

The Nature and Current Challenges of an Active Amazonian Intelligence Defense – Case Study on The Amazon Fund Proponent Within the Legal Brazilian Amazon

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Abstract: This article presents an application to the Amazon Fund, developed on the period of 2023/ 2024, based on demand from concerns which have risen in the recent decades. Therefore, the selected themes are proposed based on the developments of economic demands that mandatorily have impacted the region and, among local and regional impacts, global impacts such as those associated with Environment and Climate Security issues, understanding their complexity is of both Local and Global Governance, focused to be met on the current proposal. The work proposal is directed to the Amazon Fund in attendance to the Amazon Forest challenges from the Brazilian Legal Amazon area that, under the Ecological Territory Zoning, will focus on the Military Domain Zone. Among the Military Areas within the Amazon, some are of Historic-Cultural valued Defense Sites, such as the Historical Fortification of Príncipe da Beira, in English Prince of Borders, which has been raised craved into the Amazon Forest in the State of Rondônia (constructed on the period of 1776 to 1783, by the Portuguese), neighboring Bolivia by an Amazonian River named Itenez Guaporé. The name of the river is of an indigenous nature, meaning Desert Valley or Possibly Waterfall River. The project proposal intends to positively impact on the local environmental biome and provide sustainable actions towards the area with topics which involve Defense. The background of information regarding this work, is based on open sources, nonetheless, we must alert that are of Defense and Security Interests.

Keywords: Amazonian Defense Intelligence, Forest, Illicit, Historical Heritage

1. Introduction

A policy maker should be aware that, while military security might still dominate, that the other sectors are still, by and large, present and could bypass military security at any moment. Buzan

This article presents an application to the Amazon Fund, initially conceived on the year of 2022, with the passing away of a Brazilian General (ynésio from FUNCEB – Brazilian Army Foundation) and further developed on the period of 2023/ 2024. It is based on the overgoing of themes from restiveness demand which have risen on the recent decades, despite all have been historically observed by Defense actors, at a both local and global level- *Diplomacy and defense are not substitutes for one another. Either alone would fail.* John F. Kennedy – address, University of Washington, Seattle, Nov.16th, 1961). A selection of topics is proposed, some inspired on the continued intelligence work of officers whom have served and (or) been ahead on command on the Brazilian Legal Amazon Military Areas, some as a result of a sum of concerns on the valuing of environmental themes and policies requiring from both law enforcement actors and civil society a delivery of support on the current Amazon defense, acknowledging that a new generation of challenges are being brought to society and to provide its defense, more aggressive intelligence must guarantee local capabilities for those whom are on the front of decision-making and of policies.

The idea of the name – Synésio & Rodrigues – arose on the year of 2022, with the passing away of one Brazilian General Synésio, that integrated – among other Defense activities - the team of the Brazilian Army Cultural Heritage, which periodically for decades, publishes and registers the Brazilian army intelligence, its history and its legacy on the Journal of Revista

DaCultura – FUNCEB. The Journal has, additionally, bastioned and mapped the Historical Defense structures from the Brazilian Military Fortifications, built by the Portuguese, researched and documented by the Brazilian Army Defense Researcher and Chief Editor Paulo R. Rodrigues T.; amongst others from FUNCEB team, whom sentineled those Publications until the present year of 2025, which remain in course.

The work drives to the Brazilian Legal Amazon, a response to the challenges by addressing them under the national Ecological Territory Zoning, also focusing the areas of Military Domain. Some of those are of Historic-Cultural Heritage Defense Sites, such as Príncipe da Beira Fortification, in English translated as *Prince of Borders*, which has been raised craved into the Amazon Forest in the State of *Rondônia* (constructed on the period of 1776 to 1783, by the Portuguese legacy under colonization period), neighboring Bolivia by an Amazonian River named Itenez *Guaporé*. The indigenous name has the meaning of *Desert Valley or Possibly Waterfall River*. The project proposal aims to positively impact the local environmental biome safety, built sustainable actions towards the area – involving the dimensions of social and economic aspects under the topics which involve Defense.

The focus on the military area was motivated by the publication of deforestation data, on the year of 2022 (MapBiomas, 2022). Despite no classified information is being placed - the background of information regarding this work, is based on open sources – it is understood that those subjects are connected and marshaled to the area of Defense and of Security. Historically, the military areas have traditionally been those that have conserved and kept its sites from deforestation as well as have kept Historical Defense sites under alerts and conservation efforts, nonetheless, it was reported that on the year of 2021; a sum of 69,796 identified deforestation alerts, validated with the register of 20% deforestation increase in comparison with 2020, which is corresponds to 16,556 Km² of deforestation. followed by the Caatinga (another Brazilian Biome). The Biomes of Amazon Forest, Cerrado and Caatinga have accounted for 96,2% of Biome losses. More than 98% of deforestation happened on 2021 accounts for illegal acts, once no official data regarding authorization was registered (Gueiros, 2022). This landscape of deforestation, additionally to security landscape issues, has motivated on the following years of 2023, the tailoring of the Fund Proposal.

Because the topics concerning the Amazon Areas are of a sensitive nature and of strategic demand on Defense and Security, the current proposal offers a focus on the Military Historical and Cultural Environmental Heritage work within the Brazilian Legal Amazon; with the understanding of the active customary challenges in the area with time-honored friendly neighbors Nations that share the Forest Biome, as well of additional challenges - geopolitical trends - involving partners of worldwide dimensions (such as the Fund collaborators itself), whom have arisen on the discussions of local Amazonian matters, either with scientific research interests tying the forest biome with innovative investments, either with active defense cooperating interests to the disrupt of illicit activities and environmental degradation.

Ecosystems can be highly nonlinear within certain regions, and changes can be dramatic or irreversible (Farber et al., 2002). The availability of the ecosystem services - under degradation - may be altered beyond the threshold of reversibility. Therefore, understanding that this work has its interface with topics of acute distress - amongst them, some may affect sovereignty, local and global governance - and critical issues, under environmental values; a deep sense of moral responsibility and competence generation is required, therefore, the current project is permeated by security remarks on the landscape of decision-making policies and investments on the area. The Project unfolds into three actions: *i. Registers of the Historical, Cultural and Environmental Heritage; ii. Post Graduation – specialization course on Amazonian Defense Intelligence and iii. Environmental-Social Project Daughters and sons of Dictatorship.*

2. The Amazon Fund Background Information

Through the Decree of NO. 6527_2008, the Brazilian Government turned available an official mechanism for the attraction of donations to the Brazilian Legal Amazon. The Brazilian Bank of Economic Development – BNDES – hosts the Fund. A REED (Reduce Emissions from Deforestation and Forest Degradation), regional and local strategy response has designed this fund amidst the raising of donations of non-reimbursable nature investments. The Fund is of an international character. It requires that projects will be capable to address *investments on prevention, monitoring and deforestation combat and additional preservation and sustainable actions* in the Biome. It focusses to the reach of *four areas of action: sustainable production; land use planning, monitoring and control systems and science, innovation and economic instruments* (www.fundoamazonia.gov.br). Main International donators are Germany, United States of America, Norway, Switzerland and Japan. Below data sourced from Amazon Fund Corporate Social Report of 2023 registers the conditions under such the payments from the Funds are provided, dependable on the achievement of deforestation decrease goals.



The Amazon Fund earns new result-based payments when deforestation (red line) drops below the agreed reference level (grey box).

Figure 1: Amazon Fund: Deforestation in Brazil vs Reference Level 2016 – 22 (km2). Reference Level for payments accordingly to deforestation decrease.

Source: Graphics (RAFA 2023_BNDES report on Amazon Fund); Data: INPE 2021/2022

The thematic support proposed by the Amazon Fund requires that the projects attends to the following goals, accordingly to the Amazon Fund Report (RAFA 2023): *i. management of public forests and protected areas, environmental monitoring and inspection, sustainable forest management, economic activities based on sustainable use of vegetation, ecological-economic, ecological-economic zoning (EEZ), territorial planning and land legalization, conservation and sustainable use of biodiversity and recovery of deforested areas*. The Following table shows the Deforestation of the Brazilian Legal Amazon from selected period.

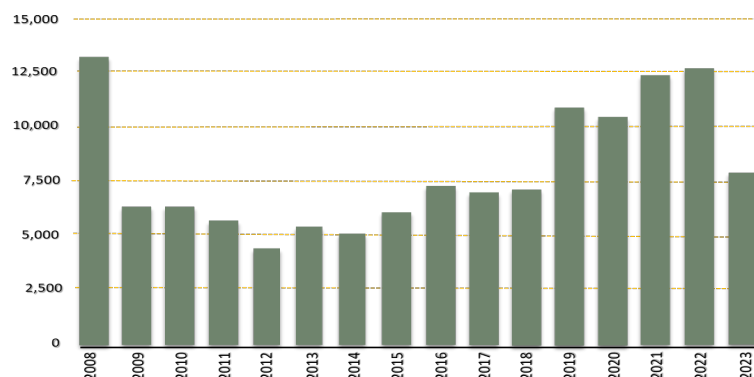


Table 1: Brazilian Legal Amazon Deforestation – 2008 until 2023

Source: Statista 2025 – Research period 2008 – 2023. Edited for this article

3. The Amazon Region: Geographical Borders and Selected Aspects Concerning Governance and Security.

On the understanding of its historical challenges, the drafting of a Project to the Amazon Fund, selected a few topics considered relevant to advocate and advance on local Intelligence actions. Topics are based on both the traditional disputes on the natural geographic landscape offered from the forest, as additionally linked to updated concerns of political adversities from local security; moreover, with the advent of environmental governance linked with advanced security topics from local to global and vice-versa. *Because security is relational, one cannot understand the national security of any given state without understanding the international pattern of security interdependence in which it is embedded.* (Buzan, as cited in Stone, 2009). The preliminary research has disclosure critical topics concerning the Legal Brazilian Amazon governance and security, and its interdependence and local stability of the amazonian forest participant Nations:

1. The existence of illicit activities under a cross-border pattern and the difficulties of local defense and law enforcement actors to fight its complexities.
2. Energy and Water resources, understanding that the Brazilian energy sector relies on hydropower and the biogeochemical cycles are compromised by deforestation and by other environmental pollutants emissions, externalized from the unsustainable land use.
3. Deforestation, illegal mining and the degraded environment, lacking restoration of both the forest biome and of the human security issues locally aggravated with the prejudice of local governance on the confrontation of illicit exploration on the land, including areas officially pertaining to legal indigenous reservations.

