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Após uma série de **compromissos ambientais** assumidos pelo Estado do Pará, como a agenda 2030 e COP 20, o Decreto nº 2.887, de 07 de fevereiro de 2015, criou a operação Curupira. A operação Curupira é um conceito inovador de combate ao desmatamento no Estado do Pará, abrangendo municípios como Anapu, Aripuanã, Brejo, Castanhal, Novo Brejo, São Domingos, Tucuruí, Uruará, Marajó, Placas, São Domingos do Araguaia, São Domingos do Capim e Uruará. A operação Curupira é composta por unidades administrativas locais, como as Unidades Administrativas Locais de Marajó, Marajó, Araguaia.

OPERATION CURUPIRA

PARÁ

GOVERNO DO PARÁ  
Data 07 / 02 / 23  
Cod.

# Operation Curupira:

An Integrated Approach  
to Combat Deforestation  
in Southern Pará

# Index

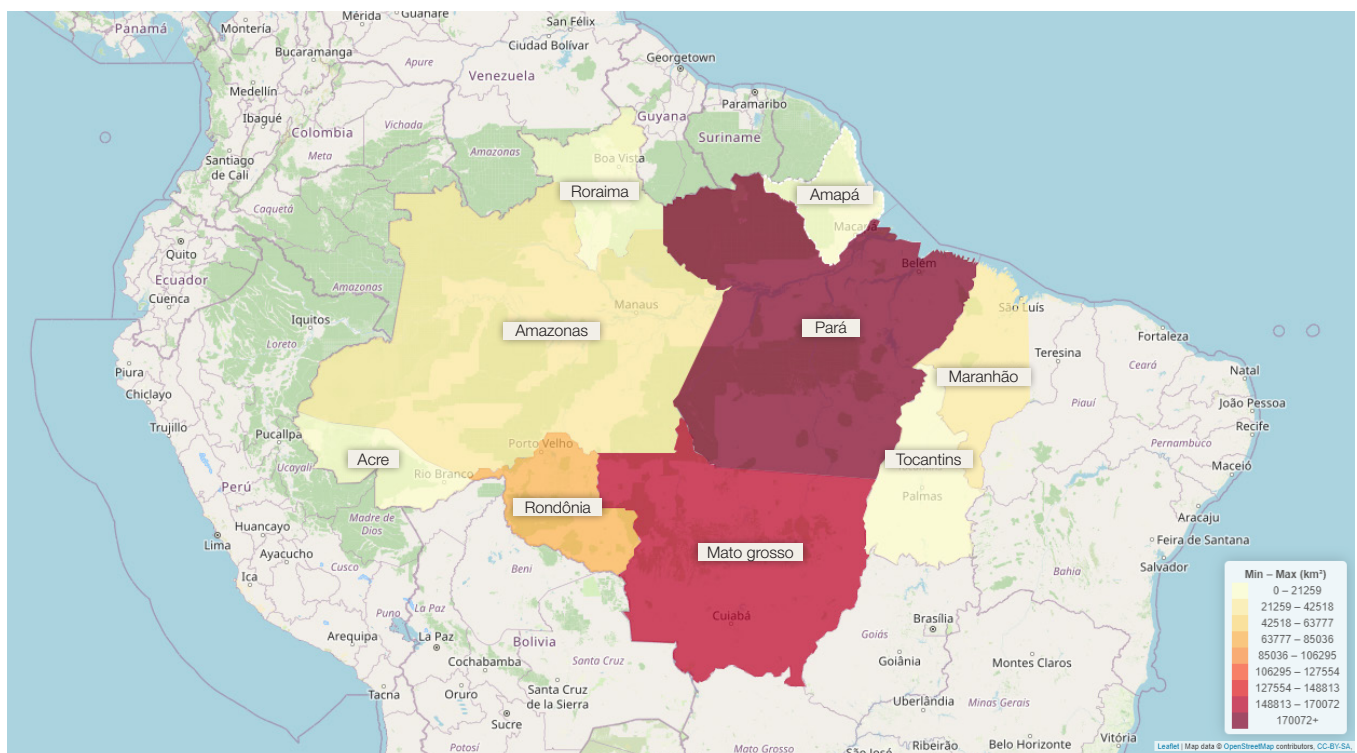
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# Operation Curupira<sup>1</sup>

## An Integrated Approach to Combat Deforestation in Southern Pará

Deforestation in the Amazon region, especially in the State of Pará, poses a significant environmental challenge. Until 2022, Pará led<sup>2</sup> deforestation among the Amazon states, driven by a series of interconnected factors.<sup>3</sup> The implementation of infrastructure (roads, hydroelectric dams), the expansion of agricultural and livestock activities, land grabbing of public lands, illegal logging, the advance of illegal mining, and the weakening of governmental agencies responsible for environmental monitoring and control are a few of the issues, further exacerbated by corruption and money laundering schemes.

**Figure 1:** Map of deforestation in the Legal Amazon by state



Source: Map based on 2023 data from the National Institute for Space Research (INPE).

Against this backdrop, the Government of the State of Pará implemented emergency measures. In 2023, an executive decree at this subnational unit of the Brazilian federation launched Operation Curupira. It is a milestone initiative in the fight against deforestation that adopts an integrated approach, combining police forces and environmental agencies with the goal of achieving zero deforestation by 2030.

Unlike other initiatives where security forces maintain a temporary presence in the region, Operation Curupira represents continuous state control and presence. Establishing fixed bases has significantly contributed to reducing social resistance to police presence, ensuring their permanence and service regularity in the region.

Multidimensional challenges demand a differentiated and comprehensive approach. This new perspective requires restructuring the social pact with local communities and involves multiple public policy dimensions, including citizen security, climate security, and rule of law aspects. Without tackling these dimensions, the progress made by Operation Curupira risks being reversed.

