



Relevant Facts about Deforestation, Forest Fires and Environmental Regularization in Mato Grosso



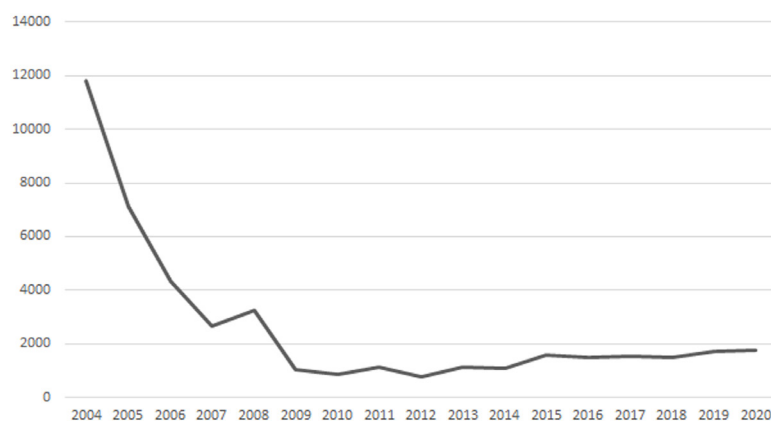
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1. DEFORESTATION IN THE AMAZON

- The PRODES [1] project of the National Institute for Space Research (INPE) has confirmed deforestation numbers for 2020. PRODES monitors satellite clearing of clear-cut deforestation in the Legal Amazon
Deforestation Rates by PRODES - 2004 a 2020 (Km2), in the Amazon:

Year	Mato Grosso	All of Amazon
2004	11814	27772
2005	7145	19014
2006	4333	14286
2007	2678	11651
2008	3258	12911
2009	1049	7464
2010	871	7000
2011	1120	6418
2012	757	4571
2013	1139	5891
2014	1075	5012
2015	1601	6207
2016	1489	7893
2017	1561	6947
2018	1490	7536
2019	1702	10129
2020	1767	11088
Var. 2020-2019	4%	9,5%

Amazon anual deforestation rate km2
Mato Grosso



2. DEFORESTATION IN THE CERRADO

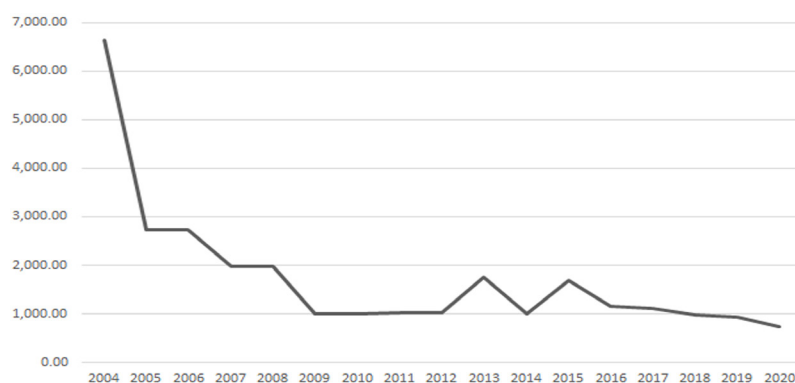
- PRODES also measures deforestation in the Cerrado

Deforestation Rates by PRODES - 2004 a 2020 (Km2), in the Cerrado:

Year	Mato Grosso	All of Cerrado
2004	6.630,41	29.939,19
2005	2.731,76	17.612,97
2006	2.731,76	17.612,97
2007	1.989,48	13.783,88
2008	1.989,48	13.783,88
2009	1.000,37	9.994,05
2010	1.000,37	9.994,05
2011	1.033,23	9.540,05
2012	1.033,23	9.540,05
2013	1.757,40	13.061,17
2014	1.010,43	10.824,85
2015	1.695,50	11.675,02
2016	1.164,54	6.789,57
2017	1.103,91	7.311,84
2018	988,09	6.634,09
2019	930,59	6.483,40
2020	727	7.300
Var. 2020-2019	-21.9%	12%
Var. 2019-2018*	-6%	-2%
Var. 2019-2004*	-86%	-78%