1. Illicit Financial Flows (IFFs) have been a permanent obstacle for local governance, being required a review of commitments addressing what were the obstacles traditionally associated to the rainforest ecosystem health, had them been solved, or no longer are active, or if they have been locally reorganized. If evolved, if transmuted into a more complex network of organized crime and corruption affecting local sustainability governance by the untold consequences of those activities over local populations, and further ahead, from the local to the global conflicts whichever poses political damage compromising local sovereignties due to governance flaws – *The core of our defense is the faith we have in the institutions we defend.* Franklin Roosevelt, Speech, Dayton, Ohio, Oct. 12th.1940.

Understanding governance, from the Greek *Kuberman*, as: *a word that suggests navigation or steering*. Among the main challenges regarding the lack of governance on the Amazon Forest, UNODC has legitimate updated reports on drugs, smuggling, environmentally predatory illicit activities such as deforestation for land use change, illegal mining, illegal animal trafficking, minor abuse, prostitution and exploration, and all the business which arise pairing with criminal supply chains. As we recall that *Local dialogues with Global*, Gupta (2004) offers an intelligence framework on the possible weakening of local governance: *The pressing governance challenge is navigating change in a globalizing world in a manner that remains legitimate across contexts. It requires mediation of local or context-specific differences on the perceived nature of governance and appropriate bases for collective action. This challenge is exacerbated by the growing need for governance under conditions of extreme scientific uncertainty and normative conflict over the very existence, nature, and hence framing of governance challenges.*

Moreover, the question may possibly rely on the forces of what has been and what is being empowered on the Amazon region, and how it affects cross-borders sovereignties. UNODC (2023) has classified the illicit profit as *outward IFF – Illicit Financial Flows (money from operations spent abroad)* and *inward IFF (money spent or invested in domestic jurisdiction)* figure 2. Those parallel network of empowerment progressively weakens official government agencies, with restricted or none chances of locally thriving conditions. Registers have spotted a challenging lack of governance scenarios, some historical conflicts and additional vulnerabilities on the region, including Nations which neighbors the Legal Brazilian Amazon frontiers. Table 2.

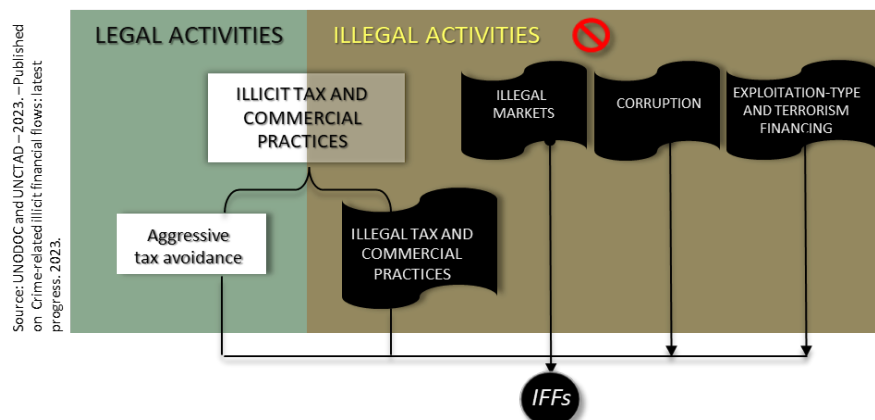


Figure 2: Legal and Illegal Activities and the Illicit financial flows (IFFs) scheme

Source: UNODC (2023)

Table 2: Geographical borders information – transnational and inner state Amazonian Forest Biome international frontier delimitations

BRAZILIAN LEGAL AMAZON FOREST FRONTIERS WITH COMMON AMAZONIAN FOREST NEIGHBORS INFORMATION								
BRAZILIAN AMAZONIAN FOREST STATES								
Amapá	Amazonas	Acre	Mato Grosso	Rondônia	Pará	Roraima	Tocantins	Maranhão
INTERNATIONAL FRONTIERS WITH COMMON AMAZONIAN FOREST - NATIONS								
BOLIVIA								
AREA OF SHARED FRONTIER	3,423.2 km - TOTAL		2,609.3 Km - Per rivers and channels		63.0 km - Per lakes		750.9 km - Conventional line borders delimitations	
BRAZILIAN STATES WITH SHARED FRONTIERS WITH BOLIVIA			Acre Rondônia Mato Grosso					
PERU								
AREA OF SHARED FRONTIER	2,995.3 Km -TOTAL		2,003.1- Per rivers and channels		708,7 km - Per water divisors		283.5 km - Conventional line borders delimitations	
BRAZILIAN STATES WITH SHARED FRONTIER WITH PERU			Acre Amazonas					
VENEZUELA								
AREA OF SHARED FRONTIER	2,199.0 Km - TOTAL		2,109.0 km - Per water divisors				90.0 Km - Per conventional line borders delimitations	
BRAZILIAN STATES WITH SHARED FRONTIER WITH VENEZUELA			Amazonas Roraima					
COLOMBIA								
AREA OF SHARED FRONTIER	1,644.2 Km - TOTAL		808.9 Km - Per rivers and channels		223.2 Km - Per water divisors		612.1 Km - Per conventional line borders delimitations	
BRAZILIAN STATES WITH SHARED FRONTIER WITH COLOMBIA			Amazonas					
GUIANA								
AREA OF SHARED FRONTIER	1,644.2 Km - TOTAL		698.2 km - Per rivers and channels				907.6 Km -Per conventional line borders delimitations	
BRAZILIAN STATES WITH SHARED FRONTIER WITH GUIANA			Roraima Pará					
GUIANA FRANCESA								
AREA OF SHARED FRONTIER	730.4 Km		427.2		303.2 Km Per water divisors			
	TOTAL		Per rivers and channels					
BRAZILIAN STATES WITH SHARED FRONTIER WITH GUIANA FRANCESA			Amapá					
SURINAME								
AREA OF SHARED FRONTIER	593.0 Km		593.0 Km - Per water divisors					
BRAZILIAN STATES WITH SHARED FRONTIER WITH GUIANA			Amapá Pará					

In a transnational context, nations which share the Amazon Forest biome, may become voiceless due to uncertainties and lack of trust on what conflicts which compromise local sovereignties and security, affect beyond the region sustainability advancing on hostile global scales of organized crime networks. The bypassing of human and environmental health, resulting on human rights violations on the region evolved to become an international security problem. Predominant threats have transborder networks that advance on the legal, political, and financial systems. *Legitimizing the use of science in governance requires evolution of the institutions that can confer legitimacy on scientific input into decision making, especially in areas of heightened controversy* (Gupta 2004, p. 143). Some impacts are of global nature, therefore borderless. That, when affects and how affects and expands its crisis, channels on geopolitical environments of discussions. The assessments of paths to the restoring of environmental and human security, have moved to a more complex status, and the nature of local impacts advance on global complains, both with affect and compromise of Public Health and financial resources addressed to problem-solving.

According to Kodack and McDonald Wimbush (2011), *Human security: sufficient access to commodities (food, water) and environments (shelter, health care) necessary to sustain human life*. Additional views of security have questioned the following: *Who is to be secured? Which values are to be secured?* (Friedrich-Ebert-Stiftung). Other traditional envision of security addresses it as: *a low probability of damage to acquired values* (David Baldwin, 1997, quoted on Friedrich).

Annual average inward IFFs (Best estimates and/or ranges, in millions of USD) resulting from drug trafficking, derived from selected country pilots

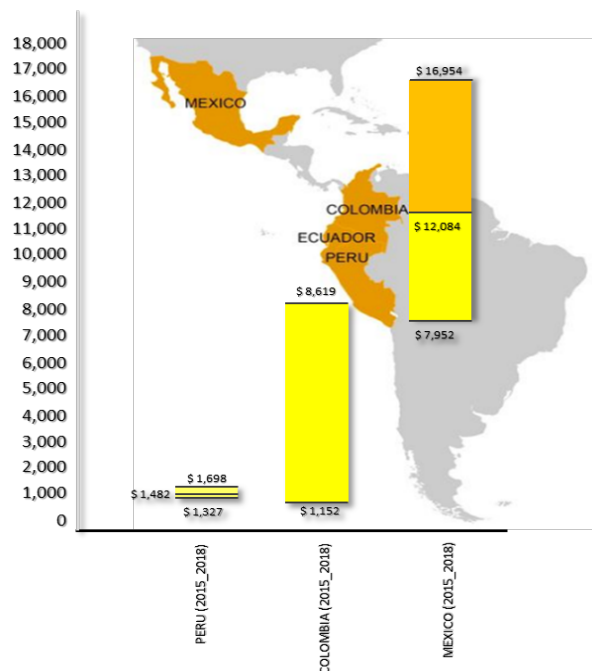


Figure 3: Americas Continent and the challenges of illicit activities increase per period 2015-2018

IFFs resulting from drug trafficking.

