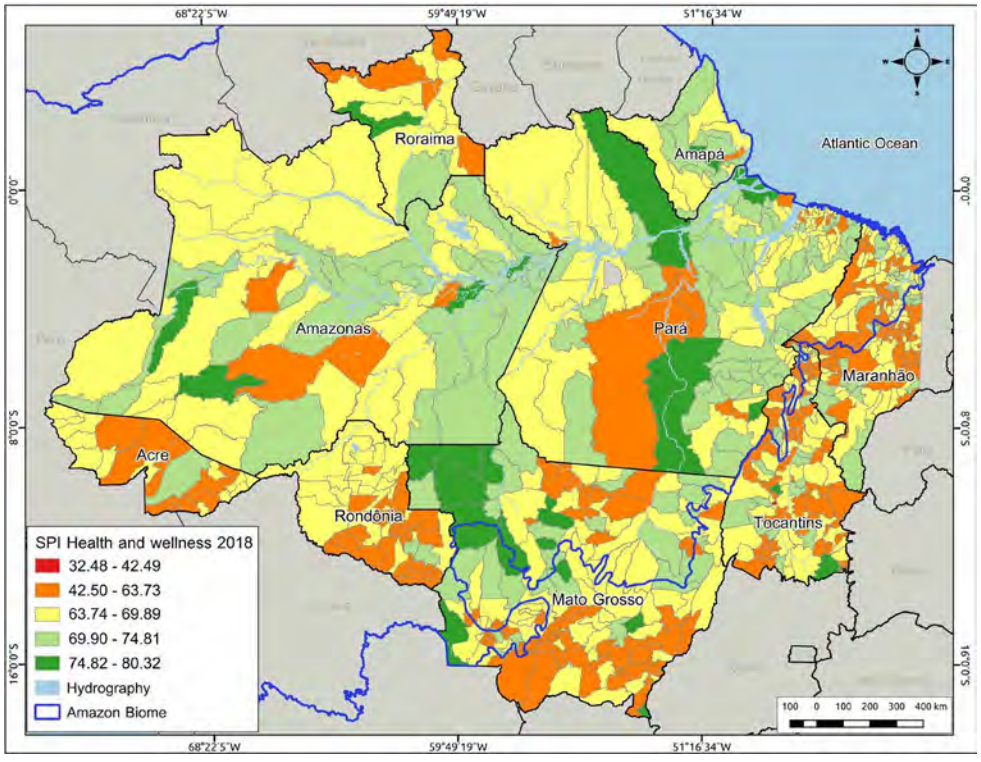


APPENDIX 4

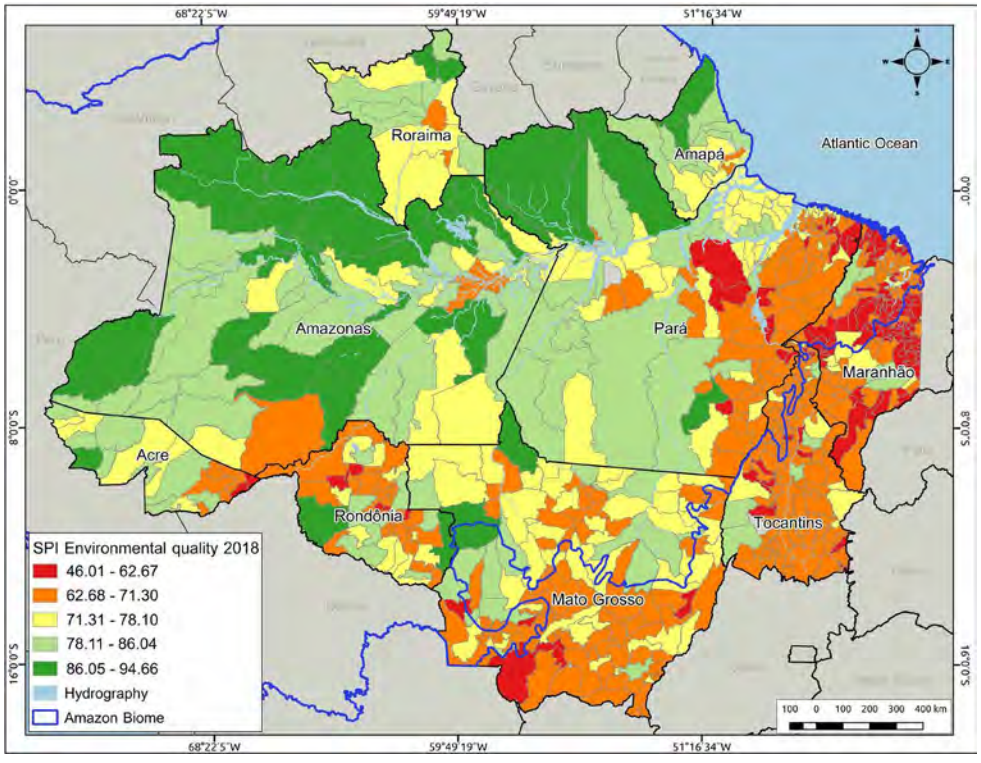
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 2.
FOUNDATIONS of WELLBEING