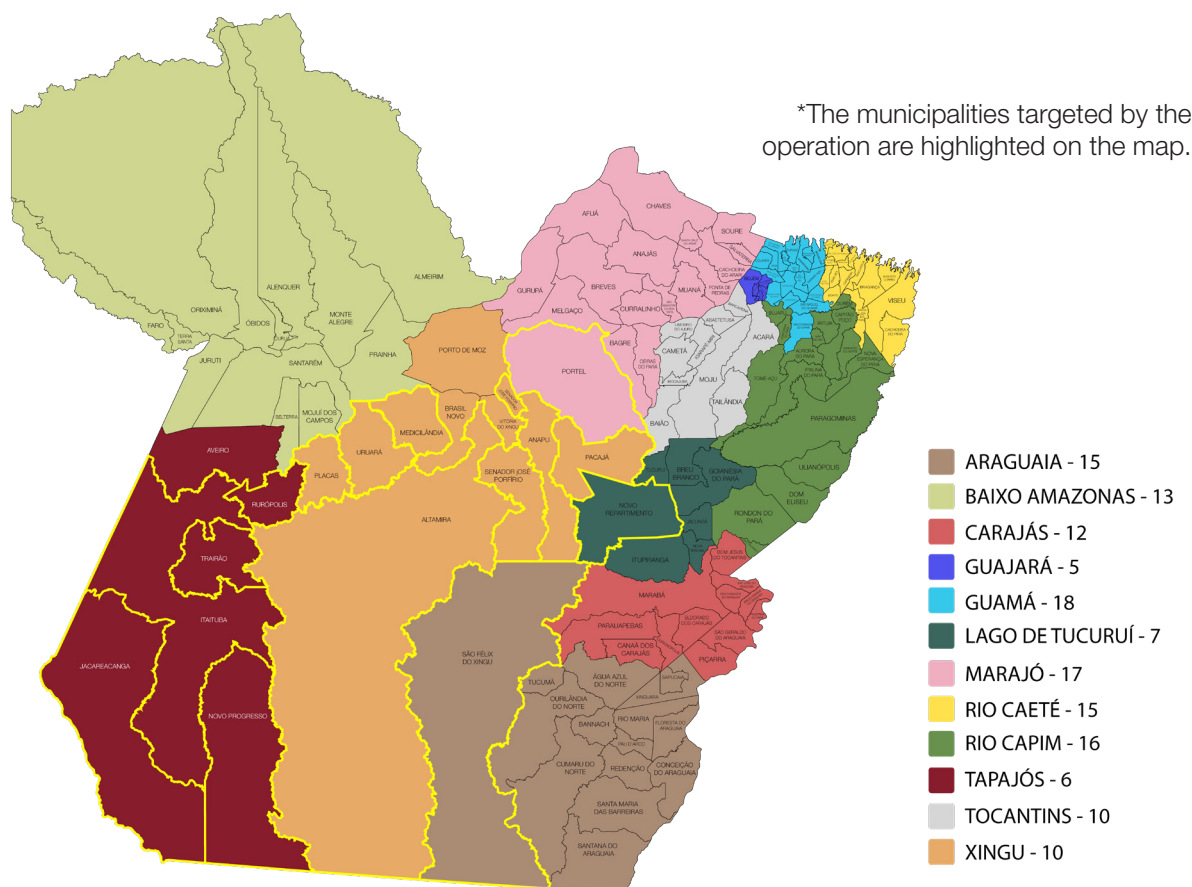
This study presents and discusses Operation Curupira, highlighting its characteristics, results, and challenges. It aims to contribute to the debate on the conservation of the Amazon and to support decision-making towards the sustainable development of the region.

## Socioeconomic Context of the Municipalities Included in Operation Curupira<sup>4</sup>

Following a series of environmental commitments made by the State of Pará, such as the 2030 Agenda<sup>5</sup> and COP 2030,<sup>6</sup> a 2023 executive Decree<sup>7</sup> established Operation Curupira. The initiative focused on fifteen municipalities that accounted for 76% of the state deforestation<sup>8</sup> between 2019 and 2022. They are: Altamira, Anapu, Itaituba, Jacareacanga, Medicilândia, Novo Progresso, Novo Repartimento, Pacajá, Placas, Portel, Rurópolis, São Félix do Xingu, Senador José Porfírio, Trairão, and Uruará.<sup>9</sup>

The municipalities included in the operation are spread across at least five of the 14 Integrated Administrative Regions:<sup>10</sup> Xingu, Tapajós, Marajó, Lago do Tucuruí, and Araguaia.

**Figure 2:** Map containing the integrated administrative regions of Pará\*



Source: Elaborated by the Instituto Igarapé on the Pará 2050 map, developed by the State Secretariat of Planning and Administration (Seplad).

**Altamira, Anapu, Pacajá, Senador José Porfírio, Uruará, Placas, and Medicilândia**, along with three other municipalities that are not part of Operation Curupira, constitute the Xingu Integrated Administrative Region.<sup>11</sup> This region, the second-largest integrated region by area, covers an area of 250,793 km<sup>2</sup>, representing approximately 20.1% of Pará's surface, and has a total population of 389,874 inhabitants.

Among its key characteristics is the protected area coverage: 70% of the region is designated as part of the National System of Conservation Units.<sup>12</sup> Additionally, 84% of the area is registered with the Rural Environmental Registry (CAR).<sup>13</sup> The population density is 1.55 inhabitants/km<sup>2</sup>, indicating a sparse distribution across its vast territory.

The Xingu Integrated Administrative Region has 31,025 formal jobs but faces social challenges common to the municipalities in the region. In comparison with the rest of the state, it ranks first with 27.8% high school dropouts; ranks fourth in poverty rate, with 57.5% of the population living in vulnerable conditions; and ranks second in infant mortality rate, with 16.8 per thousand live births.

**Novo Progresso, Itaituba, Rurópolis, Trairão, and Jacareacanga** are part of the Tapajós Integrated Administrative Region,<sup>14</sup> which is home to a population of 275,035 inhabitants spread across an extensive area of 189,595 km<sup>2</sup>, or 15.2% of the state's area. Similar to the Xingu region, over 64.4% of Tapajós's territory is designated as protected areas, with 70.58% of the land registered in the CAR. The population density is low, with only 1.36 inhabitants/km<sup>2</sup>.

