PerCursos

e-ISSN 1984-7246

# For a living and healthy Pan-Amazon Region: the perspective of Good Living

**Abstract**

This paper analyzes some of the consequences that a perspective of economic growth based on the domain of what is usually called "natural resources" has for the Amazon Region and its socio-biodiversity. Through a critical analysis of academic literature and recent journalistic articles, it aims to contextualize the Amazon region and its importance for the planet, as well as show the scope of the deforestation problem and point out some of its consequences. In contrast to the "exploitation of nature" promoted by the capitalist system, which only benefits a minority of human beings to the detriment of a majority of other beings -human and non-human- and their environments, the worldview of Good Living developed by the Andean-Amazonian peoples and the decolonial perspective are highlighted. Good Living defends the need to respect all forms of life. Thus, it constitutes a possibility of establishing another relationship between all living beings and their environments and, as a consequence, an attempt to avoid the destruction of what remains of the Amazon rainforest and the possible appearance of other pandemics such as COVID-19 in that region.

**Keywords:** good living; anthropocentric paradigm; coloniality; Amazon rainforest; COVID-19 pandemic.

**Ivón Natalia Cuervo**
Mestre Profissional em Planejamento Territorial e Desenvolvimento Socioambiental pela Universidade do Estado de Santa Catarina – UDESC. Doutoranda Interdisciplinar em Ciências Humanas na Universidade Federal de Santa Catarina – UFSC.
Brasil
icuervof@gmail.com
orcid.org/0000-0002-8595-625X

**Eunice Sueli Nodari**
Doutora em História pela Pontifícia Universidade Católica do Rio Grande do Sul – PUCRS.
Professora da Universidade Federal de Santa Catarina – UFSC.
Brasil
eunice.nodari@gmail.com
orcid.org/0000-0001-5953-649X

**Marcia Grisotti**
Doutora em Sociologia pela Universidade de São Paulo – USP.
Professora da Universidade Federal de Santa Catarina – UFSC.
Brasil
marcia.grisotti@ufsc.br
orcid.org/0000-0003-0389-7100

**Javier Ignacio Vernal**
Doutor em Filosofia pela Universidade Federal de Santa Catarina – UFSC.
Professor da Universidade Federal de Santa Catarina – UFSC.
Brasil
jivernal@gmail.com
orcid.org/0000-0003-4014-6656

**To cite this article:**
CUERVO, Ivón Natalia; NODARI, Eunice Sueli; GRISOTTI, Marcia; VERNAL, Javier Ignacio. For a living and healthy Pan-Amazon Region: the perspective of Good Living. **PerCursos**, Florianópolis, v. 23, n.53, p. 37 - 97, set./dez. 2022.

**DOI: 10.5965/198472462353022037**
http://dx.doi.org/10.5965/1984724623532022037

# Por uma Pan-Amazônia viva e saudável: a perspectiva do Bem Viver

**Resumen**
Este artículo analiza algunas de las consecuencias que una perspectiva de crecimiento económico, por medio del dominio de lo que se suele denominar "recursos naturales", tiene para la región amazónica y para su sociobiodiversidad. Desde un análisis crítico de la literatura académica y de artículos periodísticos recientes, se pretende contextualizar la región amazónica y su importancia para el planeta, así como mostrar el alcance del problema de la deforestación y señalar algunas de sus consecuencias. Como contrapunto a la "explotación de la naturaleza" promovida por el sistema capitalista, que solo beneficia a una minoría de seres humanos en detrimento de una mayoría de otros seres –humanos y no humanos– y de sus ambientes, se destacan la cosmovisión del Buen Vivir desarrollada por los pueblos andino-amazónicos y la perspectiva decolonial. El Buen Vivir defiende la necesidad de respetar todas las formas de vida. Así, constituye una posibilidad de establecer otra relación entre todos los seres vivos y sus ambientes y, como consecuencia, un intento de evitar la destrucción de lo que queda de la selva amazónica y la posible aparición de otras pandemias similares a la del COVID- 19 en esa región.

**Palabras clave:** buen vivir; paradigma antropocéntrico; colonialidad; Amazonas; pandemia de COVID-19.

# Por uma Pan-Amazônia viva e saudável: a perspectiva do Bem Viver

**Resumo**
Este artigo analisa algumas das consequências que uma perspectiva de crescimento económico baseada no domínio do que é normalmente chamado de "recursos naturais" tem para a Região Amazónica e a sua sócio-biodiversidade. Através de uma análise crítica da literatura académica e de artigos jornalísticos recentes, pretende contextualizar a região amazónica e a sua importância para o planeta, bem como mostrar o alcance do problema do desmatamento e apontar algumas das suas consequências. Em contraste com a "exploração da natureza" promovida pelo sistema capitalista, que apenas beneficia uma minoria de seres humanos em detrimento de uma maioria de outros seres -humanos e não-humanos- e dos seus ambientes, destacam-se a cosmovisão do Bem Viver desenvolvida pelos povos andino-amazónicos e a perspectiva decolonial. O Bem Viver defende a necessidade de respeitar todas as formas de vida. Assim, constitui uma possibilidade de estabelecer outra relação entre os seres vivos e os seus ambientes e, como consequência, uma tentativa de evitar a destruição do que resta da floresta tropical amazónica e o possível aparecimento de outras pandemias como a da COVID-19 naquela região.

**Palavras-chave:** bem viver; paradigma antropocêntrico; Colonialidade; floresta tropical amazónica; pandemia da COVID-19.

## Introduction

The Amazon rainforest is the largest tropical forest in the world and one of the most important biomes on planet Earth. It covers a geographical extension of 7.4 million square kilometers and contains the largest hydrographic basin. The need to reduce deforestation in the Amazon Region has been widely documented in scientific publications and in various media (COSTA, 2020; GÓMEZ, 2020; MARENGO, 2018; SIERRA, 2019; SUÁREZ *et al*., 2020). This tropical forest fulfills several environmental roles: it helps regulate the climate, capture carbon dioxide ($CO_2$) and 20% of the world's fresh water flows through its hydrological system. In addition, it is the terrestrial ecosystem with the greatest biodiversity, about 30% of the world's plant and animal species are found in the Amazon rainforest (BUTLER, 2020).

The magnitude of the ecological impact caused by deforestation and environmental degradation is evident in monitoring satellite images spanning a three-decade period of changes in forest cover and land use in the Amazon Region: "Between 1985 and 2018, the Pan-Amazon region lost 72.4 million hectares of its natural plant cover, an area equivalent to the territory of Chile. On the other hand, in the same period there was a growth of 172% in areas of agriculture and livestock" (RAISG…, 2020). The extent of this problem is verified year after year by various monitoring systems. (DESMATAMENTO..., 2022; RAISG..., 2020; TRACKING..., 2019).

However, environmental degradation is growing rapidly (WHEELER, 2022), even in the midst of the health emergency of the COVID-19 pandemic, when social distancing measures should be respected and controlled, activities such as land grabbing and speculation, Illegal mining and road construction are advancing in the Amazon region, where the highest deforestation rate in the last fourteen years is reported (BUTLER, 2022; PUENTES, 2022). Several studies demonstrate the influence of biodiversity loss, caused by deforestation and the emergence of infectious diseases (ELLWANGER *et al*., 2020; IPEA, 2015).

At the same time, the Amazon was the region of South America most affected by COVID-19 (COVID-19…, 2021) and is a possible source for the origin of new pandemics

(LAPOLA, 2020). This is the conclusion reached by the PREDICT project, carried out by the Emerging Pandemic Threats (EPT) program of USAID (US Agency for International Development), which has been involved since 2009 in detecting zoonotic viruses that have the potential to generate a pandemic. This project took place in 31 countries in Asia, Africa and Latin America, until the United States government interrupted the resources to extend its validity in 2020 (BAUMGAERTNER; RAINEY, 2020). Its design followed the One Health model, which emphasizes the correlation between the health of humans, non-human animals and ecosystems, warning about some factors for the emergence of zoonoses: "the majority IEDs (Emerging Infectious Diseases) arise from wild animal reservoirs in biodiverse landscapes experiencing strong anthropogenic pressures, including human population growth, land use change, and natural resource extraction." (KELLY, *et al*., 2020, p. 2).