Cerrado anual deforestation rate km2

Mato Grosso

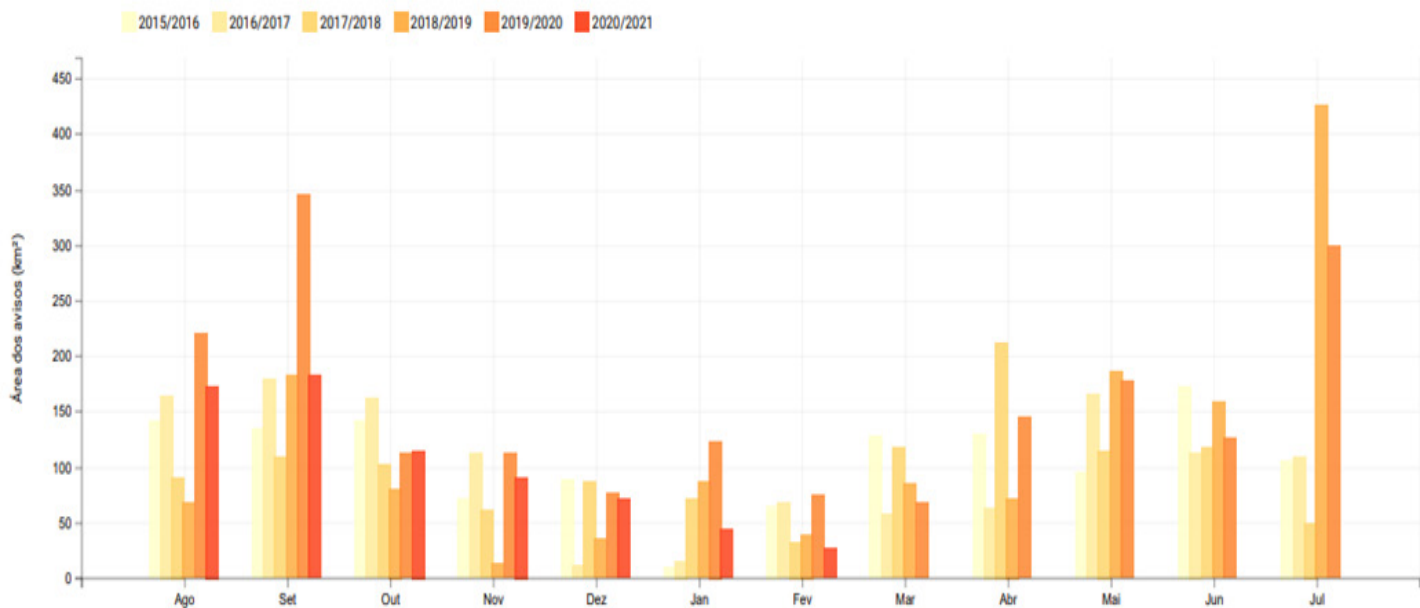


3. DEFORESTATION ALERTS 2019-2021

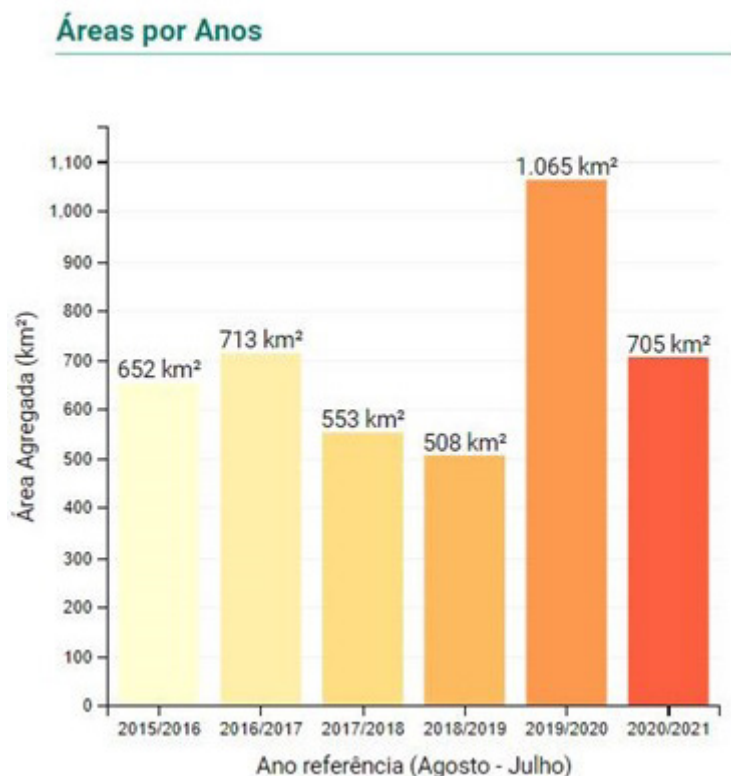
INPE, through DETER [2], also makes a monitoring of changes in forest cover in the Amazon and Cerrado.