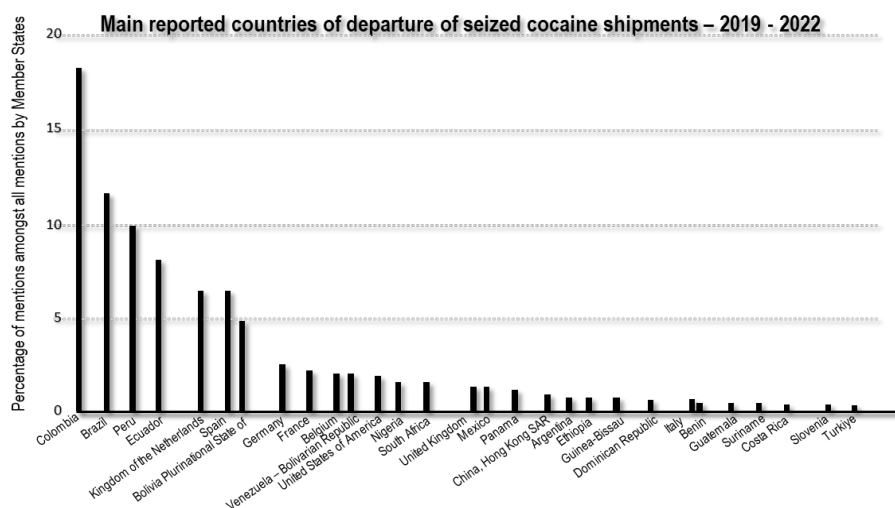
Note: Peru and Colombia – Nations which integrate the Amazon Forest, neighboring Brazil's Legal Amazon Forest. According to the IFFS Estimate report 2023, Peru accounts for the second largest share of the world's supply of cocaine. Traffickers resident in Peru export cocaine to markets in South America, and additional income is generated by selling cocaine to non-resident drug trafficking organizations in Europe involved in the extra-continental export of the drug. Source: IFFS Report 2023.

Global Illicit Cultivation of Coca Bush, 2010 – 2022 (hectares)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bolivia (Plurinational State of)	31,000	27,200	25,300	23,000	20,400	20,200	23,100	24,500	23,100	25,500	29,400	30,500	29,900.00
Colombia ^a	62,000	64,000	48,000	48,000	69,000	96,000	146,000	171,000	169,000	154,000	142,800	204,300	230,027.62
Peru ^b		61,200	64,400										
Peru ^c		62,500	60,400	49,800	42,900	40,300	43,900	49,900	54,100	54,700	61,800	80,681 ^a	95,008.00
Total	154,200	155,600^d	133,700	120,800	132,300	156,500	213,000	245,400	246,200	234,200	234,200	315,481	354,935.62

Table 3: Global Illicit Cultivation of Coca Bush, 2010-2022 (hectares)

Sources: Plurinational State of Bolivia: National illicit crop monitoring system supported by the UNODC. Colombia: National illicit monitoring system supported by UNODC. Peru: National illicit crop monitoring system supported by UNODC. (UNODC 2024 – Drug Market, online accessed on March 27th, 2025).



Source: www.unodc.org/unodc/en/data-and-analysis/wdr2024-drug-market-trends.html

Figure 4: Main reported countries of departure of seized cocaine shipments – 2019-2022.

Source: UNODC. Assessed on March 27th, 2025.

2. Energy and Water Resources: the World Bank Group, amongst other International Security Agencies, recognized that *without water security, countries will fail to achieve most of the Sustainable Development Goals (SDGs)*. (WBG report – 2024). The World Bank Group additionally reported (WBG 2025) that over the last 50 years, *natural water storage has declined by 27 trillion cubic meters due to land degradation, groundwater depletion, and loss of wetland*. Moreover, the existence of illicit activities on the land, posing water, air and soil contamination, environmental degradation, compromised water quality and scarcity. Water and climate change are both physically and chemically linked under the biogeochemical cycles: Climate change amplifies water-related risks and affects the hydrological cycle. Energy and water Security subjects address for intelligence defense actions, sharply connected with life and population's security:

Energy Security: Uninterrupted provision of vital energy services (see Chapter 1, Section 1.2.2) – energy security – is a high priority of every nation. Energy security concerns are a key driving force of energy policy. These concerns relate to the robustness (sufficiency of resources, reliability of infrastructure, and stable and affordable prices); sovereignty (protection from potential threats from external agents); and resilience (the ability to withstand diverse disruptions) of energy systems. CHERP.

The International Energy Agency IEA defines energy security as the *uninterrupted availability of energy sources at an affordable price* (Energy Security – Topics - IEA).

Water Security: *The ability to safeguard an availability of water sufficient to sustain lives and livelihoods and protect against threats to and from water. The definition attempts to capture that water security is an access and availability issue.* (The Center for Water Security and Cooperation, 2017).

- *Reliable access to water of sufficient quantity and quality for basic human needs, small-scale livelihoods and local ecosystem services, coupled ‘with a well-managed risk of water-related disasters (USAID).*

- *Under the context of the US Department of Defense (DoD), water security refers to the capacity to ensure adequate, reliable, and sustainable access to water of suitable quality to support all current and future missions and installations, while also protecting against water-related threats and ensuring resilience (DoD).*

With Defense Intelligence awarenesses operating in a worldwide scale, imbalances between supply and demand on water and energy security subjects have been predicted. Those topics are periodically reviewed by experts, among them: Marc Kodack. Juli McDonald Wimbush (2011), as previously mentioned, for more than a decade, as of request of U.S. Department of State, reported: *Due to the uncertainties concerning the availability, quality and cost uncertainties related to climate change, demographics and renewable energy increases water demands, and more realistic training scenarios to match operations of water deployment situation.* Updated on current subject is bellow available per statistics on water security events (Statista, 2025). **Table 4.**

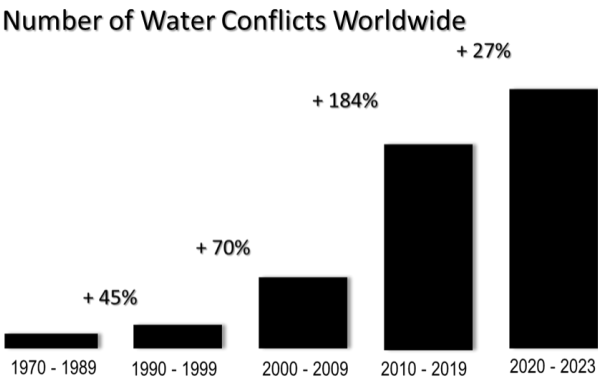


Table 4: Statistical data available in 2025, regarding registers on water conflicts, the use of water as a weapon in conflicts and water as a trigger/cause of a conflict

Source: STATISTA 2025, sourced from Pacific Institute

The trends regarding the use of water as a weapon, have anticipated current scenarios. On 2012 a report was ordered by the U.S. Department of State to provide strategic intelligence on the main questioning of *how would water shortages, poor water quality and (or) floods, would impact U.S national security interests over the next 30 years?* The study outlines topics that despite not explicitly calling for water and energy security in the Brazilian Legal Amazon Forest, those highlights would relate with the emerged concerns on the heart of the Brazilian Legal Amazon Biome, craved in the South America region. The Intelligence Committee (ICC) coordinated report from 2012, previewed the following status – amongst others – on the subject:

- During the next 10 years, many countries important to the United States will experience water problems—that will risk instability and state failure, increase regional tensions...
- The lack of adequate water will be a destabilizing factor in some countries because they do not have the financial resources or technical ability to solve their internal water problems. In addition, some states are further stressed by a heavy dependency on river water controlled by upstream nations with unresolved water-sharing issues.

- We assess that from now through 2040 water shortages and pollution probably will harm the economic performance of important trading partners.
- Water shortages, poor water quality, and floods by themselves are unlikely to result in state failure. However, water problems— when combined with poverty, social tensions, environmental degradation, ineffectual leadership, and weak political institutions— contribute to social disruptions that can result in state failure.

As environmental governance stressors evolved, those subjects remain gravitating amongst intelligence actors, with geopolitical adverts involving water as weapon, such as water scarcity, amongst the many disturbances which are covered on the Water Security agenda. The next image displays data on the amount of water covered in millions of hectare on the Brazilian territory per biome, among them, the data registers that more than half of the Brazilian Water covered area is sited in the Amazon Biome.

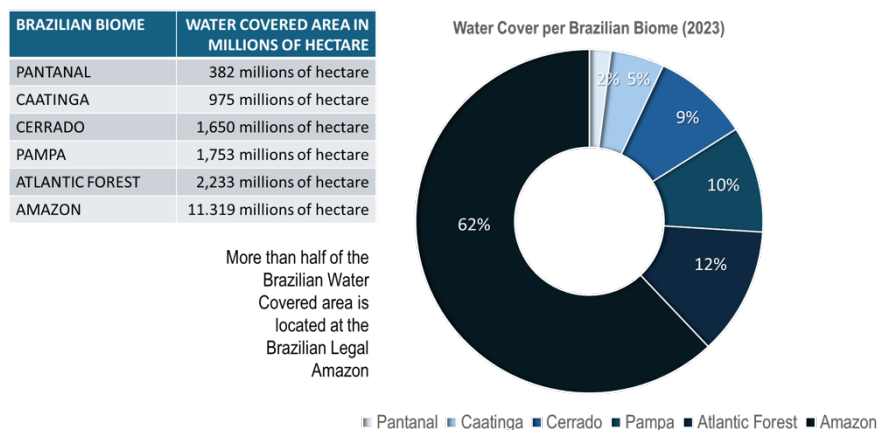


Figure 5: Water coverage area on the Brazilian Biomes per millions of hectares.