In Latin America, the project was carried out in Mexico and in four countries of the Pan-Amazon region (Bolivia, Brazil, Colombia and Peru). USAID criteria for implementing the PREDICT project in these countries include the following:

> The risks of disease emergence are greater in developing countries, where people and animals live in close proximity and livelihoods are highly dependent on natural resources. Developing countries are also commonly characterized by limited capacity for detecting disease emergence in wildlife prior to spread to humans, and by limited or no public health reporting infrastructure (UHART *et al*., 2013, p. 65-66).

Analysis of the samples collected by this project between 2010 and 2013 allowed the identification of 14 viral families with pandemic potential in the Amazonian regions of Bolivia, Brazil, and Peru (UHART *et al*., 2013). Faced with this scenario, we ask ourselves: What is the worldview that has prevailed in socio-environmental relations so that we reach the current humanitarian and environmental emergency?

In order to explore the foundations of this mentality and expose some of the perspectives that oppose it, we carry out the theoretical discussion from the decolonial

approach of some Latin American authors. The notion of Good Living[1] of the Andean-Amazonian indigenous peoples is presented as an alternative to the colonial capitalist project initiated at the end of the fifteenth century, currently predominant under the neo-liberal version. Given that neoliberalism has been in existence for more than fifty years, this model is obsolete and unable to face its own consequences, including the origin of the COVID-19 pandemic and its effects.

Although environmental justice in the Andean-Amazonian countries is turning closer to ecocentrism[2], trying to interrupt centuries of anthropocentrism[3] and androcentrism, we consider it necessary to review compliance with this legal approach in times of pandemic, when we are experiencing a worsening of deforestation in the Amazon region. Likewise, currently, contrary to the proposal of Good Living, we show the lack of protection of the governments of the Amazonian countries to the indigenous and Afro-descendant peoples, who are the most vulnerable during the pandemic, the most impoverished due to the exploitation of their territories and for whom a worsening of their situation is expected in the post-pandemic.

This paper analyzes some of the consequences that an economic growth perspective based on the domain of what is usually called "natural resources" has for the Amazon region and for its socio-biodiversity. For this purpose, we use a qualitative methodological approach, through the critical review of academic articles (using the EBSCO, Scielo and Scopus databases), institutional technical reports and recent newspaper sources. We begin with a contextualization of the Amazon region and its importance for the planet, which we contrast with the scope of the deforestation problem. Then, we refer to the theoretical foundations from which the colonialist mentality of the domination of some human beings over others and over nature derives.

[1] The notion of Good Living is permanently being constructed as a philosophy of life and an alternative to development. In the Latin American political, economic and philosophical fields, the Good Living has been promoted by Alberto Acosta, Eduardo Gudynas, Humberto Cholango, Arturo Escobar, Magdalena León, among other authors.

[2] The ecocentric paradigm recognizes nature as a subject of rights and, therefore, as an autonomous legal asset and an object of comprehensive protection (MELLO; PEÑAFIEL, 2020, p. 232).

[3] According to the anthropocentric paradigm, human beings occupy a central position and nature is separate from us and is here for our service. This idea is based on the notion of "human dignity" as a right-matrix. In the field of Environmental Law, from the anthropocentric perspective, environmental protection is given according to its usefulness for human protection (MELLO; PEÑAFIEL, 2020, p. 232).

Subsequently, we ask ourselves what consequences this worldview has, and we address some different alternatives to the imposition of capital on nature, emphasizing the Good Living proposal.

## Amazon region under threat

The Amazon region represents 53% of the total territory of the member countries of the Amazon Cooperation Treaty Organization (ACTO) known as Pan-Amazonia, which is the sum of the Legal Amazon areas of each ACTO member country: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana and Suriname.[4]

Its total population is close to 30 million inhabitants, which represents 10% of the total population of these countries (FENZL, 2010). In addition, it has a cultural richness represented by more than 420 indigenous communities that speak 86 languages and 650 dialects (PNUMA/OTCA, 2008). The importance of the cultural and biological heritage of the Amazon region is internationally recognized. However, this region is experiencing social, environmental, political and health crises that are rapidly worsening (GÓMEZ, 2020; SUÁREZ *et al.*, 2020). This territory receives strong pressure due to land grabbing, unplanned colonization, road construction, the expansion of the agricultural and livestock frontier, mining, oil exploitation and extractivism, factors that influenced the devastation of 29.5 million hectares of forest cover in the Pan-Amazon region between 2000 and 2017 (SIERRA, 2019).

Conserving the Amazonian forests allows the preservation of socio-biodiversity[5]. That is, sociocultural diversity and biological diversity that are articulated in the same social space. This objective can be achieved by reducing deforestation and implementing extractive and agro-ecological practices that allow the region's economy to be

[4] French Guiana is also part of the Amazonian territory, but as it is officially an overseas department of France, it was not included in the Pan-Amazonia by ACTO. For more information, see the Internet platform of the Amazon Cooperation Treaty Organization: http://otca.org/en/about-us/.

[5] This notion implies considering the existence of "differentiated cultural groups and their own forms of social organization, use of territories and natural resources" (see: DINO, Nicolao. Ética, medio ambiente e sociobiodiversidade. **Cadernos Eletrônicos Direito Internacional Sem Fronteiras**, [Belo Horizonte], v. 2, No. 2, e20200238-e20200238, December 20, 2020, page 16. Available at: https://www.cadernoseletronicosdisf.com.br/cedisf/article/view/95. Access on: May 19, 2021).

maintained. An example of this is the use of non-timber forest products, such as fibers, resins, oils, fruits and aromatic and medicinal plants, an economic activity that has made possible the existence of socially equitable and environmentally sustainable projects (LOPES *et al.*, 2019, CARVALHO RIBEIRO *et al.*, 2020). Maintaining the environmental balance also makes it possible to regulate the spread of viruses carried by endemic species, a topic that we will develop later in this paper.

The reality of the Amazonian countries is opposed to the necessary fight against deforestation. We selected as the geographic focus of this study the deforestation that has occurred in recent years in five countries that make up 86.5% of the Amazonian territory: Bolivia, Brazil, Colombia, Ecuador, and Peru.

In Bolivia, the increase in deforestation caused by fires is the biggest challenge. Between 2001 and 2019, an average of four million hectares of forest were burned per year (SIERRA, 2021a). The Forest and Land Inspection and Social Control Authority (ABT) reported that between 2016 and 2017 the deforested area reached 554,232 hectares, 86% of the deforested area is in the departments of Santa Cruz and Beni, which are part of the Bolivian Amazon region (ABT, 2018).

In the Brazilian Amazon, the extension of the logged areas during 2019 was more than 976,200 hectares (A ESTIMATIVA..., 2019). Even in the midst of the quarantine due to the COVID-19 pandemic, the devastation of the Amazon rainforest does not diminish. Instead, it demonstrates an upward trend. This fact is attributed to less control and penalization by the State control entities. The Brazilian Deforestation Alert System (SAD) published the following finding on the loss of vegetation cover in 2021: "The Amazon rainforest experienced its worst year in a decade in 2021. From January to December, 10,362 km² of native forest were destroyed, which is equivalent to half of Sergipe" (DESMATAMENTO…, 2022, translation made by us).

In Colombia, the Amazon region represents 67% of the country's forests. The growing trend in the rate of environmental degradation is demonstrated in a report by the Foundation for Conservation and Sustainable Development (FCDS). According to that report, between January and February 2022, the numbers of fires in the Colombian

Amazon region were the highest in the last 15 years: "The fires that are occurring are caused during the less rainy season -between December and March- for agricultural activities [mainly] for the establishment of farms and grassland," said Rodrigo Botero, director of FCDS in a balance that he presented in the news portal *La Silla Vacía* (BOTERO, 2022).

In Ecuador, although deforestation in the Amazon region is relatively low compared to the trend in other Amazon countries, since it decreased from 18,800 hectares in 2017 to 11,400 hectares in 2019, this phenomenon is affecting places relevant to cultural and biological diversity. The Monitoring of the Andean Amazon Project (MAAP) calculated the deforestation of 57.3 hectares for oil drilling platforms and access roads in the Yasuní National Park, which forms part of the ancestral territory of the Waorani (FINER *et al.*, 2019). This ecological impact was denounced by the Waorani leader Nemonte Nenquimo, in an open letter addressed to the presidents of the nine Amazonian countries, in which she stated: "The Earth does not expect to be saved, it expects to be respected. And we, as indigenous peoples, expect the same" (NENQUIMO, 2020, translation made by us).