The economy is driven by the extraction of precious minerals, as well as slaughterhouses and sawmills. In the services sector, freight transportation and goods and services are the main activities, with a notable emphasis on the sale of fuels, mining products, food, and soybeans.

The region has 23,659 formal jobs and a high school dropout rate of 24.1%, ranking fourth in the state for this indicator. The poverty rate affects 60.1% of the population, with 41.2% experiencing extreme poverty, according to December 2022 data from the Cadastro Único (CadÚnico).<sup>15</sup> Another critical issue is deforestation, covering an area of 1,242.9 km<sup>2</sup>, representing 14% of the total deforestation in the State of Pará.

The realities of these regions are also shared, to varying degrees, by the municipalities of Portel, Novo Repartimento, and São Félix do Xingu, which belong to the administrative regions of Marajó,<sup>16</sup> Lago do Tucuruí,<sup>17</sup> and Araguaia,<sup>18</sup> respectively.

**Portel** has a population of 63,831 inhabitants spread over 25,385 km<sup>2</sup>. Its main economic activity is agriculture. There are only 3,376 formal jobs, and the high school dropout rate is 20.7%. Additionally, 58.46% of the population lives in extreme poverty, and only 2.96% have access to water.

**Novo Repartimento**, with a territorial area of 15,398 km<sup>2</sup> and a population of 78,488 inhabitants, has a population density of 5.10 inhabitants/km<sup>2</sup>. Only 15.8% of the population has formal employment, while 41.69% live in poverty, according to Cadastro Único data. Another severe issue is the limited access to water, with only 4.57% of the population adequately served by water supply systems.

**São Félix do Xingu**, with an area of approximately 84,000 km<sup>2</sup>, is one of the country's largest municipalities in terms of territorial extension. With a population of about 135,000, its economy is based on agriculture and mineral extraction, including gold, copper, and other minerals. The municipality faces challenges common to many areas of the Amazon, such as illegal deforestation, land conflicts, and social issues, as it has only 5,907 formal jobs, and only 1.74% of the population has access to water supply.

As we can observe, besides concentrating 76% of the state deforestation, these regions share similar characteristics: vast areas with low population density, more than 70% of the land registered in the Rural Environmental Registry (CAR), and various social challenges such as a shortage of formal jobs, high school dropout rates, poverty, limited access to safe water, and elevated infant mortality, among others.

The consequences of deforestation are profound. It is no coincidence that the municipalities with the highest deforestation rates are also the least developed in the region, making their populations more vulnerable to recruitment to illegal activities.<sup>19</sup>

## Details of Operation Curupira

The distinctive feature of Operation Curupira, instituted through a government decree as a response to the environmental crisis in 15 municipalities, lies in its integrated execution. It involves the Secretariats of Environment and Sustainability (Semas), Public Security and Social Defense (Segup), as well as the three branches of polices: Military, Civil and Scientific, apart from the Military Fire Department and the Civil Defense, that handles disaster risk management. Each agency plays well-defined and complementary roles, ensuring coordinated and effective action:

- Secretariat of Environment and Sustainability (Semas): Coordinates inter-institutional collaboration with other public agencies and entities responsible for situational leadership during field operations.
- Secretariat of Public Security and Social Defense (Segup): Oversees the command-and-control actions of the forces within the State Public Security System, focusing on enforcing and suppressing environmental crimes. Additionally, the Department is responsible for investigative activities and operations conducted by the Environmental Crimes Task Force of the Civil Police, which thoroughly investigates environmental crimes detected during field operations.

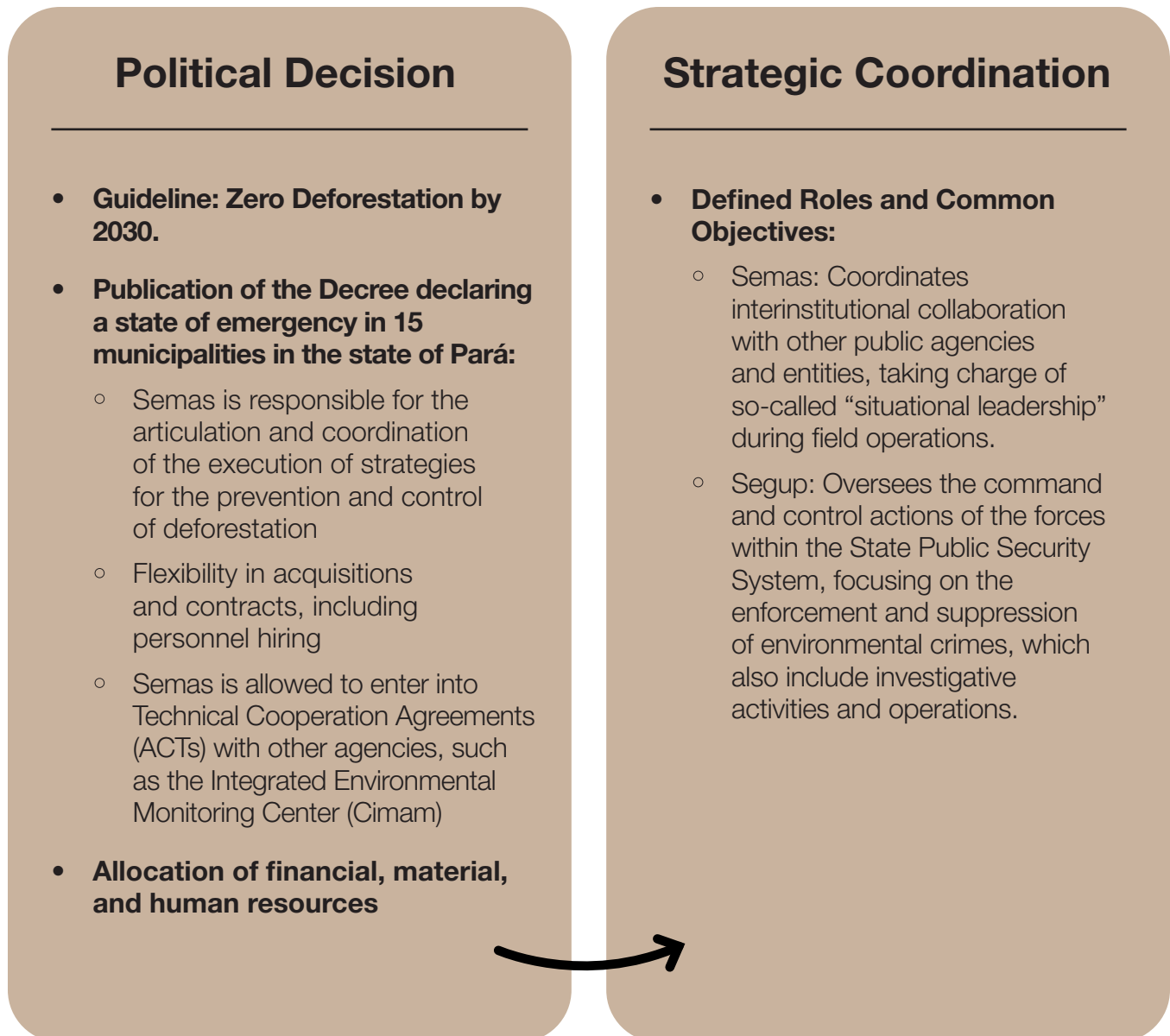
Semas also functions as an environmental intelligence center, identifying critical deforestation areas that guide inspection operations. Deforestation inspection is conducted daily by the Integrated Center for Environmental Monitoring (Cimam), which generates weekly reports indicating the areas to be inspected. To facilitate these operations, a Technical Cooperation Agreement (TCA)<sup>20</sup> was established between Semas and the Federal Government, allowing Cimam's technical staff to be trained to operate the National Institute for Space Research (INPE) monitoring system in areas under state jurisdiction.