Source: MapBiomias. *Panorama da Superfície de Água do Brasil 1985. 2023.*

Fact_MapBiomias_Agua_2023_25.06.24. Projeto MapBiomias – Mapeamento da superfície de água no Brasil (Coleção 3), www.mapbiomas.org.

3. The third driven force to justify the current project, has its focus on Deforestation, illegal mining and the degraded environment, lacking restoration of both the forest biome and of the human security issues locally aggravated with the prejudice of local governance on the confrontation of illicit exploration on the land, including areas officially pertaining to legal indigenous reservations.

Roy Morrison (1995), on Ecological Democracy, has stated that: *Building an ecological society means protecting and preserving wilderness and diversity...the wild can touch us in the deepest heart of our cities. Building an ecological society means reviving the planet.* Those conceptual frameworks have gradually blended on society, with the recognition of the embracing of an interdependent world. The ecosystem functional value has evolved to understandably alert that, in most cases, it extraordinarily surpasses the economic value of its intervention, and therefore it encompasses values of environmental ethics. Either under biocentric or anthropocentric approaches of nature and of man's intervention, Arne Naess's ¹ (1984) quote on R.E. Watson (2005/2012) wisely states that: *man should learn to behave in an ecologically sound manner simply because this is necessary for human survival.* That understanding delivers highlights for the selection and review of criteria, and on how must them be punctually understood under localness adversities on decision-making. Those values are indispensable for defense, security and for governance. As a response, the introduction of Environmental Ethics within detailed tools of Environmental Assessments, such as Life Cycle Assessments (LCAs), has allowed quantified results and scientifically based scenarios for decision-makers.

The concepts of the deep ecology movements, accordingly, have been a driven force on the data inputs for LCAs, both on the applying of environmental ethics on policy decision-making (R. Schenck, Philip et al 2014), as on the careful inputs previously selected from processes *per* region, and for about the last three decades. The understanding of the complexity of the quantified outputs from those activities based on accredited data and methods, has encouraged many experts and consultants to openly state their position regarding geopolitical status, based on scientific data. Those have conquered the empowerment of directly influence international markets of commodities, for instance, such as the case of rare earth and conflict minerals and its landscape of risks for shareholders: *The global geopolitical landscape is rife with conflict, meaning manufacturers must expand their focus beyond typical areas and be ready to pivot to respond to new disruptions. In short, compliance with conflict minerals regulations is no longer enough.* (ASSENT, 2024).

Those activities have been under universally raised unquietness and with the monitoring of its area by intelligence actors. The Amazon Forest Biome is amongst those strategic areas. Not only due to environmental damage resulted from deforestation, but to the many activities associated to such with wildlife losses whichever compromised the biome or increased the local ecosystem losses in such a path that, the social damage from the advent of those acts and from IFFs, have, for long periods, locally encroached the area of other ethically mutilated human response towards the captured status of the sites, such is the case of illicit artisanal mining, which is happening in a higher pace in the Amazon Forest Biome. Figure 6 displays the State of Criminalization of UN Member States, regarding environmental topics. Followed by figures 7, 8 and 9 providing data on Amazon Forest challenges, with emphasis on the Amazon Deforestation resulted to mining activity.

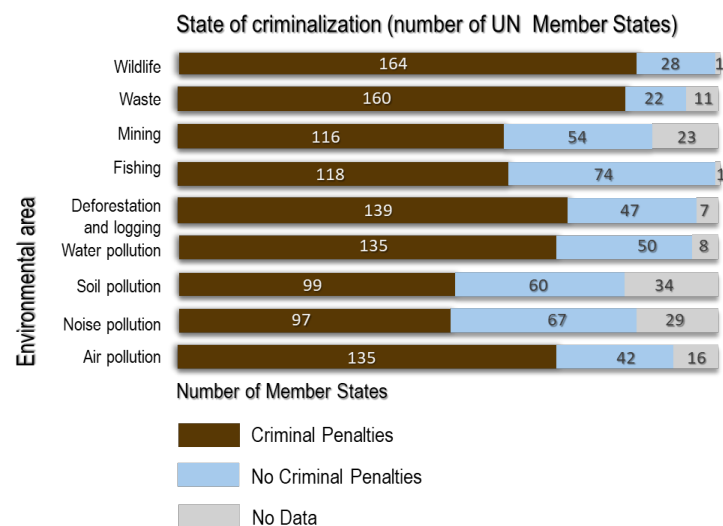


Figure 6: State of Criminalization (from United Nations Member States).

Source: UNODC 2024 - *The Landscape of Criminalization Global Analysis on Crimes That Affect the Environment*.

Observations: According to document, the two environmental areas with the highest levels of criminalization are waste and wildlife crime. However, those are followed by mining. In the case of the Brazilian Legal Amazon, the highlights of illicit activities commute those environmental violations, and are related.

Available data by statista on the *most popular Climate Policies – a Global Environmental Trend* -registered that most of proposed policies are raised with the focus on the conservation of forests and land (54%), followed by renewable power investments (53%).(Roper, Statista. 2021). On the year of 2019, Richard H. Glenn, Deputy Assistant Secretary Bureau of International Narcotics and Law enforcement Affairs, regarding the threats to U.S. National Security and

International Human Rights has testimony that: *Mining in violation of the laws of the nation in which the activity occurs often takes place in remote areas, and it is difficult to police, which leaves opportunities for organized criminal groups to carry out this activity.*

In Brazil, the activity of both Industrial and Artisanal mining increased (Fig7). The Brazilian Legal Amazon accounts for 66,2% of the mining area in Brazil. (MapBiomias, 2024). Regarding the artisanal mining activity, 91,6% of the artisanal mining in Brazil is located at the Amazon Biome.

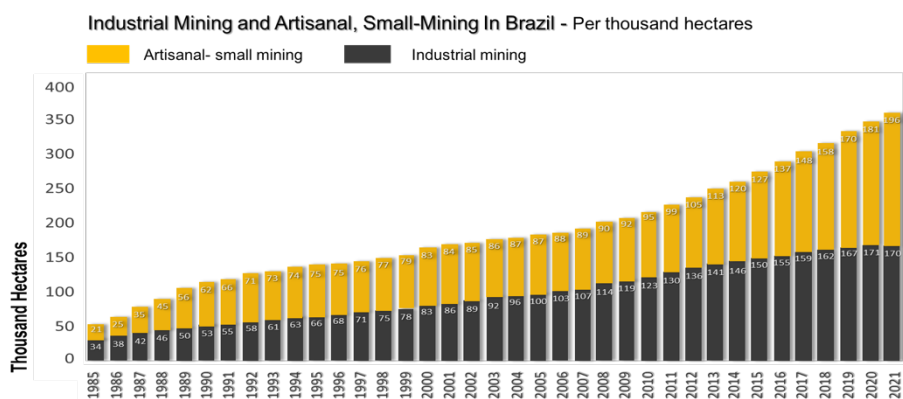


Figure 7: Industrial and Artisanal-small mining in Brazil – per Thousand Hectares.
Source: MAPBIOMAS 2022 — collection 7- Mapping of Industrial and artisanal mining in Brazil.

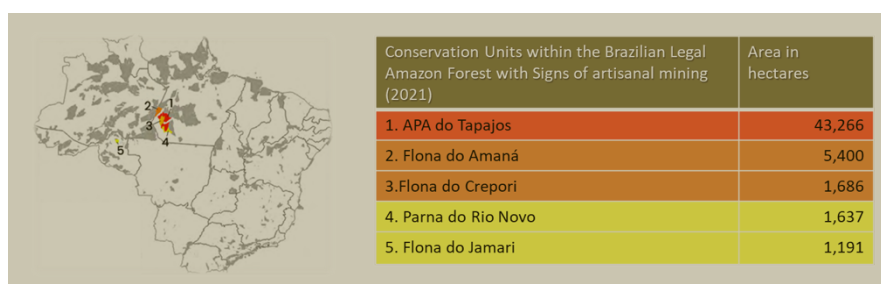


Figure 8: Conservation Units within the Brazilian Legal Amazon Forest with Signs of Artisanal Mining.
Source: MAPBIOMAS 2022 - collection 7 – Mapping of industrial and artisanal mining in Brazil.

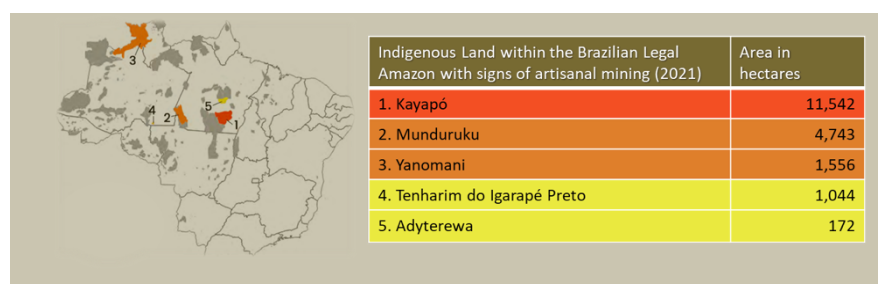


Figure 9: Indigenous land within the Brazilian Legal Amazon with signs of artisanal mining (2021).