DETER is not used to measure deforestation, it is an alert system to support deforestation control.

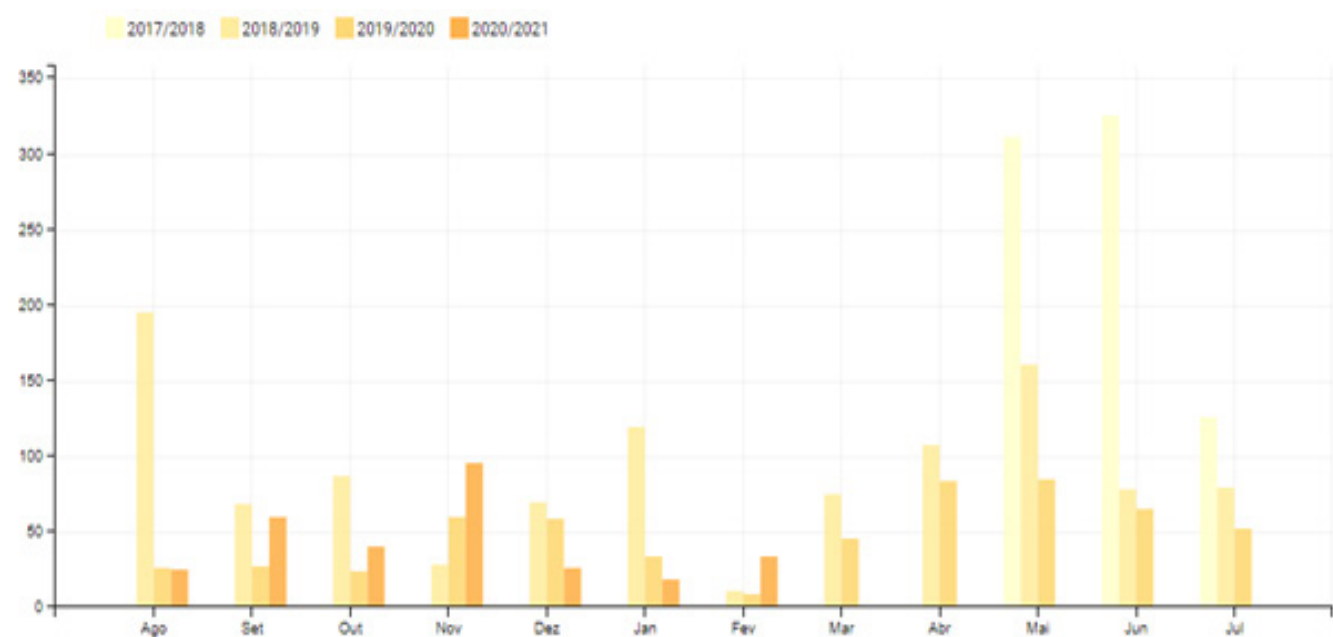
Graph below depicts DETER monthly aggregated area of deforestation alerts in Mato Grosso Amazon in the last 6 years:



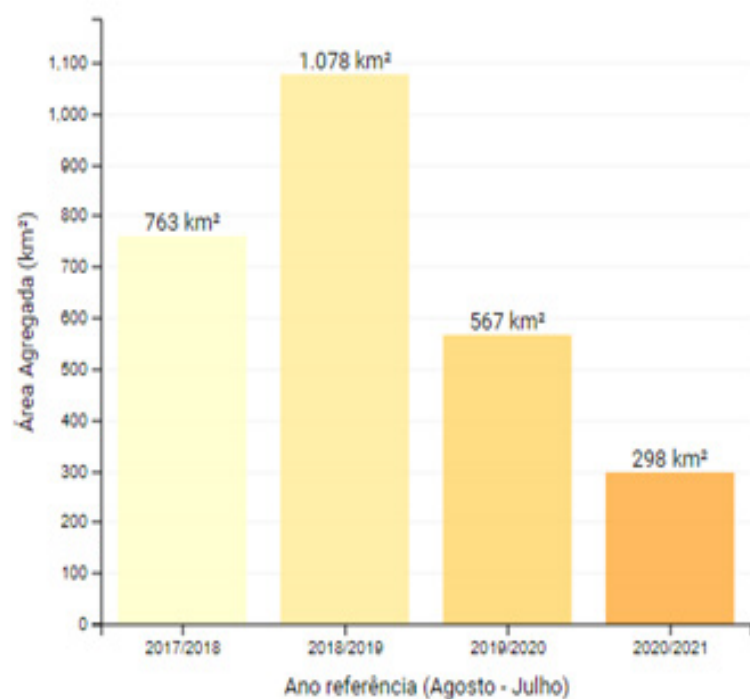
This graph shows the yearly aggregated area of deforestation alerts in Mato Grosso Amazon by DETER:



Graph below depicts DETER monthly aggregated area of deforestation alerts in Mato Grosso Cerrado in the last 4 years:

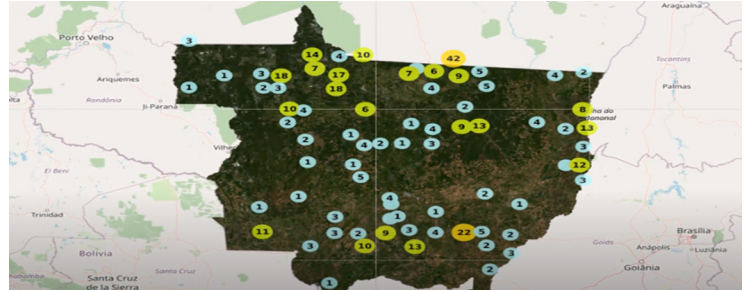


This graph shows the yearly aggregated area of deforestation alerts in Mato Grosso Cerrado by DETER:



4. MATO GROSSO STATE ACTIONS AGAINST DEFORESTATION

- As described in previous papers, since August 2019, Mato Grosso has been using a Planet Satellite Image Monitoring Platform, acquired by the REM program, as a preventive environmental control tool. The large number of daily images enables efficient monitoring of critical areas and will serve as the foundation for strategic decision making. The platform has been made public by SEMA and can be used by anyone [3].



- In March 2020, a Strategic Committee to Combat Illegal Deforestation, Illegal Forest Exploration and Forest Fires - CEDIF-MT, presided by the Governor of the State defined a plan of action. As a result, in 2020, 6.891 deforestation alerts were detected covering 680 thousand hectares.



- Integrated operations between SEMA and other state agencies were coordinated to stop deforestation in the field, including mobile units to serve as control centers providing access to deforestation data. The alerts led to a record R\$ 3,8 billion in fines issued by the State Secretary of Environment - SEMA and other government agencies responsible for deforestation control. Only SEMA issued R\$ 1,5 billion in fines in 2020, compared with the R\$ 300 million in R\$ 2019.