The integrated work between Semas and Segup was also formalized through a Cooperation Agreement<sup>21</sup> defining each agency's roles in Operation Curupira and authorizing agents from all public security agencies to issue environmental infraction notices. This possibility to initiate environmental administrative processes significantly expands the reach of nature crimes inspection across the Pará state.

In addition to institutionalizing and sharing responsibilities, as in the case of environmental infraction notices, the integration between the government secretariats also involves sharing relevant data and information on deforestation areas and patterns of illegal activities. This collaboration includes developing joint operational plans and protocols and aligning environmental inspection efforts with public

security forces' logistical and operational support. Continuous monitoring systems are also implemented in areas of interest, using innovative technologies (drones, satellite imagery) and physical patrolling to detect and respond to illegal activities more effectively.

**Figure 3:** Governance structure of Operation Curupira



According to documentary research and primary sources, the Operation Curupira can be structured into three phases:<sup>22</sup>

## **Phase 1 - Strategic planning** (Precursor activities)

### ***Environmental diagnosis***

The Monitoring Center at Semas utilizes satellite imagery and drones to identify areas of interest where environmental violations, such as illegal fires and illegal logging, are occurring. After analyzing these locations, the information is forwarded to inspection teams, prioritizing areas with active deforestation for patrolling.

### ***Alignment meeting***

A monthly alignment meeting is held with managers and action coordinators to discuss deforestation data across the state and other points related to field operations. During these meetings, relevant information is presented and analyzed.

Based on the insights gained from these discussions, strategic and tactical decisions are made to inform the operational guidelines provided to the teams. The teams then implement these Fieldwork Guidelines during operations in the targeted areas.

## **Phase 2 - Operational activities**

### ***Territory stabilization***

As the security teams are not part of the local Operational Units, they consider local public resistance at the municipality level, supported by specialized battalions, such as the Choque Battalion, from Military Police.

During the first fifteen days, the teams assess the area, within a municipality involved in Operation Curupira, and identify points of resistance. After this initial period, the specialized forces return to their respective battalions in the capital.

## **Phase 3 - Operational routine**

### ***Situational diagnosis***

Like the environmental diagnosis, the situational diagnosis provides an almost routine portrait of the areas, guiding the operational plans.

### ***Alignment meeting***

Operational alignment occurs monthly, and strategies are defined based on situational diagnosis data, leading to the development of regular Operational Plans.

### ***Patrolling and area inspection***

Public security and environmental teams execute the established operational plan as they enter the field to carry out the necessary procedures. They can issue administrative sanctions and police actions commensurate with the severity of the environmental crimes detected, forwarding cases to the justice system to initiate pertinent actions.

When warranted, offenders face fines, legal sanctions, arrests, and the destruction of machinery, among other measures.

### ***Follow-up and monitoring***

Monitoring focuses on tracking vegetation cover and the dynamics of the region and the groups operating illegally, to prevent the rainforest from being razed.