Source: MAPBIOMAS 2022 - collection 7 – Mapping of industrial and artisanal mining in Brazil.

Artisanal Gold extraction accounts for 83% of an equivalent area of 162,659 hectares. Additional data recorded land use within the Brazilian legal amazon conflicts such as mining in conservation and on indigenous areas. The pace of its advance affects the biome degradation resulting on both national and international security problem, as of recently declared by current Brazilian

Government (Pres. Luis Inácio da Silva, 2024), which has claimed for the use of government apparatus against illegal mining: *health crisis plaguing the indigenous community, with members falling victims of malnutrition and other diseases. The region is Brazil's largest indigenous territory in terms of land area and is assailed by the invasion and violence of gold miners and the contamination of the land and water by the mercury used in mining* (Agency Brazil, 2024). That resulted on a total of 387 ongoing investigations, including clandestine flights for provision of supplies addressing illicit mining activities, and additionally advanced on the raise of criminal activity in the Amazon Forest - on both inside its borders as of trans-frontier violations from neighboring nations that share the forest biome. U.S. Investigations confirmed predatory activities associated with the opening of the Trans-Oceanic highway in 2011, with a skyrocketing impact of illicit mining in the Peruvian Amazonian region of Madre de Dios. In response, the U.S. Customs and Border Protection Department (CBP, 2025) has been empowered to investigate and deter illegal mining, with capability of tracking the most common illegally mined materials - gold and diamonds.

The awareness over Illicit mining interconnects with the warfare against financial and transnational criminal activity and in addition, to human rights violations: *Criminal networks often use land cleared by illegal logging operations to establish illegal mining activities where they use mercury to search for raw minerals, like gold. Mercury pollutes nearby water sources, poisoning wildlife and local drinking water.* Amidst the transnational movement of illicit activities on the Amazon Biome, the areas which occur artisanal mining, have been spotted with roads that have allowed – lacking law enforcement capability of defense on the coverage of the vast area – the enabling of equipped illegal miners' entrance. Environmental and population's health have been compromised from the process of gold extraction – affecting local amazonian rivers, land and air, additionally, the moral and ethical damage resulted from human rights violations as observed: *Since illegal miners do not have access to capital through the formal banking sector, they often turn to TCOs and other criminal groups for financing. Illegal gold mining also has severe environmental consequences... In Peru, illegal mining has destroyed a part of the Amazon rainforest equivalent to seven times the size of Miami...in 2017, police in Peru's Madre de Dios region uncovered a mass grave with 20 burned bodies thought to be the bodies of laborers from illegal mining camps. In addition to financing the activities and controlling the labor* (CBP,2025).

4. The Presenting of the Amazon Fund Project Proposal

On the addressing of the project, it is relevant to recall that: Security is taken to be about the pursuit of freedom from threat and the ability of states and societies to maintain their independent identity and their functional integrity against forces of change, which they see as hostile (Buzan, quoted on Marianne Stone,2009). The demand of due diligence towards requiring funds for the Amazon Fund has motivated the already exposed topics of concern. Additionally, it suggests that the authorization of its proposed activities to be under the approval of the Brazilian Federal Police, given the existence of criminality and on demand operations within the region. The project extension can be overviewed on figure 10, with further highlights followed on the next lines.

The project addresses the Amazon Fund demand being developed on three fronts, as of figure 10 displays: *i. Registers of the Historical, Cultural and Environmental Heritage; ii. Post Graduation – specialization course on Amazonian Defense Intelligence and iii. Environmental-Social Project Daughters and sons of Dictatorship.*

The **I.** Item is addressed to continue and to deepen on the subjects that already integrate the work in course developed and researched by Brazilian army publications on the Journal of Brazilian Cultural Intelligence: Revista da Cultura. This will remain as the scientific root of the project, once it will allow the continued local research of military capabilities and demands on the advancements of defense structures. This part one will be divided into two: **1.1.** Military Historic Defense Heritage and **1.2.** Cultural Environmental Heritage. Those are followed display on the

figure and further detailed by suggested research topics. Part two - **II** - is directed to attend to advanced defense intelligence competence, with the deepening into further environmental data, and the providing of intelligence preparedness to avoid, to identify and to face adversities and provide immediate response on the front when in the advent of both local and global harm. The topics were proposed as a response to the recurrent violence on the Biome. Among them, data analytics tools such as Life Cycle Assessment will be presented to the understanding of anthropogenic impacts and how they externalize per category of impacts, with the providing of threat intelligence on biosecurity risks whichever may affect the Amazon Biome Defense and Environmental Security. On the third -**III**-part, a social responsibility project is mandatorily addressed, named *Daughters and Sons of Dictatorship*. All detailed on the following topics.

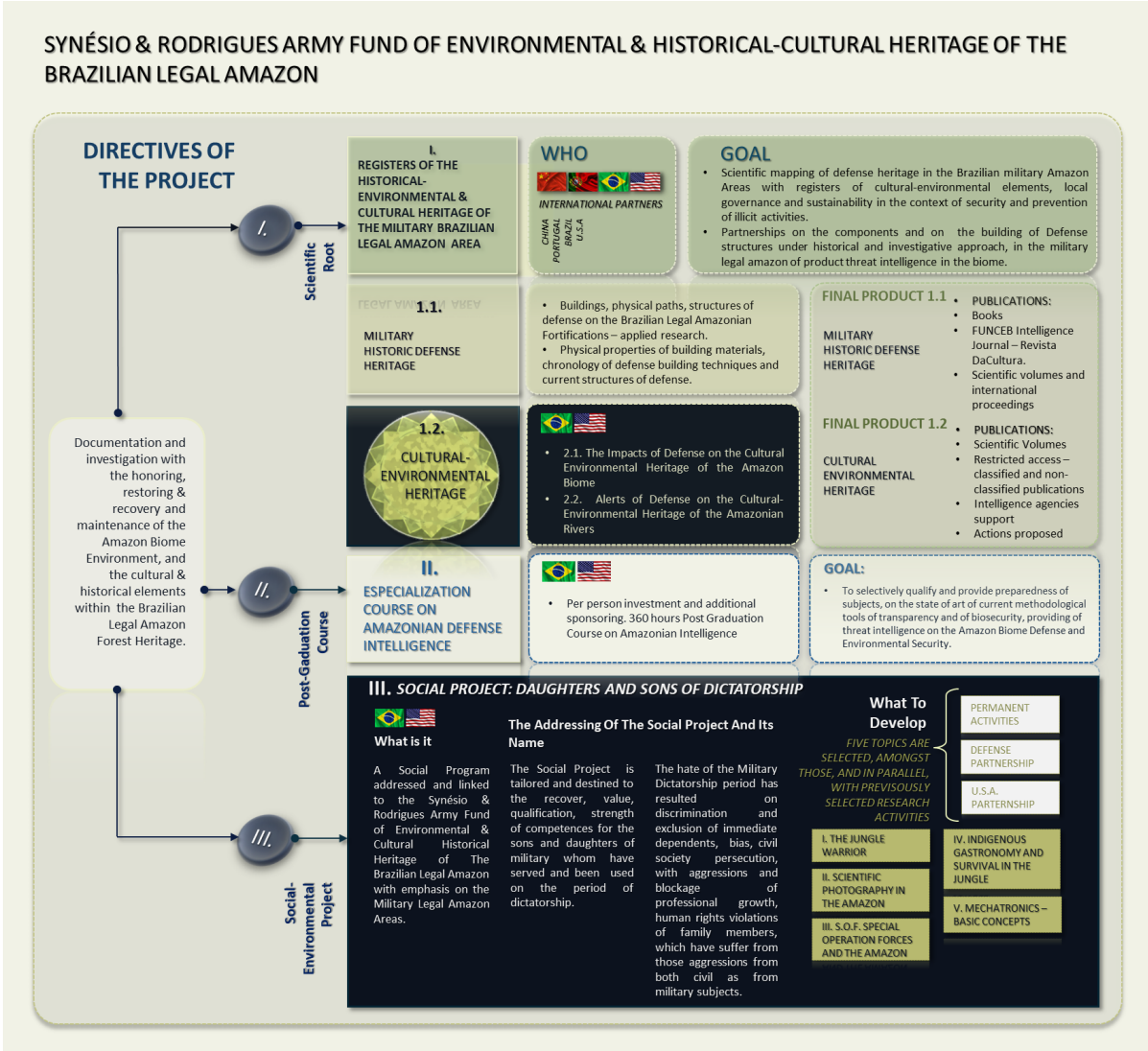


Figure 10: The directives of the Project.

Source: Project Draft October 2024. Gueiros.S.T.

4.1. Military Historic Defense Heritage

Part I. is below detailed on the table, under the understanding of the previous drafted version that will evolve on demand. The table one defines themes, activities, final products and feedback and projected participants with friendly nations involved as to take part on the research topics. Table 2 details the scientific work topics required from researchers.