In 2020, Peru reached the highest level of deforestation in the last two decades. The monitoring system of the National Forest Program of the Ministry of the Environment of that country reported the loss of 203,272 hectares of forest. This is mainly due to the expansion of the agricultural frontier for the establishment of crops for illicit use (SIERRA, 2021b).

The intensification of the loss of native vegetation in the Amazon rainforest can be seen in a series of satellite images produced by MAAP[6] based on its observations of deforestation processes. Deforestation is one of the practical consequences of the anthropocentric idea that nature is a commodity that must be dominated by human beings and a resource to be exploited for their benefit, an idea put into practice by the

[6] The satellite images published by the Andean Amazon Monitoring Project (MAAP) can be consulted on its web platform: https://www.maaproject.org/2021/amazon-2020

European colonialist project. Next, we will make a brief exposition of the historical development of that form of thought consolidated during Modernity.

## The idea of nature as a thing to be dominated

In their historical evolution, societies have determined the cultural characteristics that guide social and ecological relationships. The school of thought that gave rise to the scientific method that separates, compares, opposes, classifies and hierarchizes knowledge is characteristic of modern societies. One of the predecessor currents of modern scientific thought on the separation between human beings and nature comes from the Calvinist interpretation of biblical texts, where the separation and asymmetric relationship is established according to which man (understood as the prototype of Western man, white and free), is conceived as a universal subject that reigns over nature. That interpretation served as the foundation for the anthropocentric and androcentric vision of the world (MONARES, 1999). The bases for this worldview are found in the translation and interpretation of the first chapter of the book of Genesis belonging to the Torah and later included in the Bible:

> 27 So God created human beings, making them to be like himself. He created them male and female, 28 blessed them, and said, "Have many children, so that your descendants will live all over the earth and bring it under their control. I am putting you in charge of the fish, the birds, and all the wild animals. (BIBLE, Genesis, 1, 27-28, 1992, p. 3)

Following the idea that human beings are an exception to creation and that they are not part of nature and, for this reason, must dominate it, Calvin introduced in his Institutes of the Christian Religion (originally published in Latin in 1536) some annotations that emphasize the fact that nature does not exist as a being in itself, but only for the benefit of human beings. He referred to the utility function of nature both to satisfy the needs and for the "delight" of human beings and raised the idea that nature can be appropriated as "earthly goods" (CALVINO, 1999, p. 552). According to Monares (1999),

this is one of the arguments from which the idea of nature as an unlimited resource for human beings, capable of being controlled through science, was derived.

Subsequently, the rationalism defended by René Descartes reaffirmed the position of nature as the object of human domination. According to Zaffaroni (2011), this philosophical current gave humans the mission to progress by exercising such dominance. The conquest of the Americas marked the beginning of a form of colonization in which capitalism and relations of subordination were articulated according to classification by "race" (QUIJANO; WALLERSTEIN, 1992; MALDONADO-TORRES, 2007). The dehumanization and consequent subordination of the indigenous and African peoples also implied the domination, subalternization and extermination of the ways of life and the narratives of the native peoples. The consequences of this live on to this day.

Only recently, the perspectives of indigenous peoples begun to gain relevance in the ecological and political spheres, as an alternative to the developmentalist vision, according to which nature is a resource to be exploited for progress and economic growth, a necessary object to ensure the well-being of human beings: "The necessity – eternal sponsor of all massacres and wars– must be evaluated according to the human conditions of dignified survival and non-abusive use with respect to all natural entities, and not for the exclusive convenience of obtaining higher profits" (ZAFFARONI, 2011, p. 144, translation made by us).

These perspectives of the native peoples on socio-environmental relationships, which promote the decolonization of knowledge of a Eurocentric matrix, gained greater visibility in the most recent Latin American constitutions and in subsequent environmental legislation.

## Deforestation and pandemics

Deforestation brings devastating consequences: soil erosion, loss of socio-biodiversity, alteration of rivers, greenhouse gas emissions, decrease in forest products and loss of watersheds (FAO/PNUMA, 2020). Changes in the forest cover of the land also have a direct effect on climate change. This was demonstrated by the 0.7°C increase in

land temperature in the Amazon region due to the reduction in tropical forest areas (MARENGO *et al.*, 2018).

The deforestation of the Amazon biome causes a global impact, since it affects not only the planet's temperature, but also hydrological variability (referring to increased rainfall in some countries and droughts in others). This has implications for agriculture, water cycles, the acceleration of forest fires (LOVEJOY; NOBRE, 2018) and the migration of humans and non-human animals. By causing imbalances in ecosystems, deforestation produces losses in socio-biodiversity, due to damage to vital relationships developed over time between human beings, non-human beings and their environments. On the other hand, climate change increases this loss and amplifies the spread of viruses in humid and warm environments (SUÁREZ *et al.*, 2020). As stated by Ellwanger *et al.* (2020), the relationship between biodiversity and infectious diseases is, at the same time, complex and paradoxical:

> *Preserved ecosystems act as health promoters, maintaining pathogens in the forest environment. From another perspective, disturbances in highly biodiverse ecosystems facilitate the emergence and spread of new human infections. These basic precepts need to be taken into account in future studies, development projects and political decision-making focused on the Amazon region.* (ELLWANGER *et al.*, 2020, p. 14).

Deforestation has a high impact on the incidence of insect-borne diseases (IPEA, 2015), including malaria, leishmaniasis, and dengue (VANWAMBEKE *et al.*, 2007). The correlation between the intensification of contact between humans and wildlife with the incidence of viral diseases has been evidenced in coronavirus pandemics in the world, such as the SARS-Coronavirus pandemic, first identified in southern China in 2002; the one caused by the MERS-Coronavirus that emerged in Saudi Arabia in 2012, and the one produced by the new coronavirus SARS-CoV-2 that produces the severe acute respiratory syndrome COVID-19, a pandemic that had the central region of China as its first epicenter in 2019, subsequently spread throughout the planet.

Various scientific studies have been carried out since the first cases of coronavirus emerged. Among them, a study carried out by researchers from Columbia University in 20 countries in Latin America, Asia and Africa (ANTHONY *et al*., 2017) explored the global biodiversity of the coronavirus (CoV), identifying 3,204 types of coronavirus in bats. The authors found that there is a correlation between the biogeographical variations of bats and the spread of the coronavirus.

The problem lies in the alteration that human beings cause in the balance of ecosystems, and not in the existence of bats themselves. Because by changing the ecosystem of bats, due to the expansion of agricultural frontiers and urbanization, these animals seek to adapt to the environments created by human beings and, consequently, the probability of transmission of the viruses they carry increases (AFELT *et al*., 2018; GÓMEZ, 2020; LEVIS *et al*., 2020; SUÁREZ *et al*., 2020).

The lack of understanding of the anthropic causes of this imbalance has led to blaming non-human animals that carry viruses for epidemics (WORSTER, 2020). For example, the National Forestry and Wildlife Service (SERFOR) of Peru reported that in March 2020, in the province of Santa Cruz (Department of Cajamarca), some people "attacked bats found in a local area with fire, those that could be rescued by SERFOR were released in a remote cave" (LOS MURCIÉLAGOS..., 2020, translation made by us). All of this causes new imbalances in ecosystems and demonstrates the reproduction of the mentality of domination of human beings over the environment.

## Pandemic and social inequality

Colonial domination is also expressed in the manifest contempt for the lives of humans who have been racialized, dehumanized, and, therefore, historically subordinated (HOUTART, 2011, p. 98). Ailton Krenak, a member of the Krenak indigenous community (Minas Gerais, Brazil) and leader of the Forest Peoples' Alliance, which brings together riverside and indigenous communities in the Amazon, affirms: "We are devastating the planet, digging a gigantic gap of inequalities between peoples and societies, so that there is a sub-humanity that lives in great misery –with no possibility of

getting out of it– and this was also naturalized" (KRENAK, 2020, p. 6, translation made by us).

Racism and inequality are also expressed in the inaccessibility of health services and in the precarious infrastructure to care for the indigenous populations of the Amazon region, which is why there was a greater number of people infected and deceased as a result of COVID-19 (INDIGENOUS..., 2020). In the Pan-Amazon region, in the month of November 2021, 3,784,944 infected people were reported among the total population, and 106,623 people died from COVID-19 (COVID-19..., 2021). Only in Brazil, until the beginning of November 2022, the Articulation of Indigenous Peoples of Brazil (APIB), which monitors the situation of indigenous people during the COVID-19 pandemic, reported 75686 confirmed cases and 1324 deaths, adding a total of 162 affected indigenous communities ([PLATAFORMA] ..., 2022).