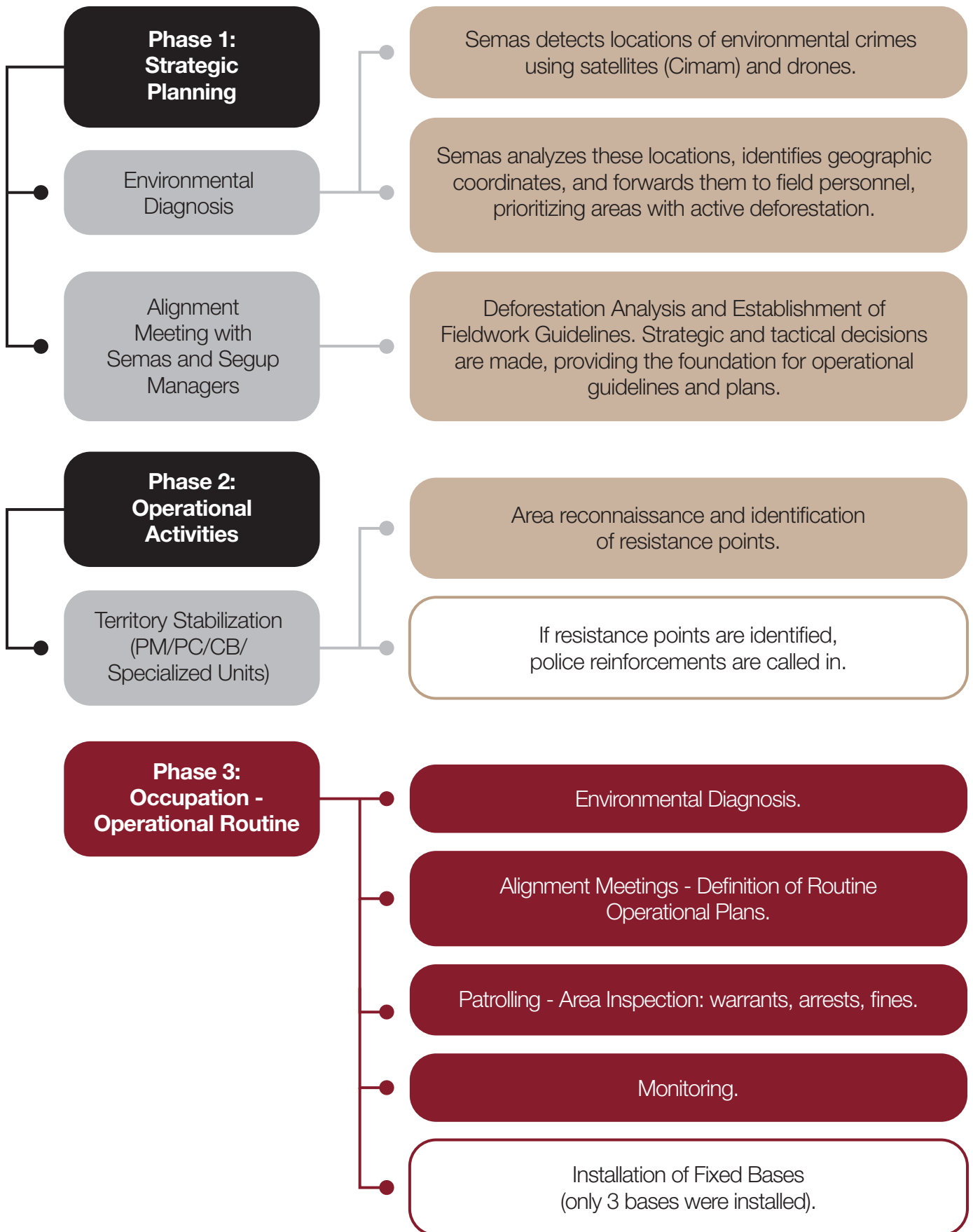
## **Other measures**

### ***Establishment of Bases***

Operation Curupira also resulted in the creation of fixed bases in the municipalities of São Félix do Xingu, Altamira, Uruará, and Novo Progresso. These bases are integrated and shared spaces where the personnel from both Secretariats, of Environment (Semas) and of Public Security (Segup), stay. The goal is to provide support and ensure the permanent presence of the State in areas that, until then, had critical deforestation rates.



**Figure 4:** Operation Curupira phases



The state chose not to use local personnel to avoid compromising the activities of the existing units located in the municipalities. Staff from other regions were assigned to the operation, rotating every fifteen days. The interaction between the fixed bases teams and the permanent units, such as police stations and military police battalions, is characterized by logistical support and mutual collaboration through the exchange of information.

Initially, the Curupira Operation mobilized 300 professionals, divided into two teams of 150 who rotated biweekly. After establishing fixed bases, the personnel was reduced to 84 professionals, with 42 working every 15 days. Of these, six are from the environmental department and 36 from public security, while regular policing remains the responsibility of the local forces.

The Military Police also conducted a 40-hour Environmental Policing Training course for 70 police officers to prepare them to participate in any mission requiring the involvement of the Environmental Policing Command. The course included specific legislation and practical lessons, considering that missions often take place in difficult-to-access areas, such as forest regions and flooded areas.

According to the Deputy Secretariat for Operational Management (Sago), responsible for the operation within the scope of Segup, the entire operation costs the public coffers approximately US\$ 456,570.00 per month, with US\$ 9,124.00 allocated by Semas and US\$ 547,445.00 by Segup. This amount includes the rental of two helicopters exclusive to the Curupira Operation and expenses with daily allowances, tickets, gasoline, and vehicle rental, among other costs.

This means that the resources allocated to the Curupira Operation represent 0.87% of the total amount spent on public security in the State of Pará.<sup>23</sup> The costs involved are minimal compared to the remarkable results achieved by the action.