SYNÉSIO & RODRIGUES ARMY FUND OF ENVIRONMENTAL & HISTORIC-CULTURAL HERITAGE OF THE BRAZILIAN LEGAL AMAZON				
THEME	WHAT IT IS	FINAL PRODUCT AND FEEDBACK	PERIODICITY	PARTNERSHIP AND PARTICIPANTS ESTIMATE
1. CULTURAL, ENVIRONMENTAL, HISTORICAL-CULTURAL REGISTERS OF THE AMAZONIAN DEFENSE HERITAGE	<i>i. Financial support proposal to support the themes of historic, cultural and environmental heritage on the Brazilian Legal Amazon;</i> <i>ii. Prevision of Annual entrance of resources destined to the programed activities;</i> <i>iii. Activities within this Project will emphasize:</i> - Identification; - Maintenance; - Investigation; - Vigilance and selective disclosure of the Environmental, Cultural Heritage of the Army within the Legal Brazilian Amazon, on the topics which are interfaced with the Elements of Defense.	- Scientific Publications; - Books and Journals published by FUNCEB; - REVISTA DA CULTURA - Congress and Seminars; - Data and Intelligence Feedback.	Continuous during the period of one to two years.	- 21 Participants with scholarship sponsored, bellow suggested: - Ahead of Revista Da CULTURA – - Cel PAULO ROBERTO RODRIGUES TEIXEIRA - FUNCEB - 1 Coordinator from the Brazilian Army or Defense, ahead of Research Organization and Publications from the Historical-Cultural Amazonian Defense Heritage Researchers & Sponsorships: - 1 Portuguese - 1 North American - 2 Colombians - 1 Bolivian - 2 Chinese - 3 TCA – members - Amazonian Cooperation Treaty - 6 Brazilians - 1 Brazilian Research Coordinator from UFRJ – Technology Center partnership with Defense
1.1. REGISTERS OF THE HISTORICAL-CULTURAL HERITAGE OF AMAZONIAN DEFENSE	<i>Applied Research on the mapping of physical paths, Defense Engineering, Defense Architecture on the Military Fortifications</i> - Physical properties of building materials, chronological review on techniques of Defense, current state of art of physical structures of defense - Synchronic and Chronological assessment of Secular Military Fortifications. - Brazil/Portugal/China/U.S.A. and TCA members - (TCA- Amazonian Cooperation Treaty)	Publications, Books and Seminars. Extension Course 12 weeks, 360 hours; Remote and in person; With possibility of publishing final report; - Intelligence feedback	Continuous during the period of one to two years	- 10 participants of applied Research sponsorship per year Period of work development one year, with tolerance for two. - 2 Research Supervision sponsorships for coordination of research subjects from Federal Superior Teaching and/or Defense, with the possibility of co-supervision from International specialists
1.2. CULTURAL ENVIRONMENT AMAZONIAN BIOME HERITAGE	<i>i. The impacts of the paths of Defense capabilities and tools over the Cultural Environmental Amazonian Heritage.</i> <i>ii. Investigation and alerts regarding the Cultural Environmental Heritage of the Amazonian Rivers</i>	Thesis and Case Studies From Master and Specialization Extension Course Sponsorship for researcher and for Supervisor Final Product: Report, thesis, for intelligence feedback	Continuous during the period of one to two years	- 6 researchers- - Extension - Master or Doctorate - 2 sponsorship for supervision and coordination from the Federal Superior Teaching or Defense with the possibility or co-supervision from International specialists.

Table 5: Detailed Part I. of the Project Synésio & Rodrigues Army Fund of Environmental Historic-cultural Heritage of the Brazilian Legal Amazon.

Source: Presentation Power Point Draft, version October 2024. Gueiros, S.T.

PREVIOUSLY SELECTED TOPICS TO THE GENERATING OF SCIENTIFIC WORK – MASTERS THESIS, DOCTORATE THESIS, SPECIALIZATION MONOGRAPHS, AND OR EXTENSION REPORTS *		
	RESEARCH TOPICS FOR THESIS, MONOGRAPHS AND REPORTS	PROPONENT OF TOPICS, SUPERVISORS, MEMBERS OF MASTER THESIS, DOCTORATE THESIS, SPECIALIZATION MONOGRAPHS, CO-SUPERVISORS AND SUPERVISORS
	1. Portuguese Defense Engineering in the Amazon: Methods and Building Structures of Defense and Artillery on the Amazonian Military Fortifications. 2. Physical Properties of Building Materials and Structures on Amazonian Fortifications: Chronological employment of Defense Constructive Methods and current state of art of physical structures available for Defense.	RESEARCH TEAM & TOPICS PROPONENT: Associate Professor Level 2 SUZANA GUEIROS TEIXEIRA SUGGESTED PROFESSORS ON THE SUPERVISION OF RESEARCH TOPICS Dean of the Technology Center – Titular Professor WALTER SUEMITSU
	3. Chronological and Synchronically approach over the Military Secular Fortifications – Portugal/Brazil/ China/U.S.A. Theme 3 _A: The Evolution under a synchronic building of Defense of Physical Structures of Power – Brazil, China, Portugal, U.S.A. Theme 3 _B: The introduction and advancements of Artificial Intelligence on Strategic Areas of the Amazon	
	4. The Impact of the means of Defense on the Cultural-Environmental Heritage of Amazonian Populations Theme 4 _A: Image Processing Studies: The Visual Identification of Illicit on the Brazilian Legal Amazon Theme 4 _B: Reverse Modelling Intelligence on the Identification of Environmental Impacts on the Brazilian Legal Amazon - Classified	Associate Professor Level 3 – Mechanical Engineering – PEM-COPPE-UFRJ and DEFENSE (NAVY SCHOOL) FERNANDO CASTRO PINTO
	5. Alerts Generation and Defense investigation of the Cultural-Environmental Heritage of the Amazonian Rivers BRAZIL-U.S.A. Theme 5 _A: Military Land Use in the Legal Brazilian Amazon: Military operations and military theater of operations in the Amazon. Theme 5 _B: Identification of Anomalies within the river populations (Classified) Theme 5 _C: Waste Mapping and the identification of illicit activities within Military Land Use in the Legal Amazon Areas: Reverse Modelling Intelligence of impacts on the Amazonian Rivers (Classified) Theme 5 _D: Multicriteria and Complex System approach Case Studies – Others to be defined	Associate Professor Level 2 – Technology Center SUZANA GUEIROS TEIXEIRA 1 or 2 Professors from the Technology Center 1 or 2 Professors from Defense Sector 1 or 2 International Researchers

Table 6: Research Topics Themes and preliminary suggested supervisors from the Project Synésio & Rodrigues Army Fund of Environmental Historic-Cultural Heritage of the Brazilian Legal Amazon.

Source: Presentation Power Point Draft, version October 2024. Gueiros, S.T.

Note: Participants on the Research Supervision on this phase are suggested, additional subjects, accordingly, to demand, are welcomed to be added and (or) reviewed the suggested topics amongst specialists.

The research topics for thesis, monographs and reports are proposed on table 6. Accordingly, on Jasanoff's quote (2004): *the interplay of the local and the Global influences the kinds of knowledges about the environment that are discovered, accepted as authoritative, and put to use in decision-making*. Under such understanding, is that 5 main guidelines on the research works are proposed, as shown on table 6, and on themes 3,4 and 5, subdivisions are required to the deepening and enhancing of the subjects. The contributions will add content to the group of already published volumes by FUNCEB publications of Military Defense Intelligence Topics on the region. And provide further envisioning of complex issues on the area.

4.2. Specialization Course on Amazonian Defense Intelligence

It would not be legitimate to affirm that qualified teams have not been active on the building of local defense intelligence from and for the region. Nonetheless, intelligence has always the need to be resurfaced and revisited under the many criteria that arise on the scenarios which may bring up to light flaws on defense references, furthermore with the advent of unexpected crisis if preparedness has not been built as a resilience strategy to face adversities. On the Intelligence Community Collection and Analysis on Iraq, for instance, Richard Kerr, Thomas Wolfe, Rebecca Donegan, and Aris Pappas Studies in Intelligence Vol. 49 No. 3 (2005) have quoted that the: *The quality of intelligence will be improved only by fundamental changes at the grass roots level*. The course is built aggregating topics which are on demand to provide capabilities to the Amazonian Defense Intelligence.

...The discussion of shortcomings and failures that follows is not meant to imply that all surprises can be prevented by even good intelligence. There are too many targets and too many ways of attacking them for even the best intelligence agencies to discover all threats in time to prevent them from happening. Nonetheless, improving performance requires an acknowledgement of past mistakes and a willingness to change. (Richard Kerr, Thomas Wolfe, Rebecca Donegan, and Aris Pappas- 2005).

Similarly, the Amazon Defense Intelligence must be required to have a broader perspective of risks. Intelligence must search for the state of art of threats, so that it can be capable of its perception and of supporting policies and (or) be encouraged to proposed them. Similarly, David W. Overton (2022 – turned available unclassified publication by the CIA), has exposed his work on *Stresses, successes, and the future The DI (Directory of Intelligence)* - this work has presented the 10 Years after Reorganization of the DI. It was reorganized primarily along regional rather than functional lines.

...Nothing -larger sums of money, additional space, greater favorable recognition, less criticism from the Congress or the press-is, by itself, as important to us as the mental health and welfare of the people who do our work. They have to be able to develop knowledge and skills we can only dimly perceive today. And they have to be able to attack, regroup, and reattack issues that will be constantly changing form and reappearing in new settings (David W. Overton, available on 2022).

The specialization Course is proposed to feed the already existing local intelligence on topics which are in need to be confronted on a higher level of subjects to provide directives for appropriate policies, and (or) clearer understanding of the aftermath of the chosen ones- whenever biased - and act with preparedness. *What people perceive, how readily they perceive it, and how they process this information after receiving it are all strongly influenced by past experience, education, cultural values, role requirements, and organizational norms, as well as by the specifics of the information received. (Richards J. Heuer, Jr.1999).*

The contents propose a total of 420hours. Figure 11.