- 236 heavy equipment and machinery used for deforestation were removed from deforestation sites. 110 trucks with illegal timber were apprehended.



- A task force for legal action was installed by SEMA, aiming to ensure that the legal processes against offenders will not expire and fines will be paid. 20 lawyer were hired as part of this task force. 20 lawyer were hired as part of this task force.



As a result, DETER alerts for deforestation have systematically been in lower levels comparing to previous years, with a reduction of 31,5% in the alerts from August 2020 until January 2021:



According to Instituto Centro de Vida (ICV) analysis, 88% of deforestation happening in Mato Grosso in 2020 was illegal.

5. PPCDIF AND ACTION PLAN AGAINST DEFORESTATION

On November 30th 2020, the Government of Mato Grosso, through the Secretary of Environment (Sema) and Public Security Secretary (SESP), State Public Prosecutor's Office, third sector entities, Instituto Produce, Conserve and Include (PCI), REM-MT Program and Arca Multincubator (UFMT) began the preparation of the Strategic Plan for Prevention and Control of Deforestation and Forest Fires (PPCDIF/MT).

The plan will guide state actions for the next four years, from 2021 to 2024.

The plan participatory construction is being supported by the GCF Task Force funds and it is expected to be finalized in the first quarter of 2021.

In Mato Grosso, the PPCDIF began as a Plan for the Prevention and Control of Deforestation and Fires (PPCDQ) in 2009, following the parameters of the Federal Plan, the PPCDAm. From 2017, the third phase of the plan began to incorporate the concept of Forest Fires, becoming PPCDIF.

The actions of the third phase focused main on environmental accountability and regularization. For SEMA Executive Secretary Alex Marega, Mato Grosso's effort, added to the investments made by the REM-MT Program in institutional strengthening, were fundamental for the State to reverse the upward trend in deforestation in the Legal Amazon.



While PPCDIF is in construction, the 2021 Action Plan to prevent and combat illegal deforestation and forest fires was launched by the Governor of Mato Grosso Mauro Mendes in March 11th.

The investment will be the largest in history in actions to combat illegal deforestation and fires, and represents more than double the contribution of the year 2020, which was in the order of R \$ 32 million. In 2021, investments will be distributed along the following lines: management, monitoring, accountability, inspection, prevention and combat, protection of fauna and communication.

The planning brings together integrated actions of the member bodies of the Strategic Committee to Combat Illegal Deforestation, Illegal Forest Exploration and Forest Fires (CEDIF-MT).



“ We are committed against illegal deforestation, with zero tolerance for illicit acts, and also in the prevention and fight against forest fires. It is a campaign that will mobilize human and financial resources, and several actors that are adding efforts and common goals to promote development of Mato Grosso with respect to legislation and the environment.”

Governor Mauro Mendes

6. FOREST FIRES

The graph below depicts the history of fire alerts in Mato Grosso [7]:



Figura 1 - Série histórica do total de focos ativos detectados pelo satélite de referência, no período de 1998 até 17/03/2021.

This graph shows a seasonal comparison between 2019 and historical rates of forest fire alerts:

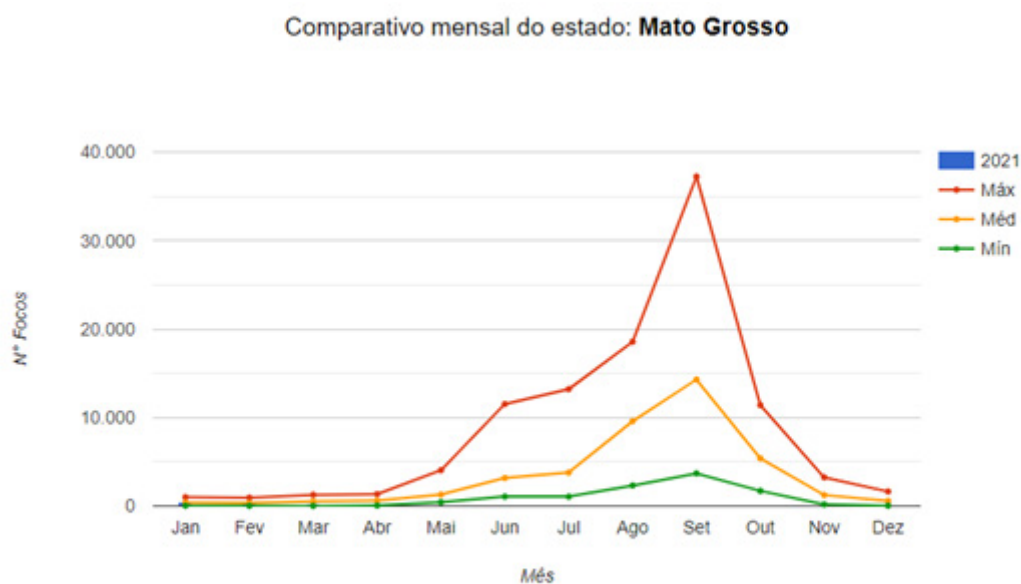


Figura 2 - Comparativo dos dados do ano corrente com os valores máximos, médios e mínimos, no período de 1998 até 17/03/2021.

According to ICV, using data from INPE, between January 1 and December 31 more than 47 thousand fire spots were detected in the state in 2020.

This number is 53% higher than that of the same period for the previous year. Proportionally, the Pantanal biome was the most affected by forest fires. Regarding the number of fire spots, 2020 had an increase of 609% compared to 2019. In the Amazon this increase was 17% and in the Cerrado, 19%.

Data from NASA, analyzed by the ICV, show that 8.5 million hectares were consumed by fire in Mato Grosso, which corresponds to almost 10% of its total area. The catastrophe of the forest fires in the Pantanal in 2020 consumed 40% of the biome area in Mato Grosso.

Mato Grosso has implemented an Integrated multi-agency committee (Ciman-MT) to deal with Forest Fires. Established by Decree No. 174/2019, Ciman brings together the various agencies that work in the forest fire response season, such as the Fire Department of Mato Grosso, Prevfogo / Ibama and ICMBio, with the purpose of strengthening monitoring, prevention, readiness and rapid response to forest fires and burns in an integrated manner with the various levels of government.

In the 2021 Action Plan, according to SEMA about R\$ 40 million will be invested only in preventing and fighting fires, with the aim of ensuring that Mato Grosso can deal with drought and preserve fauna and flora. A helicopter will be acquired that will have priority in serving operations against fire and illegal deforestation.

In the Plan is also the provision to hire 100 brigade members with State resources, and another 100 with federal resources, plus the equipment for combat and individual protection giving the Fire Department a very significant reinforcement.

7. ENVIROMENT REGULARIZATION

In 2017, the State also implemented the State Rural Environmental Registry System – SIMCAR[8] and regulated the Environmental Regularization Program provided for in the Forest Code.

The Rural Environmental Registry (CAR) is a key instrument for territorial management in the state, for the implementation of the Brazilian Forest Code law and for the regularization of state agricultural production.

In 2019, a task force was set up at the State Secretariat for the Environment to expedite the analysis of CAR registrations so that producers can begin the process of regularization and restoration.