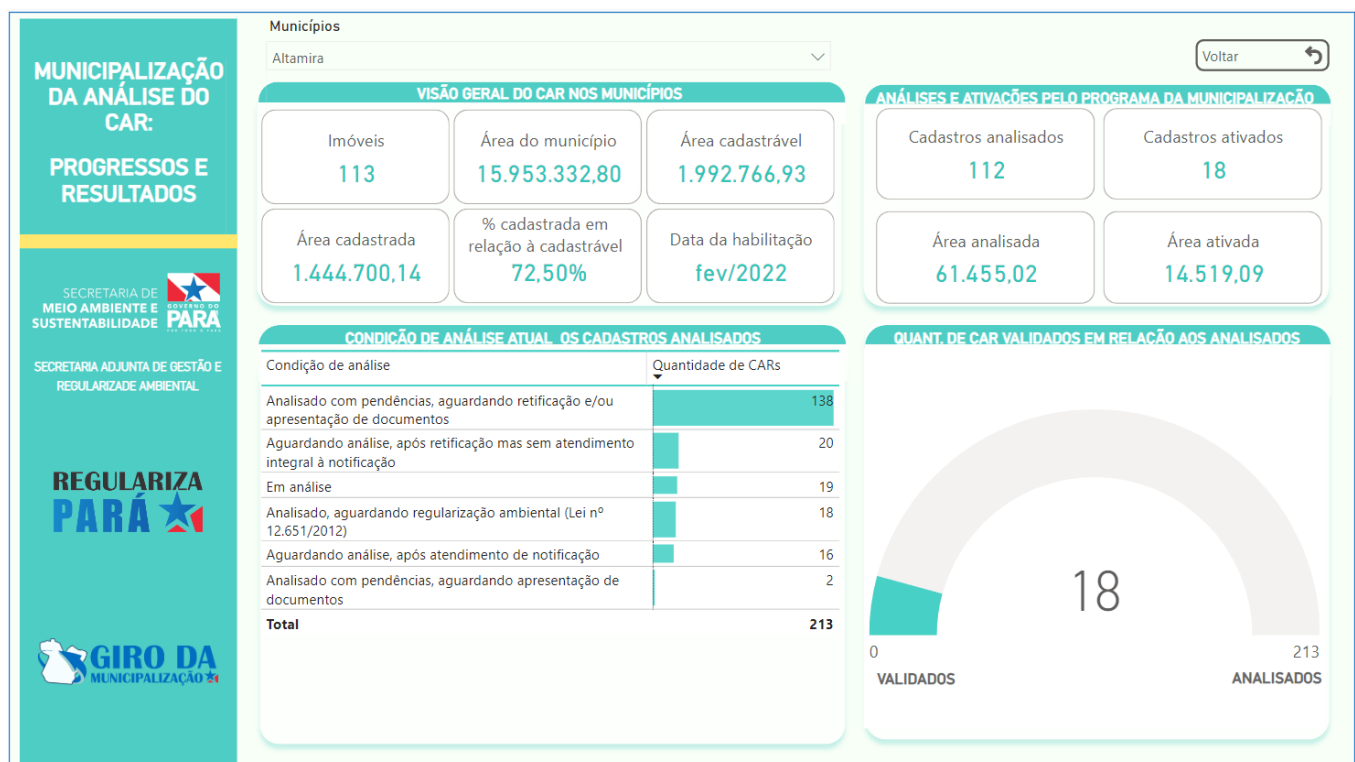
# Supporting Operation Curupira

In parallel with Operation Curupira, the state has undertaken other efforts to achieve zero deforestation by 2030. Among these efforts, a few stand out:

- Creation of the *CAR Analysis Portal*,<sup>24</sup> which systematizes and analyzes the Rural Environmental Registries (CARs) of the State of Pará using advanced technological tools. This database is strategic for controlling, monitoring, and combating deforestation and forest degradation.

As of the time of writing, the portal shows the suspension of CARs in the following municipalities: Altamira (134), Novo Repartimento (173), Placas (91), and São Félix do Xingu (1,080),<sup>25</sup> totaling only 21 cancellations in the region.

**Figure 5:** Technical Analysis Framework - Eligible Municipalities



- Creation of Sustainable Territories,<sup>26</sup> a program that promotes actions to foster socioeconomic development, facilitating the transition to a low-emission economy in areas under deforestation pressure. Rural producers benefit from government services for social and environmental development, such as land regularization, access to credit lines and rural insurance, and rural technical assistance.

The municipalities included both in the Sustainable Territories program and in Operation Curupira are São Félix do Xingu, Altamira, Medicilândia, and Anapu.

## Some results

In the first five months following the establishment of the fixed bases, the visible actions of Operation Curupira were considered effective in combating deforestation. According to Semas manager Mauro O’de Almeida, the operation resulted in a 40% reduction in deforestation compared to 2022 in the municipalities covered by the operation.

He emphasized the importance of the various interventions against environmental degradation carried out during this period, including arrests, confiscation, and destruction of equipment, among other measures. “The integrated action of environmental and security agencies was crucial for the State of Pará to stop being the top 1 state with highest deforestation rates in the Amazon region,” O’de Almeida also noted.<sup>27</sup>

The operation, which remains in effect, achieved the following results by February 2024.<sup>28</sup>

- Number of Integrated Inspections: **1022**
- Number of Inspected Mining Sites: **144**
- Number of Weapons and Ammunition Seized: **177** and **590** (respectively)
- Number of Sets of Machinery Seized: **871** (tractors, excavators, etc.)
- Number of Machinery Rendered Unusable (tractors, dredges, and other mining equipment): **240**
- Number of Detention in blazing offense: **68**
- Value of fines Imposed and issued by the Environment and Sustainability Secretariats (Semas): **R\$ 5,745,810.00** (approximately US\$ 31,203,000)
- Percentage reduction in Deforestation Alerts: **67%**

Operation Curupira also impacted common crime trends, including intentional violent, lethal crimes (CVLI) and robbery. A comparison of records of intentional violent, lethal crimes and robberies in the municipalities during the 450 days before and after the start of the operation reflects this.<sup>29</sup>

**Table 1:** Crime data in the municipalities of Operation Curupira

Municipality	CVLI				Theft			
	Before	After	VAR ABS	VAR %	Before	After	VAR ABS	VAR %
Altamira	76	51	-25	-32,89	556	275	-281	-50,54
Anapu	38	21	-17	-44,74	89	52	-37	-41,57
Itaituba	82	61	-21	-25,61	440	433	-7	-1,59
Jacareacanga	11	10	-1	-9,09	24	25	1	4,17
Medicilândia	12	17	5	41,67	67	26	-41	-61,19
Novo progresso	35	31	-4	-11,43	68	42	-26	-38,24
Novo repartimento	44	28	-16	-36,36	58	66	8	13,79
Pacajá	36	50	14	38,89	33	35	2	6,06
Placas	5	13	8	160,00	12	9	-3	-25,00
Portel	14	22	8	57,14	240	140	-100	-41,67
Rurópolis	3	4	1	33,33	29	10	-19	-65,52
São Félix do Xingu	53	48	-5	-9,43	136	116	-20	-14,71
Senador José Porfírio	5	10	5	100,00	14	11	-3	-21,43
Trairão	21	12	-9	-42,86	20	19	-1	-5,00
Uruará	48	32	-16	-33,33	96	47	-49	-51,04

Source: Sisp/Ceac/Deac/Siac/Segup-PA

Despite its noteworthy results, Operation Curupira has faced and continues to face various challenges in combating illegal activities. The head of Sago, the Secretariat for Operational Management, highlighted that the resistance from criminals involved in these activities required adopting new strategies and a more proactive approach to ensure the effectiveness of security operations.