Health and wellness



Environmental quality

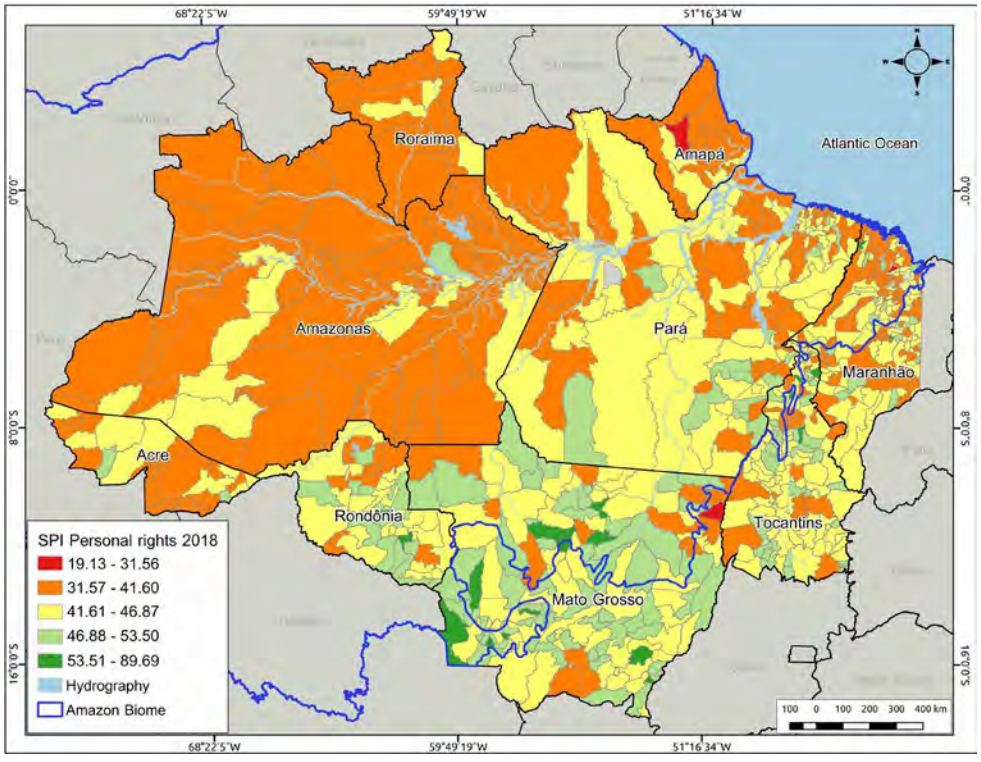


APPENDIX 4