MODULES CONTENTS preliminary version suggested of 420 hours total	DISCIPLINES & HOURS 100HS MODULE 1	DISCIPLINE & HOURS 80HS MODULE 2	DISCIPLINE & HOURS 80HS MODULE 3	DISCIPLINE & HOURS 100HS MODULE 4	DISCIPLINE & HOURS 60HS MODULE 5
ESTIMATE SUGGESTED INVESTMENT PER PERSON 5,750.00 US \$	MORAL & CIVIC EDUCATION – THE HISTORY OF A GENERATION 10hs	AMAZONIAN BIOME HISTORY 20hs	GOVERNMENT BANKING 10hs	LIFE CYCLE ASSESSMENT LEVEL 1 20hs	FINAL REPORT SUPERVISION , PRESENTATION AND ADDITIONAL DEMANDS 60hs
	STATISTICS – BASIC CONCEPTS 20HS	AMAZONIAN DEFENSE HISTORY 15hs	ENVIRONMENTAL GOVERNANCE 10hs	LIFE CYCLE ASSESSMENT LEVEL 2 20hs	
	GOVERNMENT BANKING FINANCE OF SUSTAINABLE PROJECTS 20HS	DEFENSE CONCEPTS, MYTHS & STRATEGIES 30hs	ENVIRONMENTAL MANAGEMENT 1 20hs	COMPLEX SYSTEMS MODELLING 20hs	
	ENVIRONMENTAL VALUES 20hs	PUBLIC HEALTH 15hs	ENVIRONMENTAL MANAGEMENT 2 20hs	ENERGY & THE AMAZON BIOME 20hs	
	INTELLIGENCE - PYSCHOLOGY INTELLIGENCE 30 HS		ENERGY 20hs	OPTIONAL THEMES. BY PROPONENTS 20hs -SUGGESTIONS: INDIGENOUS HERITAGE AND THE AMAZON FOREST; AMAZONIAN RIVERS; ARTIFICIAL INTELLIGENCE; BIOPOLICIES BIOECONOMY; BIOCOSMETICS TROPICAL DISEASES	
ESTIMATE PER PERSON INVESTMENT/ PER MODULE Without additional sponsoring	US \$ 1,450.00	US \$ 1,150.00	US \$ 1,150.00	US \$ 1,450.00	US \$ 550.00

Figure 11: Suggested Content of Specialization Course on Amazon Intelligence Defense.

Source: Presentation Power Point Draft-version. April 2025. Gueiros, S.T.

4.3. Daughters and sons of DictatorshipSocial Project

The Brazilian Military Dictatorship period is a relative recent one, it occurred on the years from 1964 until 1985. It extended towards diplomacy alliances and on Defense preparedness and challenges on the seventies on the Americas, including impacts and actions from supportive friendly Nations, such as the U.S.A. awareness on the threats against the continent and the efforts to protect it: *Under the dictatorship, the Brazilian military's strong anti-communist position converged with that of the United States. As a result, US foreign aid to Brazil reached new heights* (Jennifer Eaglin, Dr.; Henry Granville Widener (2023)).

The aftermath of this period in the Brazilian history has still its remains of generations of military families which are still alive, followed by a civilian dependents generation of survivals which have been biased as of power abusive actors, and accused of being sons of torturees, despite having absolutely no part on the military theater of operations and on the law enforcement acts that happened under political orders at that time. Civilians which were military dependents and had not entered the military career, have repeatedly been under media attack and by series of biased and bullying behavior from civil society towards military officers' families active on the period. The social humiliation from hate attacks from individuals which have lived under the military dictatorship period have been justified due to the human rights violations which occurred, ignoring the other side of those whom have suffered. The hate of the period and actors have become established as normal, and accepted. However, a group has remained invisible and under periodic attacks from society, and persecutions that would be addressed to the military civilian dependents in the dictatorship period and beyond, with the followed generations.

On the year of 2002 a law was created by the Amnesty Commission (10.559/2002), creating the benefit and compensation for those who were affected by the Military Dictatorship. Both Military and Civilians who suffered human rights violations were benefited based on what the historical registers have legitimated and on what they have claimed to occur. The compensations have reached both civilians which were involved on communist party manifestations, as well as military which did not comply to the orders addressed by superiors on the political environment at that occasion. The Truth Commission Report (2014) registered that

the military which suffered from bias were the most affected by the period. Below figure registers compensations in millions of reais – Brazilian currency.

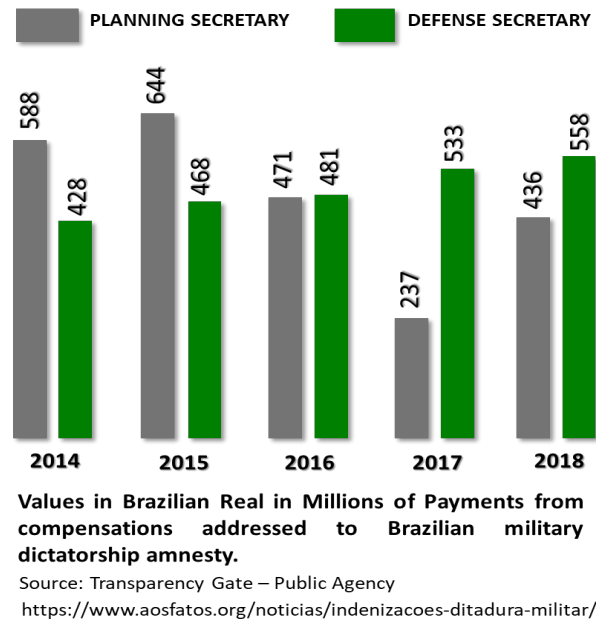


Figure 12: Compensations in Brazilian Real values (millions) received from the Amnesty Commission.

Source: Transparency Gate – Public Agency

The title of Daughters and sons of Dictatorship, addresses the Social Project proposed to reach those invisible victims, possibly not ever contemplated by compensations, and possibly remained under unrest psychological abuse and torture, some, with undermined resilience, having no right to expose the suffer and pressure which would occur on the interfaces of both their social lives as within the family resilience environment. Due to the understanding of abusive behavior affecting both sides of the history, this part of the project, dedicate its focus on the recovery of the military daughters and sons of dictatorship that were (are) victims of bias. Hate has remained active against the generations of teenagers, children and their grandchildren who lived under such period as military dependents. Some and most of them, military dependents, have lived in the remote areas of the Brazilian Legal Amazon, some in inhospitable areas and on frontiers, carried by the military defense mission of their parents. The return from frontier areas to capitals on the period of dictatorship, civilian minors and students would face bias on schools, universities and social environments when discovered their military-dependent identity. The resulted discountenance against the military dictatorship period, has remained subsidize and incentivized by media, nonetheless in one way only, resulting in vulnerability of civilian military dependents safety - most silenced - with a continued direction of resources addressing the criminalization against military families, whom as well were under suffer and abuse.

Was intelligence blind to what those civilian generations had on their days and what it would suffer ahead? Aren't the military civilian dependents also included on human rights? Abuse has been apotheotically uncovered on one side only, with continued obscure psychological threats and warfare, revenge, oppression and torture on other. That requires all attention to what intelligence investigations teaches over perception, once it has silenced one side of those actors involved on the Dictatorship period: *What people perceive, how readily they perceive it, and how they process this information after receiving it are all strongly influenced by past experience, education, cultural values, role requirements, and organizational norms, as well as by the specifics of the information received.* (Richards J. Heuer, Jr., 1999). Understanding that human rights must not be excluding of military civilian community rights and of their children. That

action is one of the many that must be addressed to achieve the restoring of a generation psychological structure, amongst some, many already passed away, some suicided, some lived under unpunishable, biased environments, hate speech and harm on their trajectories, including relatives within their own families which have had placed pressure, political opportunism on freeing young relatives and unknown subjects from military service and the asking of favors and compensations as well, due to divided political visions.