Moreover, opposition from the local population,<sup>30</sup> often reliant on economic activities linked to environmental illegalities, makes the situation even more complex, calling for a differentiated approach than regular law enforcement.

The difficulty of accessing remote areas, compounded by the lack of vehicles suitable for the terrain,<sup>31</sup> presents logistical and maintenance challenges that hinder interventions. Finally, the constant need for personnel rotation reflects the dynamic nature of the operational environment, given the ever-changing criminal landscape.

Overcoming these challenges requires an integrated, collaborative, and resilient approach. The noteworthy results of Operation Curupira in controlling environmental offenses, as demonstrated, led the Government of Pará to prolong the action for a longer period.

## Final Considerations

The prospects for Operation Curupira in combating illegal activities and promoting environmental preservation are promising. The following aspects may pave the way for more effective cooperation, innovation, and sustainability. See below what the summary table of Operation Curupira and its evaluation criteria reveal:

**Table 2:** Summary table of the evaluation criteria for Operation Curupira

Criteria	What is Evaluated	Findings
Political Decision (Commitment and Political Support)	Commitment of leadership, considering the allocation of resources, the availability of personnel, the support of administrative acts, and the continuity of integrated initiatives.	<p>The public manager allocates resources to the initiative (financial, human, and structural) and issues normative acts, providing a legal framework for integrated activities. The initiative is regularly monitored and evaluated.</p> <p>One point of attention is the need to develop plans or strategies that ensure the continuity of integrated initiatives, even during changes in leadership or administrative transitions. In addition to establishing fixed bases, improving this aspect of governance ensures that the work carried out does not suffer interruptions.</p>
Governance	Aligned objectives and strategies of the involved agencies and a shared understanding of the expected outcomes of the integration.	<p>We identified common objectives and integration strategies by analyzing the Technical Cooperation Agreement signed between Semag and Segup.</p> <p>Monthly alignment meetings are held between strategic managers (Phase 3: Operational Routine) and monthly meetings between managers and operational coordinators (Phase 1: Strategic Planning).</p>
	The ability of the agencies to collaborate and coordinate actions effectively, including the development and implementation of joint operational plans.	Joint and coordinated inspection activities and shared resources such as equipment, technologies, and infrastructure (fixed bases).

*continuation*

Criteria	What is Evaluated	Findings
Information and Intelligence Sharing	Quality and regularity of information sharing among the involved agencies, ensuring that critical information is shared efficiently and promptly.	Daily sharing of information and relevant data on deforestation areas and patterns of illegal activities.
Results and Impacts	Reduction in deforestation, increased operational efficiency, and improvement in services provided to the population.	The efforts resulted in a 76% reduction in deforestation in the past year.
Innovation	Originality in problem-solving, whether through innovative technology, an unconventional work method, or a novel approach to addressing the challenge.	The Technical Cooperation Agreement (TCA) allows public security agents, with greater reach than environmental officers, to issue environmental infraction notices, enhancing the state's command and control capacity.  The same applies to the partnership model with the Integrated Environmental Monitoring Center (Ciman).

Source: Elaborated by the Igarapé Institute on the data presented.

The study demonstrates that the partnership between the police and environmental agencies is essential for a practical and integrated approach to protect natural resources and combat environmental crime. The constructive interaction between these institutions enables a faster and more coordinated response to threats to biodiversity and fragile ecosystems.

Moreover, monitoring and inspection technologies significantly advance the detection and prevention of illegal activities.

With the Curupira operation initiative, Pará is taking necessary steps toward implementing a command-and-control policy for environmental crimes at the Amazon. Recognizing the progress and results achieved is crucial, but the question arises: how can these results be sustained in the long term?

With this in mind, we provide specific recommendations:

- **Strengthen the integration between environmental and public security sectors** and expand interinstitutional collaboration with other actors, such as the Public Prosecutor's Office, for a comprehensive approach to combating deforestation.
- **Align and implement other public policies in the municipalities** included in Operation Curupira, such as sustainable urban development, education, employment, and health, among others.
- **Intensify awareness and environmental education actions in communities**, recognizing the fundamental role of these actions in building a culture of respect and care for the environment. Encouraging sustainable practices and civic engagement in protecting natural resources is essential.
- **Accelerate the transition from dependence on environmental crimes to the “green economy,”** reconciling economic development and environmental conservation through implementing policies and incentives for the sustainable use of natural resources. The standing forest can become a viable source of income for local communities through ecotourism, sustainable forest management, organic farming, and other economic activities compatible with environmental preservation, but also profitable and capable of securing livelihoods.

The effectiveness of Operation Curupira is linked to institutional cooperation, the adoption of innovative technologies, environmental education, and the development of a green economy. This multidimensional and sustainable approach is essential for protecting the forest and promoting human well-being in Pará and beyond the unique scenario presented here.