Despite the fact that the underreporting of cases of COVID-19 prevalence in the *quilombos*[7] makes it difficult to know the situation of these peoples in the Amazon, in Brazil there is the COVID-19 Observatory in the *quilombos*, thanks to an alliance between the National Coordination of Articulation of Rural Black Quilombola Communities (CONAQ) and the Socio-Environmental Institute (ISA). Data from this observatory report 5,666 confirmed cases and 301 deaths among the country's *quilombos* inhabitants up to January 2022 (OBSERVATÓRIO..., 2022).

In recent years, in the countries of the Amazon region, the deepening of the neoliberal model has prevailed, which implies environmental devastation and the loss of thousands of human lives conceived as "expendable". This is how, in 2020, the Brazilian government imposed vetoes on social policies that would protect indigenous peoples and *quilombolas* during the pandemic (LINHA..., 2020).

Before the pandemic, three types of actions were promoted that lead to ecological annihilation: hunting, habitat degradation and deforestation. For these

[7] The *quilombos* are settlements formed by people from the Afro-descendant community of Brazil who resisted the slavery established during the colony. These ethnic-racial groups have their own historical trajectory and their specific territorial relations. That is the basis of the social movement from which they fight for their rights (For more information, see the Internet platform of the *Coordenação Nacional de Articulação das Comunidades Negras Rurais Quilombolas* (CONAQ): http://conaq.org.br/quem-somos/).

reasons, the Brazilian president was denounced for "ecocide" before the International Criminal Court (MARQUES, 2019). In addition, the heads of the Ministries of the Environment in Brazil and Ecuador considered that the way forward in their countries was to make environmental laws more flexible and intensify extractivism, especially of wood and minerals, even in times of pandemic (ACOSTA, 2020; GREENPEACE BRAZIL, 2020).

Development in the Amazon region, regardless of which governments are, has maintained the same model that ignores geological, biological and sociocultural diversity, as Grisotti and Moran (2020, p. 1, translation made by us) point out: "The recognition of diversity, that should be the starting point for any discussion on development strategies in the region, is neglected by public policies that continue to seek solutions for the region as if it were homogeneous."

Colombia, for example, presented a worsening of environmental conflicts due to political conflicts in the implementation of the peace agreement signed between the government and the Revolutionary Armed Forces of Colombia - People's Army (FARC-EP) guerrilla in 2016 (SÁNCHEZ, 2019). The weak presence of State institutions in the territories previously occupied by this guerrilla gave rise to new conflicts over territorial control. In the Amazon region, deforestation has increased due to land grabbing, the expansion of extensive cattle ranching, illegal mining, and the intensification of illicit coca crops (*Erythroxylum coca*) (REPORTE..., 2020). Despite the efforts made at the legal level and from community-based organizations, in 2021 the Amazon region concentrated 70% of deforestation in Colombia (SANABRIA, 2022).

As a consequence of the pandemic, deforestation in the Amazon region is expected to continue to increase, justified by the economic crisis, rising unemployment and the need to continue producing food, fuel and other consumer goods in large quantities (BENSUSAN, 2020). However, the promise of neoliberalism to increase wealth from the use of "natural resources" in "underdeveloped countries" can easily be denied, because in Latin America, Asia and Africa the levels of poverty and inequality remain high, despite to growing environmental exploitation.

The World Bank (WB) estimates that, in Latin America and the Caribbean, the pandemic will have an impact on both poverty and inequality. This was the analysis disclosed by the economist Carlos Felipe Jaramillo, vice president of the WB for this region, in an interview for the *France Presse* (AFP) news agency: "We are already forecasting a loss of at least 25 million jobs for this year 2020 and that figure could be worse depending on how the situation evolves over the next five or six months [...], we are estimating that 50 million Latin Americans are going to fall below the poverty line this year." (BM ESTIMA..., 2020, translation made by us).

At the same time, this World Bank specialist believed that the way out of the crisis requires "a different growth" that is "more environmentally sustainable and with a greater inclusion of young people" (BM ESTIMA..., 2020, translation made by us). With the adoption of the discourse of transformation of the economy, the economic development model that the World Bank and the International Monetary Fund (IMF) imposed has recently been called into question in Latin American countries, but will this translate into more effective policies to maintain socioecological systems[8]? If that economic position includes continuing to promote extractivism that generates negative social and environmental impacts, in order to later compensate for those impacts, we can affirm, along with Gudynas, that "benevolent capitalism is incompatible with good living" (GUDYNAS, 2011, p. 239, translation made by us). The loss of socio-biodiversity also has negative impacts on local economic conditions, since many communities and traditional peoples depend on forests for survival. In other words, the chain of deforestation-pandemic-poverty can continue to repeat itself indefinitely until we generate positive changes in socio-ecological relationships.

[8] On the conception of the Amazon as a socio-ecological system see, for example: BUSCHBACHER, Robert; ATHAYDE, Simone; BARTELS, Wendy-Lin; MELLO, Ricardo Avaliação da resiliência como ferramenta para entender a fronteira amazônica como um sistema socioecológico. **Sustainability in Debate/Sustentabilidade em Debate**, [s.l.], v. 7, no. 2, 2016.

## Alternatives to the advance of capital over nature

Understanding the existence of human beings as an integral part of a living organism –the Earth, *Pacha Mama* or *Gaia*– and, therefore, as one more species among others, has a different ethical connotation than the vision of the Earth as a passive host that is there to satisfy the economic projects of certain human beings. According to Zaffaroni (2011), the conception of *Pacha Mama* implies recognizing that all beings that coexist on Earth have the right to live and develop peacefully. These rights require that human beings adopt ethical obligations with respect to all human and non-human beings, an urgent commitment at a time when the environmental crisis has become global: "20% of the earth's surface has been degraded between the years 2000 and 2015" (FAO/UNEP, 2020, p. 99, translation made by us). As Houtart (2011) explains, abandoning the utilitarian attitude towards nature, which causes damage to life itself, means assuming the ethical imperative of "changing economic practices and the cultural system that justifies them." (HOUTART, 2011, p. 22, translation made by us).

The rights of nature –understood as the set of all living beings, human and non-human, and their environments– are in the matrix of the communities that practice, as part of their ways of life, the interdependent relationships of all living beings and their environments. In this area is the notion of Good Living of the Andean-Amazonian peoples that, instead of constituting a finished model that must be reproduced in other societies, is considered as a proposal in constant collective construction:

> *Sumak Kawsay* for us, for the indigenous peoples, is reconstruction, that is, the construction of a new model of life, not only for human beings, but for the entire planet; new model of life that includes political, economic, cultural, social, ecological and spiritual aspects. (CHOLANGO, 2014, p. 240, translation made by us)

In short, Good Living promotes coexistence in harmony with Mother Earth and the practice of the principles of complementarity, cooperation, solidarity, sovereignty and reciprocity. In this sense, its ultimate goal is the "sustainability of life" (LEÓN, 2009, p. 72). In the sphere of human relations, it is about "a coexistence without misery, without

discrimination, with a minimum of necessary things that do not represent the final goal" (ACOSTA, 2008, p. 37, translation made by us).

At the end of the 20th century, the new Latin American constitutions marked an environmental trend. The Brazilian Political Constitution of 1988 was the first in Latin America to introduce the notion of "ecological balance", in terms of being a social right, based on the usefulness of the services that the environment provides to human beings. In this constitutional text, responsibilities are attributed to the State and civil society for the care of nature: "**Art. 225.** Everyone has the right to an ecologically balanced environment, which is considered an asset for the common use of the people and essential for a healthy quality of life, imposing on the public power and the community the duty to defend and preserve it for the present and future generations" (BRAZIL, 1988, art. 225, translation made by us). Subsequently, the Brazilian Forest Code (BRAZIL, 2012, art. 12) established that 80% of rural property located in Amazonian forest areas cannot be deforested.