CAR situation in February 2021

State of Mato Grosso Area	90.302.535 hectares
Area subject to be registered under CAR <small>(total area of the state excluding Indigenous Territories and conservation protected areas)</small>	73.236.223 hectares or 81% of the total state area

SIMCAR

Number of CAR	103.007
Registered area	48.783.634 hectares or 66% of the total area subject to registered under CAR

Historic Base (CAR migrated from federal SICAR system and former state base)

Number of CAR	112.260
Registered area	53.159.159 hectares or 66% of the total area subject to registered under CAR

Total CAR (SIMCAR + migrated CAR)

Number of CAR	60.893.445 hectares or 83,1% of the total area subject to registered under CAR
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Analyzed CAR

Number of CAR	46.661 or 45,3% of total number of CAR
Registered area	24.600.579 hectares or 33,6% of the total area subject to registered under CAR

Validated CAR

Number of CAR	4.769 10,8% of analysed CAR 4,6% of total number of CAR
Registered area	6.032.127 hectares 22,3% of analysed CAR 12,4% of the total area subject to registered under CAR

The low rate of approved or validated CARs reflects the poor information provided at the registration, at the CAR elaboration on farm level.

However, there is also the need to increase the number of analysts at Mato Grosso Environmental Secretary, define strategies to prioritize the analysis and make reference databases available.

In order to improve this information, it is essential to build official state geographic reference bases that reduce errors in the elaboration of the registers and enable an automation of the analyzes by crossing the registered information with the state reference bases.

The States Environment Secretariat is seeking to contract the elaboration of geographical databases with mapping of land use and coverage and hydrography, with updated remote sensing data, in the scale of 1: 25,000, detailing to 1: 10,000.

Better reference maps will allow automatic filter in the analysis of CAR, making the process more expedite and eliminating errors. Information on hydrography has been critical for the validation of CAR, since 90% of rejected CARs have presented differences on information on water bodies at farm level.

In 2018, Mato Grosso Environmental Secretary launched a Transparency Portal[9], publicizing data on forests, CAR and other important environmental issues. Mato Grosso is the Amazon state best placed in a transparency ranking by the public prosecutors office – MPF in Brazil.

8. PCI INSTITUTE MONITORING

The PCI Strategy is based on a broad set of targets divided into three key areas: Produce, Conserve and Include, which underpin its objectives and make monitoring possible.

The PCI Monitoring Committee was formed in early 2017 with the purpose of evaluating the progression of targets, subsidizing improvements and putting in place actions, as well as ensuring the transparency and credibility of the strategy for partners, investors and the general public. To this end, the Committee initially worked on defining indicators, a baseline and a source for each of the goals of three key areas, consolidated in the document “Bases para o monitoramento das metas da Estratégia PCI” (Premises for Monitoring PCI Strategy Goals) published in July 2017. The indicators were monitored and updated yearly over the first 4 years of the PCI (2016-2019).

PCI Institute is launching its Year 4 edition of PCI Goal’s Progress [10]. This overview offers the results of the monitoring indicators of the 21 PCI goals for the first four years of implementation of the 2016-2019 strategy, and outlines the baseline for 2015, when PCI was launched. It also includes a brief summary of the perception of the entities involved in the Strategy regarding the progress made in each key area, during the evaluation process.

Some data gaps still remain and some data sources have been reviewed in accordance with the commitment to continuously fine tune the methodology and data sources for greater accuracy, which are permanent activities of this Committee. The methodology used and the details of the data source are in the Technical Note. The PCI Institute hopes to launch in 2021 a reappraisal of the Strategy for the 2021 to 2030 period based on the goals and indicator improvements proposed in the evaluation workshops conducted in 2020.

The PCI Goal’s Progress was produced with the support of ICV. Considering the delay on data collection, this paper **Relevant Facts about Deforestation, Forest Fires and Environmental Regularization in Mato Grosso** aims to keep stakeholders and interested parties updated on these key issues in Mato Grosso.

ICV is one of the founding members of the PCI Institute, and is also producing analysis on deforestation and forest fires in Mato Grosso, as well as illegal timber extraction [11].

The fight against illegal deforestation is one of the pillars of the Produce, Conserve and Include Strategy of the State of Mato Grosso (PCI).

9. REFERENCES

All the images used in this document are credited to the Environment Secretary of Mato Grosso and the Mato Grosso Government.

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[2] DETER

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[3] Deforestation monitoring platform

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Realização



Apoio