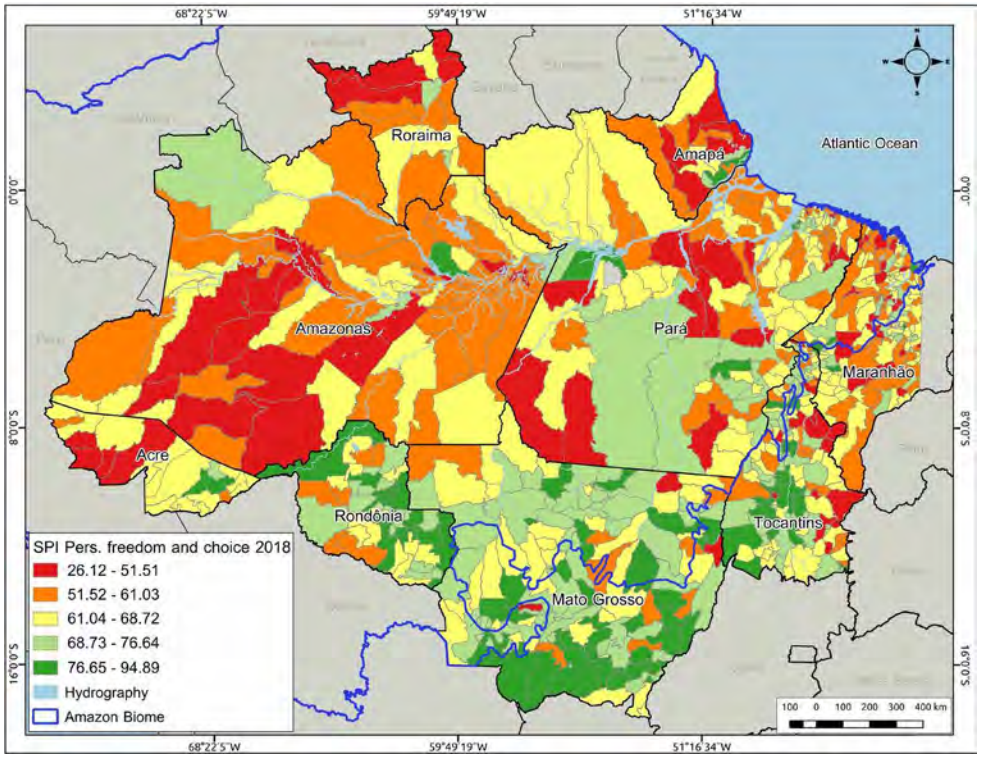
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 3. OPPORTUNITIES