In Colombia, article 79 of the National Constitution of 1991 contemplates the fundamental right of people to enjoy a healthy environment. As in the Brazilian case, environmental care is based on the service that nature provides to human beings. This article led to new discussions in the legal-environmental field that adopted the ecocentric approach. This approach assumes that the human species is one among all species of living beings. This perspective is reaffirmed with the declaration of the Constitutional Court in 2016 according to which: "the Atrato River is subject to rights that imply its protection, conservation, maintenance and in the specific case, restoration" (COLOMBIA, 2016, sentencia T-622, translation made by us). Likewise, in the decision of the Supreme Court of Justice that recognizes the Colombian Amazon as a subject of rights (COLOMBIA, 2018, sentencia STC-4360). This latest court ruling is the result of a lawsuit made by a group of 25 Colombian children and youth who demanded that the Colombian National State stop deforestation in the Amazon rainforest (JUICIO..., 2019). As a consequence of this, the Supreme Court of Justice ordered government entities to establish land use plans whose goal was to end deforestation and adapt land use to the situations imposed by climate change.

The Political Constitution of Peru of 1993 refers to the environment in terms of natural resources, renewable and non-renewable, and grants the State the power to take advantage of them (art. 66). In addition, it determines that environmental legislation must be oriented towards the conservation of biodiversity and protected natural areas and the promotion of a model of sustainable development in the Amazon (art. 69). These requirements were contemplated by the Forest and Wildlife Law (PERU, 2011, arts. 66-69).

The recognition of nature as a subject of rights was made manifest for the first time in Latin America in the Political Constitution of Ecuador (2008, art. 71, translation made by us): "Art. 71. Nature or *Pacha Mama*, where life reproduces and takes place, has the right to full respect for its existence and the maintenance and regeneration of its vital cycles, structure, functions and evolutionary processes."

The Political Constitution of Bolivia (2009, art. 347) refers to Good Living (*Suma qamaña* in Aymara) as one of the ethical-moral principles of a plural society (art. 8). It also defends the protection of the environment and sanctions the commission of "environmental crimes". However, this political constitution focuses on the quality of the environment based on the quality of life of people; its perspective is that of third generation citizen rights. Next, the Framework Law of Mother Earth and Integral Development for Living Well was instituted, which establishes as a fundamental principle the "Rights of Mother Earth as a collective subject of public interest" (BOLIVIA, 2012).

Good Living (*Sumak kawsay* in Kichwa) contemplates the practice of solidarity and reciprocity that are opposed to the inequality and devastation produced by the capitalist system. The challenge posed by this notion is the articulation between Human Rights and the Rights of Nature, having the defense of life as a principle in decision-making. As a promoter of this perspective, Alberto Acosta –economist who presided over the Constituent Assembly of Ecuador (2007-2008) – suggests the relevance of "a transition to a sustainable and solidarity-based economy, which includes the decrease of extractivism, and the demand for local and participatory policies" (ACOSTA, 2015, p. 299, translation made by us).

## Final considerations

Since the late 1940s, various voices have been warning about the future consequences of the relentless exploitation and destruction of nature, inherent in sustaining the way of life of some human beings and the capitalist system (CARSON, 1962; OSBORN, 1948; VOGT, 1948). In the 1970s, the *Limits to Growth* report (MEADOWS *et al.*, 1972) and the Stockholm Conference addressed issues related to the degradation of the planet and pointed to the need for its preservation. Even in the 19th century there was concern about "saving the forests" in Europe, which were being extinguished to generate a type of energy that promoted the development of the exploitation of mineral coal and the large-scale expansion of a type of industry associated with its consumption.

None of these and countless other alerts, among which we must highlight those of indigenous peoples, frequently silenced for not being part of the Eurocentric matrix of knowledge, were seriously considered, and we find ourselves living with the consequences of decades of struggle against nature. In this way, all kinds of predatory practices were developed to maintain a system that brings economic benefits only to some human beings, and that remains indifferent to the effects that these practices have on the rest of nature. Neither the so-called green revolution and the massive use of agrochemicals and synthetic fertilizers; neither deforestation, mineral extraction and other activities that harm nature as a whole, produced the promised results, and in seventy years we passed from the era of warnings to the era of consequences. Specifically, the current situation in the Amazon region is evidence of the prevalence of an exploitative attitude against nature. It also points out that, among the human groups that inhabit that region, there is contempt for indigenous and Afro-descendant peoples.

According to Zaffaroni (2011), the confusion in the relationships of human beings with nature is due to the continuity of the anthropocentric paradigm that granted the exclusivity of rights to just a few humans and, therefore, the right of domination over nature. To this fact, we can add a previous one, which is the human/nature separation, as result of the establishment of an epistemology based on dichotomies. Such an epistemology first established an opposition, and then promoted a body-centered

hierarchy, creating a norm and placing certain human bodies in a higher order, and all bodies dissenting from that norm, in a lower order.

Unlike the mentality of separation and domination of some human beings over the rest of nature, the proposal of Good Living invites us to understand the relationships of interdependence between species in order to create a common world that is not limited to humans, but for all living beings. Socio-environmental relations must be guided by the ethical conduct of the State and civil society. Good Living does not imply the prohibition of the consumption of natural products; instead, it aims to do so with care and respect, thus opposing the idea that nature is an entity separate from human beings, the factory of resources and wealth that capitalism converted it into. This "*should be*" is present in Latin American neo-constitutionalism and in legal environmentalism, but it is clear that the rules do not materialize in reality automatically, but the will of human beings is necessary to put them into practice.

The COVID-19 pandemic exposed the carelessness of Latin American governments with ethnic minorities and aggravated the situation of indigenous, Afro-descendant and Roma peoples who have historically lived in conditions of poverty and misery. It also made it possible to observe how governments prefer to ignore both the origin of the pandemic and its possible causes, as well as the measures that the first affected countries took to reduce its spread. On the one hand, despite the relationship established between deforestation and the origin of COVID-19, the Amazon forest continues to be devastated. On the other hand, even knowing that the indigenous and Afro-descendant communities would be the most vulnerable, and that their care required social distancing and support from the State, the invasion of their lands continued to be allowed, which promoted the spread of the disease among the guardians of the forest. To prevent the next pandemic from emerging in the Amazon territory, we need to stop considering nature as a large supermarket. The notion of Good Living takes us out of the logic of unlimited consumption to place us in a scenario of self-sufficiency and self-management.

We conclude that limiting deforestation means profound social, ecological and economic change. A "more environmentally sustainable economic growth", as advocated by World Bank specialists, is not a plausible proposal on a finite planet; it just represents

another version of neoliberalism, cornered by the economic and social effects of the COVID-19 pandemic.

The change proposed by the notion of Good Living implies valuing knowledge and territorial practices, including those that do not focus on the accumulation and reproduction of capital, but those that respond to other economic rationalities that allow restoring concern for other beings, and the notion of collective well-being –without limiting the concepts "other" and "collective" to the human species–, (largely dissolved by the neoliberal discourse), having as its main objective the coexistence of all living beings on planet Earth.

## Acknowledgements

The authors thank the reviewers for their comments on the preliminary versions of this article. They also thank Dr. Carolina Levis (postdoctoral researcher at the Graduate Program in Ecology at the Federal University of Santa Catarina -UFSC) and colleagues from the Immigration, Migration and Environmental History Laboratory (LABIMHA/UFSC) for contributing their ideas during the writing process. We would like to extend our thanks to the National Council for Scientific and Technological Development (CNPq) for the fellowship received by the authors ESN and MG, and to the Coordination for the Improvement of Higher Level Personnel (CAPES) for the doctorate scholarship to the author INC.

## References

ABT. Autoridad de Fiscalización y Control Social de Bosques y Tierra de Bolivia. **Deforestación en el estado plurinacional de Bolivia periodo 2016-2017**: versión preliminar. Bolivia: Gobierno de Bolivia, 2018. Available at: http://abt.gob.bo/images/stories/Transparencia/InformesAnuales/memorias-2016-2017/Memoria_Deforestacion_2016_2017_opt.pdf. Accessed: 15 July 2022.

ACOSTA, Alberto. El Coronavirus en los tiempos del Ecuador. **Análisis Carolina**. España: Fundación Carolina, 2020. Available at: https://www.fundacioncarolina.es/wp-content/uploads/2020/04/AC-23.-2020.pdf. Accessed: 25 April 2021.

ACOSTA, Alberto. El Buen Vivir como alternativa al desarrollo. Algunas reflexiones económicas y no tan económicas. **Política y Sociedad**, v. 52, n. 2, p. 299-330, 2015.