# Endnotes

1. Curupira is a mythical figure in Brazilian folklore, known as the guardian of the forests. With his feet turned backward, he confuses and frightens those who enter the woods with the intent to deforest or hunt animals, punishing them for their actions and protecting nature.
2. National Institute for Space Research data (2023): [https://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal\\_amazon/rates](https://terrabrasilis.dpi.inpe.br/app/dashboard/deforestation/biomes/legal_amazon/rates)
3. For more information on the theme, visit [The ecosystem of environmental crime in the Amazon: an analysis of illicit rainforest economies in Brazil](#) and [Governar para não entregar: uma agenda de Segurança Multidimensional para a Amazônia brasileira](#), by Igarapé Institute.
4. The data used in this section, including information on population, GDP, employment, education, health, and environmental data, were sourced from @cidades – IBGE (2022) and the Pará State Research Support Foundation (Fapespa). These data were compiled from technical presentations by the Planning and Administration Department for the [Multi-Year Plan \(PPA\) 2023-2027](#).
5. The [2030 Agenda](#) for Sustainable Development of the UN is a universal commitment that came into effect on January 1, 2016. It sets a series of goals to be achieved by 2030, outlining a collective path toward a sustainable global future.
6. COP 30 - UN Climate Change Conference. The State of Pará is preparing to host the 30th COP, which will be held in Belém (PA) in November 2025.
7. Government of Pará, Decree No. 2,887, dated February 7, 2023. DOE No. 35,281 of 02/07/2023. Declares a State of Environmental Emergency for a period of 180 days. Official Gazette No. 35,281. Belém/PA: Semas, 2023. Available at: [www.semas.pa.gov.br/legislacao/files/pdf/239012.pdf](http://www.semas.pa.gov.br/legislacao/files/pdf/239012.pdf)
8. Data calculated from the 2021 Annual Deforestation Report in Brazil (RAD) - July 2022. [https://alerta.mapbiomas.org/wp-content/uploads/sites/17/2024/03/RAD2021\\_Completo\\_FINAL\\_Rev1.pdf](https://alerta.mapbiomas.org/wp-content/uploads/sites/17/2024/03/RAD2021_Completo_FINAL_Rev1.pdf)
9. All the municipalities included in Operation Curupira are also part of the [list of municipalities](#) considered a priority by the federal government for actions aimed at preventing, controlling, and reducing deforestation and forest degradation.
10. For a better administrative division and regional planning, the State of Pará opted to adopt the Integrated Administrative Regions (IRs), which aim to integrate the management and development of geographically close areas with similar characteristics.
11. Amazon Foundation for the Support of Studies and Research, Government of Pará. [RI Xingu - Socioeconomic and Environmental Profile](#).
12. Protected and Conserved Areas in Brazil are regulated by Law 9985 of 18 July 2000.
13. Created by [Law 12.651/12](#), the [Rural Environmental Registry \(CAR\)](#) is an electronic record mandatory for all rural properties. It forms a strategic database for controlling, monitoring, and combating deforestation of forests and other forms of native vegetation in Brazil, as well as for the environmental and economic planning of rural properties.
14. Amazon Foundation for the Support of Studies and Research, Government of Pará. [RI Tapajós - Socioeconomic and Environmental Profile](#).
15. The Cadastro Único (CadÚnico) is the main gateway for accessing federal government benefits in Brazil. It is a registry of low-income Brazilian families that aims to identify and characterize these families based on data provided by the population.
16. Amazon Foundation for the Support of Studies and Research, Government of Pará. [RI Marajó - Socioeconomic and Environmental Profile](#).
17. Amazon Foundation for the Support of Studies and Research, Government of Pará. [RI Lago de Tucuruí - Socioeconomic and Environmental Profile](#).
18. Amazon Foundation for the Support of Studies and Research, Government of Pará. [RI Araguaia - Socioeconomic and Environmental Profile](#).

19. According to the Amazon Institute of People and the Environment (Imazon), the municipalities with the highest deforestation rates have the lowest quality of life.
20. Ministry of Defense. Technical Cooperation Agreement / Management and Operational Center of the Amazon Protection System - Censipam n. 08/2020. <https://www.gov.br/censipam/pt-br/aceso-a-informacao/convenios-e-transferencias-1/arquivo-de-documentos/acordos-de-cooperacao-tecnica/15-27-07-20-act-com-semas-pa.pdf>
21. Pará Agency. [Acordo de cooperação permite que agentes de segurança atuem na fiscalização ambiental no Pará](#)
22. A dialogue channel was established with Segup, and several conversations were held throughout April with the Deputy Secretariat for Operational Management (Sago), who is responsible for the operation within Segup. Additional conversations with Semas took place in May with the Coordinator of the Deputy Secretariat for Administrative Management and Technologies – Sagat.
23. Data on security public expenditures by state can be found in the 2023 Brazilian Public Security Yearbook, published by the [Fórum Brasileiro de Segurança Pública](#)
24. Rural Environmental Registry (CAR) Analysis Portal: [www.semas.pa.gov.br/2021/03/18/semas-lanca-portal-de-analise-do-car/](http://www.semas.pa.gov.br/2021/03/18/semas-lanca-portal-de-analise-do-car/); Regulariza Pará: [Portal do Programa Regulariza Pará](#)
25. Data accessed from the portal [Programa Regulariza Pará](#) on June 12, 2024.
26. State Secretariat for Agriculture Development and Fisheries. <https://sedap.pa.gov.br/node/352>
27. Pará Agency (2023). [Pará registra queda de 40% no desmatamento após ações estratégicas da Operação Curupira](#)
28. Special Advisory Office for Social Communication (Ascom). [Operação Curupira completa um ano com redução do desmatamento e novos investimentos anunciados; O Pará avança em ações integradas e reduz o desmatamento no território estadual; Pará avança em ações integradas e reduz o desmatamento no território estadual; Desmatamento no Pará segue em queda e registra redução de 50% em julho, segundo o Inpe; Territórios Sustentáveis atende mais de 2 mil produtores rurais em 43 municípios paraenses; Plataforma Territórios Sustentáveis é lançada para fortalecer economia de baixo carbono](#)
29. The period before the operation, as provided by Segup, spans from November 15, 2021, to February 7, 2023, and the post-operation period is from February 8, 2023, to May 2, 2024.
30. O Liberal. [Viatura usada em operações de combate ao desmatamento é incendiada no Pará](#)
31. The vehicles used during Operation Curupira encountered issues and needed to be replaced. As of May, this year, Segup was on its third attempt to tender the leasing of modified vehicles suitable for use on the region's uneven roads and access routes.

## **Expediente Institucional**

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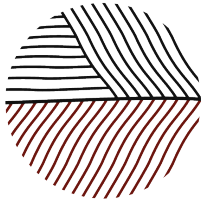
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# IGARAPÉ INSTITUTE

a think and do tank

The Igarapé Institute is an independent think-and-do tank that conducts research, develops solutions, and establishes partnerships with the aim of influencing both public and corporate policies and practices in overcoming major global challenges. Our mission is to contribute to public, digital, and climate security in Brazil and worldwide. Igarapé is a non-profit and non-partisan institution, based in Rio de Janeiro, operating from the local to the global level.

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