Personal rights



Personal freedom and choice

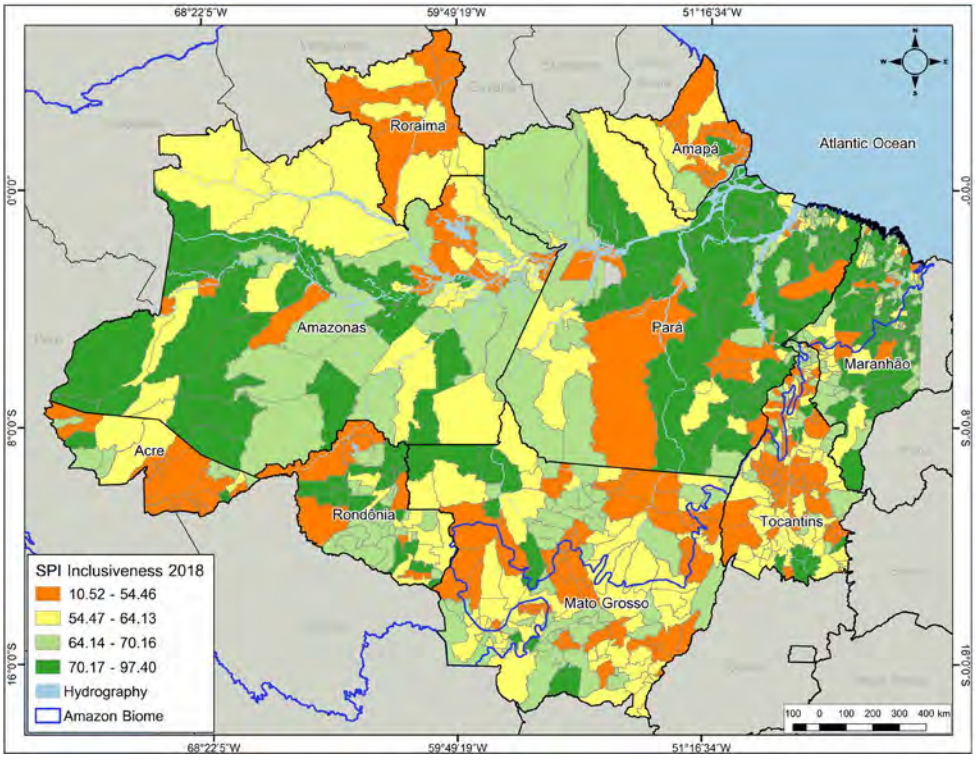


APPENDIX 4

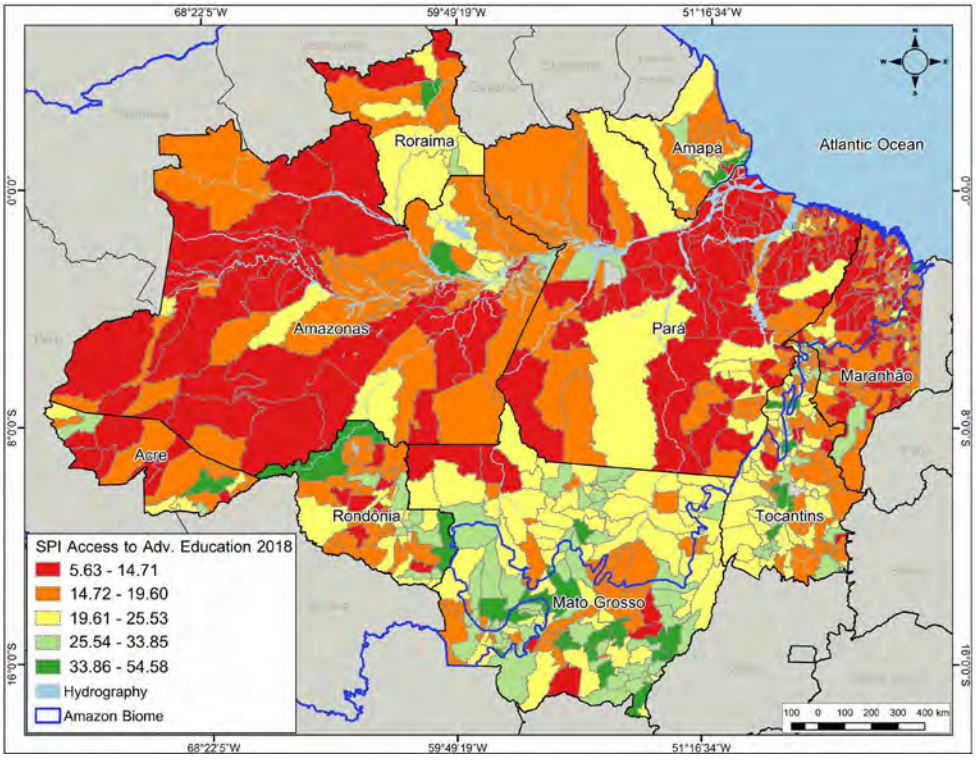
COMPONENTS OF THE IPS AMAZÔNIA 2018

DIMENSION 3. OPPORTUNITIES

Inclusiveness



Access to advanced education



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