ACOSTA, Alberto. El Buen Vivir, una oportunidad por construir. **Ecuador Debate,** n. 75, p. 33 – 48, Dec. 2008.

A ESTIMATIVA da taxa de desmatamento por corte raso para a Amazônia Legal em 2019 é de 9.762 km². **Notícias OBT INPE**, [Brasília: INPE], 18 Nov. 2019. Available at: http://www.obt.inpe.br/OBT/noticias-obt-inpe/a-estimativa-da-taxa-de-desmatamento-por-corte-raso-para-a-amazonia-legal-em-2019-e-de-9-762-km2. Accessed: 25 May 2020.

AFELT, Aneta; FRUTOS, Roger; DEVAUX, Christian. Bats, coronaviruses, and deforestation: Toward the emergence of novel infectious diseases?. **Frontiers in microbiology**, v. 9, paper 702, p. 1-5, 2018.

ANTHONY, Simon; JOHNSON, Christine; GREIG, Denise; KRAMER, Sarah; CHE, Xiaoyu; WELLS, Heather; HICKS, Alison; JOLY, Damien; WOLFE, Nathan; DASZAK, Peter; KARESH, William; LIPKIN, W.I. ; MORSE, Stephen; Predict Consortium; GOLDSTEIN, Tracey. Global patterns in coronavirus diversity. **Virus evolution**, v. 3, n. 1, 2017, p. 1-15.

BAUMGAERTNER, Emily; RAINEY, James. Trump administration ended coronavirus detection program, **Los Angeles Times**, 2 Apr. 2020. Available at: https://www.latimes.com/science/story/2020-04-02/coronavirus-trump-pandemic-program-viruses-detection. Accessed: 7 August 2020.

BENSUSAN, Nurit. A pandemia nossa de cada dia: sobre becos e fissuras. **Blog do Instituto Socioambiental**, 16 Jun. 2020. Available at: https://www.socioambiental.org/pt-br/blog/blog-do-isa/a-pandemia-nossa-de-cada-dia-sobre-becos-e-fissuras. Accessed: 13 July 2020.

BM ESTIMA que Latinoamérica va a perder 25 millones de empleos en 2020. **AFP**, Paris, 24 jul. 2020. Available at: https://www.swissinfo.ch/spa/bm-estima-que-latinoam%C3%A9rica-va-a-perder-25-millones-de-empleos-en-2020/45925728. Accessed: 11 August 2020.

BOLIVIA. [Constituição (2009)]. **Constitución Política del Estado (CPE)**. La Paz: Presidencia de la República, 2009. Available at: https://www.oas.org/dil/esp/constitucion_bolivia.pdf. Accessed: 2 July 2020.

BOLIVIA. **Ley 300 de 2012**. Derechos de la Madre Tierra como sujeto colectivo de interés público. La Paz: Asamblea Legislativa, 2012. Available at: http://www.planificacion.gob.bo/uploads/marco-legal/Ley%20N%C2%B0%20300%20MARCO%20DE%20LA%20MADRE%20TIERRA.pdf. Accessed: 3 July 2020.

BOTERO, Rodrigo ¿Qué está pasando en la Amazonía? **La Silla Vacía**, [Colombia], 16 feb. 2022. Available at: https://www.lasillavacia.com/historias/historias-silla-llena/que-esta-pasando-en-la-amazonia/. Accessed: 20 February 2022.

BRAZIL. [Constituição (1988)]. **Constituição da República Federativa do Brasil de 1988**. Brasília: Câmara dos Deputados, 1988. Available at: https://www2.camara.leg.br/legin/fed/consti/1988/constituicao-1988-5-outubro-1988-322142-publicacaooriginal-1-pl.html. Accessed: 20 July 2020.

BRAZIL. **Lei 12.651 de 2012**. Código florestal. Dispõe sobre a proteção da vegetação nativa. Brasília: Presidência da República, 2012. Available at: https://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12651.htm. Accessed: 20 July 2020.

BUTLER, Rhett. January deforestation in the Amazon highest in 14 years. **Mongabay**, [California], 11 Feb. 2022. Available at: https://news.mongabay.com/2022/02/january-deforestation-in-the-amazon-highest-in-14-years/. Accessed: 27 February 2022.

BUTLER, Rhett. The Amazon Rainforest: the world's largest rainforest. **Mongabay**, [California], 4 Jun. 2020. Available at: https://rainforests.mongabay.com/amazon/. Accessed: 5 December 2021.

CALVINO, Juan. **Institución de la religión cristiana**. Barcelona: Fundación Editorial de Literatura Reformada, 1999. v. 1.

CARSON, Rachel. **Silent spring**. [Boston]: Houghton Mifflin Harcourt, 1962.

CARVALHO Ribeiro, Sónia Maria; JARDIM, Helder Lages; RUCHKYS DE AZEVEDO, Úrsula; COELHO, Vagner; BACHI, Laura Salles; SOARES-FILHO, Britaldo. Non-Timber forest products (NTFP) in the Brazilian Amazon and Cerrado biomes: multi scale governance for Implementing enhanced socio-biodiversity chains. **Sustainability in Debate/Sustentabilidade em Debate**, Brasilia, v. 11, n. 2, 2020, p. 42-61.

CHOLANGO, Humberto. Sumak Kawsay y mundo indígena. In: HIDALGO-CAPITÁN, Antonio; GUILLÉN, Alejandro.; DELEG, Nancy (eds.). **Sumak Kawsay Yuyay**: antología del pensamiento indigenista ecuatoriano sobre Sumak Kawsay. [Huelva]: Universidad de Huelva; [Cuenca]: Universidad de Cuenca, 2014. p. 237-243.

COLOMBIA. Corte Constitucional. **Sentencia T-622 de 2016**. Principio de precaución ambiental y su aplicación para proteger el derecho a la salud de las personas. Bogotá: Corte Constitucional, 2016. Available at: https://www.corteconstitucional.gov.co/relatoria/2016/t-622-16.htm. Accessed: 18 March 2021.

COLOMBIA. Corte Suprema de Justicia. **Sentencia STC-4360 de 2018**. Sobre la protección inmediata de la Amazonía Colombiana. Bogotá: Corte Suprema de Justicia, 2018. Available at: https://cortesuprema.gov.co/corte/wp-content/uploads/2018/04/STC4360-2018-2018-00319-011.pdf. Accessed: 18 March 2021.

COSTA, Camilla. Destrucción del Amazonas: las principales amenazas para la mayor selva tropical del mundo en los 9 países que la comparten. **BBC News Mundo**, [s.l.], 18 Feb. 2020. Available at: https://www.bbc.com/mundo/noticias-america-latina-51377234. Accessed: 5 March 2020.

COVID-19 en la Panamazonía: mapa de casos confirmados. **REPAM - Red Eclesial Panamazónica**, [s.l.], 1 nov. 2021. Available at: https://redamazonica.org/covid-19-panamazonia/. Accessed: 09 November 2022.

DESMATAMENTO na Amazônia cresce 29% em 2021 e é o maior dos últimos 10 anos. **Imazon**, [s.l.], 17 enero 2022. Available at: https://imazon.org.br/imprensa/desmatamento-na-amazonia-cresce-29-em-2021-e-e-o-maior-dos-ultimos-10-anos. Accessed: 29 January 2022.

ECUADOR. [Constituição (2008)]. **Constitución de la República del Ecuador**. [Quito]: Asamblea Nacional, 2008. Available at: https://www.oas.org/juridico/pdfs/mesicic4_ecu_const.pdf. Accessed: 13 August 2021.

ELLWANGER, Henrique; KULMANN-LEAL, Bruna; KAMINSKI, Valéria; VALVERDE-VILLEGAS, Jacqueline; VEIGA, Ana; SPILKI, Fernando; FEARNSIDE, Lílian; GIATTI, Leandro; WALLAU, Gabriel; ALMEIDA, Sabrina; BORBA, Mauro; HORA, Vanusa P. da; CHIES, José. Beyond diversity loss and climate change: Impacts of Amazon deforestation on infectious diseases and public health. **Anais da Academia Brasileira de Ciências**, Volume 92, No. 1, p. 1-33, 2020.

FAO. Organización de las Naciones Unidas para Agricultura y la Alimentación; PNUMA. Programa de las Naciones Unidas para el Medio Ambiente. **El estado de los bosques del mundo 2020**: los bosques, la biodiversidad y las personas. Roma: ONU, 2020. Available at: https://www.fao.org/3/ca8642es/ca8642es.pdf. Accessed: 13 October 2021.