SYNÉSIO & RODRIGUES ARMY FUND OF ENVIRONMENTAL & HISTORICAL-CULTURAL HERITAGE OF THE BRAZILIAN LEGAL AMAZON			
2. SOCIAL PROJECT SONS AND DAUGHTERS OF DICTATORSHIP	WHAT IS IT	FINAL PRODUCT AND FEEDBACK	PERIODICITY
2.1. JUNGLE WARRIOR	Addressed Conference to the appreciation of Amazonian Indigenous Tribes survival strategies and jungle techniques; Panels from traditional Warriors and Land Occupational Strategies from partners: Portugal, Brazil, China, U.S.A. Timeline of Organizational Structures of Defense and how Traditional values have been kept despite of innovative structures of power.	In person and online conference <ul style="list-style-type: none">- With registration fee values- Sale of Products related to the content of the subject- Donations available	Annual 2 days in person Conference 8 Hours per day 16 hours Total
2.2. SCIENTIFIC PHOTOGRAPHY IN THE AMAZON	Photography Course focusing the identification of disturbance and alteration of local populations, environmental regimes and specificities of local biome per proposed theme.	Sponsored Course <ul style="list-style-type: none">- Part of the value subsidized by the Fund.- Sales of course material- Photography equipment and complimentary products- International exhibition of images, sales of photos for publications from the Fund and other- Images generated to attend to scientific and historical projects demand associated with the local amazon Biome and affected populations	Semi-annual 3 weeks/ 3 days in person Remote hours: 10 hours previous instructions and plan sheet of focus 15 hours in situ (5 hours per day photography in situ) 25 hours/ remote Final Product Expo Selection 50 hours total
2.3. S.O.F. SPECIAL OPERATIONS FORCES AND THE AMAZON FOREST THE COMBAT MULTIPLIER	Invitation to the Interested parties from the U.S.A, which are contributors of the Amazon Fund and supporters, to present their innovative products regarding self defense and vigilance in the Tropical Forest, alongside with personal defense techniques. Panels on Tropical Forest Defense & Security <ul style="list-style-type: none">- What is the training of the S.O.F. – Special Forces Operations – and how can they contribute to the Protection of the Amazon Forest.	In person 5 days Mini-course with registration tax. <ul style="list-style-type: none">- Feedback- Registration value- Product sales related to the content of the subject, previously authorized by Defense	Semi-annual (twice a year) 5 days in person 6 hours per day 30 hours total
2.4. INDIGENOUS GASTRONOMY, TROPICAL FOREST SURVIVAL GASTRONOMY, AND SCIENTIFIC GASTRONOMY	Event with course on scientific gastronomy. Traditional heritage of indigenous nutritional habits and survival metabolism in the jungle. <ul style="list-style-type: none">- Food Engineering sector and industrialized products- Metabolism of Human Survival.- Science & Technology: Nanotechnology, innovation on survival and Jungle Metabolism	Sponsored Mini-Course 7 days in person <ul style="list-style-type: none">- Feedback with registration tax- Product donations- One day ticket exhibition of Tropical Forest Indigenous Gastronomy and Scientific Gastronomy event	Semi-annual (twice a year) 7 days in person 5 days classes 1 day prepare to the fair 1 day Fair of Exhibition of Tropical Forest Indigenous Gastronomy and Scientific Gastronomy Event. 40 hours total
2.5. MECHATRONICS BASICS	Mini-Course and Workshop with the Introduction of mechatronics Basics. <ul style="list-style-type: none">- Focus: Supplying of local Defense with background of acknowledgment to spot the presence of illicit in the Legal Brazilian Amazon Forest;- Equipment Maintenance, Identification of Product parts and Electronic Waste from suspicious activities;- Use and Impact of devices on local Biome, Environmental Protection, local innovations and products addressed to sustainable management and alerts on land use;- Mini-course –Workshop of mechatronics with both theoretical and practice on local demand regarding Security and Defense.	Mini-Course with Certificate conditioned on the approval of class activities <ul style="list-style-type: none">- Registration Fee tax- Learning Material and classes included- Individual Evaluation for certificate acquisition- Selling of Industrialized Products	Annual (Once a Year) <ul style="list-style-type: none">- 6 weeks /5 hours per week- 150 hours total- 1 week in person- 5 weeks remotely 150 HOURS/TOTAL

Figure 13: Social Project Suggested Activities per topic.

Source: Presentation Power Point Draft-version. April 2025. Gueiros, S.T. *Note: Participants and partnerships are not displayed on this table.

The Social Project has been proposed under five group of activities, associated with intelligence research activities, scholarships and of reinvigorating defense challenges, bellow displayed. For each of the listed five topics, there are programmed courses and activities detailed on the full

version of the project draft, concomitant with partnership and participants suggested from Academia and International Actors which joined as Friendly Nations that may contribute on Defense and on environmental challenges.

SELECTEC THEMES ADDRESSING SCIENTIFIC PRODUCTION – THESIS/ MONOGRAPHY		
SOCIAL PROJECT SONS AND DAUGHTERS OF DICTATORSHIP – SCIENTIFIC THEMES FOR RESEARCH PRODUCTION	EXPECTED SCIENTIFIC WORK : THEMES AND MONOGRAPHS TITLES SPECIALIZATION MONOGRAPHS MASTER THESIS EXPOSITIONS – EVENTS - PUBLICATIONS	TEAM OF SUPERVISORS MEMBERS OF MASTER PRESENTATION WORK COORDINATORS OF PROJECT
1. JUNGLE WARRIOR	1.1. Spatial - land use - Occupational Strategies and Indigenous Defense of Amazonian Indigenous Tribes. 1.2. A Chronological and a Synchronically Investigation of Indigenous Tribes artifacts of warfare and of environment survival – North American Indigenous Heritage x Amazonian Indigenous Heritage.	FUNCEB – CULTURAL BRAZILIAN ARMY FOUNDATION – Publications U.S.A - CONSULATE
2. SCIENTIFIC PHOTOGRAPHY IN THE AMAZON JUNGLE	2.1. Amazonian Populations	NATIONAL GEOGRAPHIC Book for sale
3. S.O.F. SPECIAL OPERATIONS FORCES IN THE AMAZON (THE COMBAT MULTIPLIER)	3.1. Technological Innovation on Defense Engineering and Warfare Products: The use of Innovative Products on to the survival support in Tropical Forests. 3.2. Human Factors and Product Ergonomics: Risk Intelligence of Human Combat Operator.	CT – TECHNOLOGY CENTER – UFRJ PROFESSOR SUZANA GUEIROS Other Professors from UFRJ joined in the Project DEFENSE SECRETARY U.S.A. CONSULATE Thesis/ monograph, with Book Publication for Sale
4. INDIGENOUS JUNGLE SURVIVAL GASTRONOMY	4.1. Survival Metabolism in the Jungle – Scientific Gastronomy. 4.2. The Advent of Survival Nutritional kits: Chronological details of product and food engineering on the sector.	PROFA. SUZANA GUEIROS PROF. WALTER SUEMITSU Other Professors integrating the project DEFENSE SECRETARY
5. MECHATRONICS BASICS	5.1. Reverse Logistic of technological Innovations used on illicit activities on the Brazilian Legal Amazonian Area – Illicit Waste. 5.2. Forensics. 5.3. Mapping, Land Use Zone and Spatial Law enforcement and standards addressing the use of drones in the Legal Brazilian Amazonian Land. 5.4. Waste Management per Land Use – Identification of Environmental Illicit in the Brazilian Legal Amazon Forest.	TECHNOLOGY CENTER - UFRJ PROF. WALTER SUEMITSU PROFA. SUZANA GUEIROS DEFENSE SECRETARY FEDERAL POLICE CHINESE CONSULATE

Figure 14: Suggested Selected Research Themes and partnership to the Social Project, per topics

Source: Presentation Power Point Draft-version. April 2025. Gueiros, S.T.

Conclusion

On the year of 2018, a survey on tropical forests (Statista, 2020), turned available that amongst the areas of total tree cover and of primary forest of the World, the Amazon Forest accounted for the larger rainforest cover, on both primary and of tree cover. The extent of primary forest accounted for 526.2 million of hectares on that period, alongside with the 628.9 million of hectares of total tree cover. Traditionally, Intelligence efforts under transnational cooperation has worked on geopolitical conflicts, weak governance and corruption issues risks, which for long periods have emerged amongst the Amazon forest nations.

This Project Proposal has observed those trajectories and its actors, as forementioned, and based on the new settings of challenges, has elected three areas of actions, exposed on the publication, with the goal of achieving sponsorship from the Amazon Fund to sustain periodic actions and specific research activities to feed and update local intelligence demand on topics required of deeper scientific background.

Imbalances and uncertainties which occur in the region have called for advancements on the defense capabilities, identification of sovereignty violations and lack of governance from political and law enforcement actors to the guarantee of environmental security, by understanding the quantifiable impacts of illicit and unsustainable actions on the region.

Despite it is a draft version proposed, the background of trajectories of threats which were reviewed for the creation of the proposed fund, allowed the enrollment of actions that foresee additional capabilities as tools of defense for those on the front of decision making and with those actors capable of partner on the Amazonian Intelligence Defense, sustained by converged interests on the region: *formulating a brief definition of so broad a term as intelligence is like making a microscopic portrait of a continent, and the product of this effort is likely to have less value than the process of arriving at it, the reexamination of our own thinking as we seek to pinpoint the essentials of the concept*” Bimfort (2007).

Provided Intelligence on environmental impacts are proposed on a deeper level, with the specialization course proposed into modules, to provide capabilities of higher qualification, to motivate deeper research, propose and justify policymaking and actions based on quantifiable scientific data and metrics. Traditional Historical and Cultural heritage will remain active, under the already periodic publications of FUNCEB, as a cornerstone of the Brazilian army defense actors and the register of their actions. The highlights of the invisible bias issue and how it affected human rights of military civilians, and their resilience is considered relevant on this proposal. As a reminder of what matters.

DuPlessis Vanbreda (2001) from the Military Psychological Institute, South Africa, has published a work on resilience where it unfolds the many investigations with its extension on military families: *What started as an enquiry into the childhood roots of resilience has grown into a broad, dynamic and exciting field of study. Resilience theory currently addresses individuals (both children and adults), families, communities, workplaces and policies. There are few domains of life that have not been touched in one or other way by resilience theory, including the military community.* New threats have emerged on the global discussions, and those are required to be known and advanced by defense actors: *the strongest security threats at present do not stem from the states with strong armed forces, but from terrorist groups and failed states – and these could not be partners in preventive limitation. However, such groups and states are unlikely to be able to develop NT-based new weaponry by themselves. The much more likely scenario is that military technology and weapons developed in the high technology countries will be exported or otherwise proliferate to end up in the hands of non-state actors* (Altmann, 2006).

This work proposal is a draft to the Amazon Fund, nonetheless, it has encompassed what is considered relevant for the Amazon Fund to hold on the path towards an Active Defense Intelligence on the Amazon Forest. The understanding of the importance of the region, into a local and global perspective has been legitimated by recent intelligence data, and as a reminder of what are the contemporary security threats, and how interests may cope to strengthen the region instead of undermining its land, its fragile environmental health and populations.

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