FENZL, Norbert. Integración de la Amazonia: desafíos, obstáculos y perspectivas. In: ECHEVERRI, Juan Álvaro *et al*. **Amazonia colombiana:** imaginarios y realidades. Bogotá: Universidad Nacional de Colombia, 2010. p. 27-35.

FINER Matt; THIEME Alison; HETTLER Brian. MAAP # 114 explotación petrolera se adentra más en el Parque Nacional Yasuní (Ecuador). **Monitoring Andean Amazon Project-MAAP**, [s.l.], 2019. Available at: https://maaproject.org/2019/yasuni-itt. Accessed: 4 August 2020.

GENESIS. In: **BIBLE**: Old Testament. Good News Translation-GNT. Philadelphia: American Bible Society, 1992.

GÓMEZ, Thelma ¿Por qué la deforestación y la pérdida de especies abren la puerta a nuevas enfermedades? **Mongabay Latam**, Madrid, 07 Apr. 2020. Available at: https://es.mongabay.com/2020/04/COVID-19-deforestacion-y-la-perdida-de-especies. Accessed: 03 June 2020.

GREENPEACE BRASIL. Ricardo Salles deve ser retirado imediatamente do Ministério de Meio Ambiente. **Greenpeace**, [s.l.], 23 May 2020. Available at: https://www.greenpeace.org/brasil/blog/ricardo-salles-deve-ser-retirado-imediatamente-do-ministerio-de-meio-ambiente/. Accessed: 6 April 2020.

GRISOTTI, Marcia; MORAN, Emilio. Os novos desafios do desenvolvimento na região amazônica. **Civitas**, Porto Alegre, v. 20, n. 1, p. 1-4, Jan./Apr. 2020.

GUDYNAS, Eduardo. Tensiones, contradicciones y oportunidades de la dimensión ambiental del Buen Vivir. In: FARAH, Ivonne; VASAPOLLO, Luciano (org.). **Vivir bien:** ¿Paradigma no capitalista? [La Paz]: CIDES-UMSA, 2011. p. 231-246.

HOUTART, François. El concepto de Sumak Kawsay (buen vivir) y su correspondencia con el bien común de la humanidad. **Revista de Filosofía** (Venezuela), Zulia, v. 69, n. 3, p. 7-33, 2011.

INDÍGENAS, quilombolas e ciganos são mais vulneráveis ao coronavírus. **Notícias Externas**, [Belo Horizonte]: UFMG, 15 maio 2020. Available at: https://ufmg.br/comunicacao/noticias/indigenas-quilombolas-e-ciganos-sao-mais-vulneraveis-ao-coronavirus. Accessed: 5 June 2020.

IPEA- Instituto de Pesquisa Econômica Aplicada. **Impacto do desmatamento sobre a incidência de doenças na Amazônia**. Brasília: IPEA, 2015.

JUICIO a la deforestación: durante un mes la Amazonía se tomará el Tribunal Superior de Bogotá. **Noticias Dejusticia**, Bogotá, 10 Set. 2019. Available at: https://www.dejusticia.org/juicioaladeforestacion-durante-un-mes-la-amazonia-se-tomara-el-tribunal-superior-de-bogota/. Accessed: 30 November 2020.

KELLY, Terra; MACHALABA, Catherine; KARESH, William; CROOK, Paulina; GILARDI, Kirsten; NZIZA, Julius; UHART, Marcela; ROBLES, Erika; SAYLORS, Karen; O. JOLY, Damien; MONAGIN, Corina; MANGOMBO, Prime; KINGEBENI, Placide; KAZWALA, Rudovick; WOLKING, David; SMITH, Woutrina; PREDICT Consortium; MAZET, Jonna. Implementing One Health approaches to confront emerging and re-emerging zoonotic

disease threats: lessons from PREDICT. **One Health Outlook**, [California], v. 2, n. 1, p. 1-7, 2020.

KRENAK, Ailton. **O amanhã não está à venda**. São Paulo: Companhia das Letras, 2020.

LAPOLA, David. Futuras pandemias poderão começar no Brasil. **Folha de São Paulo**, São Paulo, 06 May 2020. Available at: https://www1.folha.uol.com.br/opiniao/2020/05/futuras-pandemias-poderao-comecar-no-brasil.shtml?fbclid=IwAR3QRrz1HNoMO_zcIp-vtoHp5vmLL7-TbnAxZAKZdqBwif_G07oKpkvDQ-I. Accessed: 06 May 2020.

LEÓN, Magdalena. Cambiar la economía para cambiar la vida. En: ACOSTA, Alberto; MARTÍNEZ, Esperanza. **El buen vivir**. Una vía para el desarrollo. Quito: Ediciones Abya-Yala, 2009, p. 63-74.

LEVIS, Carolina; LOPES PICELLI, Isabelle; MOUTINHO, Paulo. O futuro da Amazônia e seus povos diante da maior crise ambiental e sanitária deste século. In: SANTOS, Ronaldo; POCHMANN, Marcio. **Brasil pós-pandemia:** reflexões e propostas. São Paulo: Alexa Cultural, 2020. p. 211 – 234.

LINHA do tempo: A omissão do governo na tragédia indígena. **Notícias/ Direto do ISA**, [São Paulo]: Instituto Socioambiental, 16 Oct. 2020. Available at: https://www.socioambiental.org/pt-br/noticias-socioambientais/linha-do-tempo-a-omissao-do-governo-na-tragedia-indigena. Accessed: 20 October 2020.

LOPES, Elaine; SOARES-FILHO, Britaldo; SOUZA, Franco; RAJÃO, Raoni; MERRY, Frank; CARVALHO-RIBEIRO, Sonia. Mapping the socio-ecology of Non Timber Forest Products (NTFP) extraction in the Brazilian Amazon: the case of açaí (euterpe precatoria mart) in Acre. **Landscape and Urban Planning**, [s.l.], v. 188, p. 110-117, 2019.

LOS MURCIÉLAGOS brindan mayores beneficios de lo que se piensa. **Noticias**, [Lima: SERFOR- Servicio Nacional Forestal y de Fauna Silvestre], 24 Mar. 2020. Available at: https://www.serfor.gob.pe/portal/noticias/los-murcielagos-brindan-mayores-beneficios-de-lo-que-se-piensa. Accessed: 2 April 2020.

LOVEJOY, Thomas; NOBRE, Carlos. Amazon tipping point. **Science Advances**, [Washington, DC], v. 4, n. 2, eaat2340, Feb. 2018.

MALDONADO-TORRES, Nelson. Sobre la colonialidad del ser: contribuciones al desarrollo de un concepto. **Teoría descolonial**, [s.l.], 2007, p. 127-167. Available at: http://ww.decolonialtranslation.com/espanol/maldonado-colonialidad-del-ser.pdf. Accessed: 14 June 2020.

MARENGO, José; SOUZA, Carlos; THONICKE, Kirsten; BURTON, Chantelle; HALLADAY, Kate; BETTS, Richard; ALVES, Lincoln; SOARES, Wagner. Changes in climate and land use over the amazon region: current and future variability and trends. **Frontiers in Earth Science**, [s.l.], v. 6, n. 228, 2018. doi: 10.3389/feart.2018.00228. Available at: https://www.frontiersin.org/articles/10.3389/feart.2018.00228/full. Accessed: 02 August 2020.

MARQUES, Luiz. Bolsonaro, o ecocida. **Jornal da UNICAMP**, [Campinas]: Unicamp, 19 Jun. 2019. Available at: https://www.unicamp.br/unicamp/ju/artigos/luiz-marques/bolsonaro-o-ecocida. Accessed: 30 July 2019.

MEADOWS, Donella; MEADOWS, Dennis; RANDERS, Jørgen; BEHRENS, William. **The limits to Growth**. New York: Universe Books, 1972.

MELLO, Patricia; PEÑAFIEL, Juan Jorge. Povos indígenas e proteção da natureza: a caminho de um "giro hermenêutico ecocêntrico". **Revista Brasileira de Políticas Públicas**, [Brasilia D.F.], v. 10, n. 3, 2020. Available at: https://www.publicacoes.uniceub.br/RBPP/about/contact. Acceso: 02 April 2021.

MONARES, Andrés. Modernidad y crisis ambiental: en torno al fundamento de la relación naturaleza-ser humano en occidente. **Revista Austral de Ciencias Sociales**, [Valdivia], n. 3, p. 31-42, 1999.

NENQUIMO, Nemonte. Una carta desde la Amazonía: uno destruye lo que no entiende. **El País**, [s.l.], 12 Oct. 2020. Available at: https://elpais.com/opinion/2020-10-12/una-carta-desde-la-amazonia-uno-destruye-lo-que-no-entiende.html?fbclid=IwAR1Si5oq8IXjRY4uOCrUbvD82flZ5G9auoGEQZUDPo5d8pV6rkhI8M9du-I. Accessed: 15 October 2020.

OBSERVATÓRIO da Covid-19 nos Quilombos. **Quilombo sem Covid-19**. [Brasil]: Coordenação Nacional de Articulação das Comunidades Negras Rurais Quilombolas; Instituto Socioambiental, 12 Jan. 2022. Available at: https://quilombosemcovid19.org/. Accessed: 09 November 2022.

OSBORN, Fairfield. **Our plundered planet**. Boston: Little, Brown and Company, 1948.

PERÚ. [Constituição (1993)]. **Constitución Política del Perú**. [Lima]: Congreso Constituyente Democrático, 1993. Available at: https://pdba.georgetown.edu/Parties/Peru/Leyes/constitucion.pdf. Accessed: 3 October 2020.

[PLATAFORMA de monitoramento da situação indígena na pandemia do novo coronavírus (Covid-19) no Brasil]. **APIB- Articulação dos Povos Indígenas do Brasil**, [s.l.], 09 nov. 2022. Available at: https://emergenciaindigena.apiboficial.org/dados_covid19/. Accessed: 09 November 2022.

PNUMA/ OTCA. Perspectivas do Meio Ambiente na Amazônia. **GEO AMAZÔNIA**. Ciudad de Panamá: Centro de Investigación de la Universidad del Pacifico, 2008.

PUENTES, Pilar. Colombia: los incendios de enero en la Amazonía superan las cifras para este mes en los últimos 10 años. **Mongabay**, [California], 2 Feb. 2022. Available at: https://es.mongabay.com/2022/02/colombia-incendios-de-enero-en-amazonia-superan-las-cifras-para-ese-mes-en-los-ultimos-10-anos/. Accessed: 1 March 2022.

QUIJANO, Anibal; WALLERSTEIN, Inmanuel. Americanity as a concept, or the Americas in the modern world. **International Social Science Journal**, [s.l.], v. 44, n. 4, p. 549-557, 1992.

RAISG lanza la colección 2.0 de MapBiomas Amazonía: nueva colección presenta mapas anuales de cobertura y uso del suelo de toda la Amazonía, de 1985 a 2018. **RAISG**, [s.l.], 2 Jul. 2020. Available at: https://www.raisg.org/es/radar/raisg-y-mapbiomas-lanzan-la-coleccion-2-0-de-mapbiomas-amazonia/. Accessed: 17 February 2021.

REPORTE FCDS: deforestación Amazonia colombiana 2020. **Fundación para la Conservación y Desarrollo Sostenible-FCDS**, [s.l.], May 2020. Available at: https://fcds.org.co/publicaciones/reporte-fcds-deforestacion-amazonia-colombiana-2020/. Accessed: 12 June 2020.

SANABRIA, Catalina ¿Cuánto se deforestó en Colombia en el 2021?: la Amazonía sigue siendo la más afectada. **Mongabay**, [California], 26 Jul. 2022. Available at: https://es.mongabay.com/2022/07/cuanto-se-deforesto-en-colombia-en-el-2021/. Accessed: 2 August 2022.

SÁNCHEZ, Luis. Ecoturismo en la construcción de paz en Colombia: acuerdo de paz, conflictividad y justicia ambiental. **Via Tourism Review** [online], [s.l.], v. 15, 2019. Available at: https://journals.openedition.org/viatourism/3649. Accessed: 12 July 2020.

SIERRA, Yvette. Los desafíos ambientales de Bolivia en el 2021. **Mongabay**, [California], 21 Jan. 2021a. Available at: https://es.mongabay.com/2021/01/desafios-ambientales-para-bolivia-en-el-2021. Accessed: 4 June 2021.

SIERRA, Yvette. Amazonia: nuevo mapa revela una pérdida del tamaño de Ecuador en 17 años. **Mongabay**, [California], 28 Mar. 2019. Available at: https://es.mongabay.com/2019/03/amazonia-mapa-perdida-vegetacion. Accessed: 3 October 2020.

SIERRA, Yvette. Perú alcanza cifra de deforestación más alta en los últimos 20 años. **Mongabay**, [California], 7 Oct. 2021b. Available at: https://es.mongabay.com/2021/10/peru-aumenta-deforestacion-cifras-bosques. Accessed: 2 November 2021.

SUÁREZ, Luis; ASUNCIÓN, Mar; RIVERA, Lennys; PRATESI, Isabella; GALAVERNI, Marco; ANTONELLI, Marco. **Pérdida de naturaleza y pandemias:** un planeta sano por la salud de la humanidad. 2. ed. España: WWF, 5 Jun. 2020. Available at: https://wwfes.awsassets.panda.org/downloads/informe_perdida_de_naturaleza_y_pandemias__actualizacion_junio_de_2020.pdf. Accessed: 10 November 2021.

TRACKING Amazon Deforestation from Above. **NASA Earth Observatory**, [s.l.], 2019. Available at: https://earthobservatory.nasa.gov/images/145988/tracking-amazon-deforestation-from-above. Accessed: 4 Setember 2020.

UHART, Marcela; PÉREZ, Alberto; ROSTAL, Melinda; ROBLES, Erika; MENDOZA, Ana Patricia; NAVA, Alessandra; PAULA, Catia Dejuste de; MIRANDA, Flavia; IÑIGUEZ, Volga; ZAMBRANA, Carlos; DURIGON, Edison; FRANCO, Padu; JOLY, Damien; GOLDSTEIN, Tracey; KARESH, William; MAZET, Jonna. A 'One Health'approach to predict emerging zoonoses in the Amazon. **Saúde silvestre e humana:** experiências e perspectivas. Rio de Janeiro: FIOCRUZ, 2013. p. 65-73.

VANWAMBEKE, Sophie; LAMBIN, Erick; EICHHORN, Markus; FLASSE, Stéphane; HARBACH, Ralph; OSKAM, Linda; PRADYA, Somboon; VAN BEERS, Stella; VAN BENTHEM, Girgit; WALTON, Cathy; BUTLIN, Roger. Impact of land-use change on dengue and malaria in northern Thailand. **EcoHealth**, [s.l.], v. 4, n. 1, p. 37-51, 2007.

VOGT, William. **Road to survival**. New York: William Sloane Associates, 1948.

WHEELER, Graycen. Amazon losing far more carbon from forest degradation than deforestation: study. **Mongabay**, [California], 9 Feb. 2022. Available at: https://news.mongabay.com/2022/02/amazon-losing-far-more-carbon-from-forest-degradation-than-deforestation-study. Accessed: 12 February 2022.

WORSTER, Donald. Otra primavera silenciosa. **Historia Ambiental Latinoamericana y Caribeña**, [s.l.], 2020. Available at: https://www.halacsolcha.org/index.php/halac/issue/download/40/v.%2010%20Edici%C3%B3n%20Suplementaria%201%20%282020%29. Accessed: 15 April 2020.

ZAFFARONI, Eugenio. **La Pachamama y el humano**. Buenos Aires: Ediciones Madres de Plaza de Mayo: Ediciones Colihue, 2011.

## Funding sources

The research of which this article is a part was financed by the CAPES-DS scholarship program of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES) of Brazil.

## Authorship contributions

Ivón Natalia Cuervo: conceived the research plan; analysed the data; wrote the article.

Eunice Sueli Nodar: analysed the data; wrote the article.

Marcia Grisotti: analysed the data; wrote the article.

Javier Ignacio Vernal: analysed the data; wrote the article.

Received in: 14/03/2022
Approved in: 23/09/2022

Universidade do Estado de Santa Catarina – UDESC
Centro de Ciências Humanas e da Educação - FAED
PerCursos
Volume 23 - Número 53 - Ano 2022
revistapercursos.faed@udesc.br