

GLOBAL INFORMATION SOCIETY WATCH 2020

*Technology, the environment and
a sustainable world: Responses from
the global South*



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC)
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Global Information Society Watch 2020

Technology, the environment and a sustainable world: Responses from the global South

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Introduction

Since the colonial era, territories rich in natural resources have experienced severe forms of underdevelopment and structural exploitation. More recently, neocolonial models of extraction like mining have emerged, which serve to perpetuate and accentuate social inequalities, especially among communities excluded from power during colonialism.

Particularly negatively affected in this system are Afrodescendant communities and Indigenous and tribal populations in ancestral territories, due to policies and practices geared towards the extraction and exploitation of natural resources and the development of mega-projects without prior and informed consent.

The aim of this report is to describe, in broad strokes, the phenomenon of neocolonialism since the rise of the extractive industries in ethnic ancestral territories in Brazil, Bolivia, Colombia and Peru, with a view to understanding the potentialities for counter-hegemonic resistance.

This ancestral ethnic approach is justified to the extent that the people who are granted differential treatment have not only experienced barriers that limit their integration into society, but also historical disadvantages that perpetuate gaps in social inequality.

Context and problem statement

Although governments promoting neo-extractivism often do so by arguing that their policies promote development, human rights organisations and scholars have shown that the implementation of these strategies shares many of the same pathologies as classical extractivism, including “a disregard for social, territorial and political rights, and the continuation of Indigenous and Afrodescendant dispossession.”¹

1 Human Rights Council. (2019). *Global extractivism and racial equality: Report of the Special Rapporteur on contemporary forms of racism, racial discrimination, xenophobia and related intolerance*. A/HRC/41/54. https://www.ohchr.org/Documents/Issues/Racism/SR/A_HRC_41_54.pdf

It should be noted that, before the first Europeans reached the Americas, the history of the Indigenous peoples of the Amazon was different, but with the onset of European colonisation of the region in the 15th century, that panorama changed.² In recent years, many have pointed to the emergence of “environmental racism”.³ While this practice may seem like a new phenomenon, in principle, however, it is historically familiar. Colonialism and neocolonialism were among the earliest forms of global economic expansion,⁴ and current forms of globalisation share many similarities with these earlier modalities.

Environmental racism, broadly defined, is racial discrimination in environmental policy making and enforcement of regulations and laws. According to a study by Chavis,⁵ this may involve, for example, the deliberate targeting of ethnic groups for toxic waste facilities, the official sanctioning of the presence of life-threatening poisons and pollutants in Indigenous and tribal communities, as well as Afrodescendant communities, and the history of excluding people of African descent from the leadership of the environmental movement.⁶

The analysis of the most recent data shows that production processes, especially those linked to the exploitation of non-renewable natural resources (hydrocarbons, mining and energy), are carried out through highly specialised companies with “political logics that reproduce inequality and regularly result in violations of human rights on a discriminatory basis.”⁷

2 Inter-American Commission on Human Rights. (2019). *Situation of Human Rights of the Indigenous and Tribal Peoples of the Pan-Amazon Region*. OEA/Ser.L/V/II. <https://www.oas.org/en/iachr/reports/pdfs/Panamazonia2019-en.pdf>

3 Cutter, S. L. (1995). Race, class and environmental justice. *Progress in Human Geography*, 19(1), 111-122. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.461.6826&rep=rep1&type=pdf>

4 de Toro, A. (1999). La postcolonialidad en Latinoamérica en la era de la globalización. ¿Cambio de paradigma en el pensamiento teórico-cultural latinoamericano? In A. de Toro & F. de Toro (Eds.), *El debate de la postcolonialidad en Latinoamérica. Una postmodernidad periférica o cambio de paradigma en el pensamiento latinoamericano*. Vervuert.

5 Quoted in Cutter, S. L. (1995). Op. cit.

6 Bullard, R. D., & Johnson, G. S. (2000). Environmental Justice: Grassroots Activism and Its Impact on Public Policy Decision Making. *Journal of Social Issues*, 56(3), 555-578. <https://doi.org/10.1111/0022-4537.00184>

7 Human Rights Council. (2019). Op. cit.

Negative impact on ancestral ethnic territories of Brazil, Bolivia, Colombia and Peru

While the economic and political elites – particularly in the industrial nations – enjoy the positive results of globalisation, the negative results are experienced by the majority of the population, particularly in developing countries. Globalisation means, in this context, “faceless neoliberalism” that can be interpreted as a revival of neocolonialism, which especially affects the least developed countries,⁸ perpetuates inequality in traditionally excluded groups, and exploits their natural resources.

It is important to remember that the hierarchical class and racial structure of the colonial era determined that people of African descent were located in a subordinate place, resulting in, along with Indigenous peoples, higher levels of material poverty and social and political exclusion. Although this problem has been shaped by particular historical processes in each country, the Inter-American Commission on Human Rights (IACHR) has identified some common patterns, such as:

- Mining, legal or illegal, that deforests, accumulates residues at the surface, consumes and contaminates river waters and groundwater, and changes the patterns of settlement.
- Infrastructure projects, in the form of waterway transport corridors or highways, presented as a mega program, the Initiative for the Integration of Regional Infrastructure in South America (IIRSA), with enormous impacts on Amazonian lands and waters.
- Hydroelectric plants, whose construction totally redefines the peoples’ ancestral territories.
- Energy and hydrocarbon projects, whose impacts are similar to those of mining projects.⁹

As can be seen from this report, although the extraction and exploitation of natural resources has a long history that accompanies the history of the Americas, official sources in Latin America and the Caribbean¹⁰ corroborate that neocolonialism is a

key feature of the 21st century, and has involved a “reprimarisation” of economies:

With respect to extractivist expansion, in Latin America, for example, gas production tripled in the Plurinational State of Bolivia between 2000 and 2008, and petroleum production in Bolivia, [...] Brazil [...] and Venezuela [...] rose between 50 and 100 per cent from 1990 to 2008. In Colombia, the leading exporter of gold, the area mined grew from 1.1 million hectares in 2002 to 5.7 million hectares in 2015. In Peru, the area of land mined grew from 2.5 million hectares in 1991 to 27 million hectares in 2013. Scholars have characterized Latin American countries as having undergone “reprimarization” of their economies.¹¹

In the field of hydrocarbons, in countries like Bolivia, there is a significant state presence, which includes the active participation of state companies in resource exploitation. In other countries like Brazil, Colombia and Peru, extraction and exploitation occur under private or mixed investment, and at times through agreements with foreign or transnational corporations.¹²

The Amazon basin – a part of South America shared by Bolivia, Brazil, Colombia, Ecuador, French and British Guyana, Peru, Suriname and Venezuela – is an area that stands out for its immense cultural and biological diversity, given its role as a biome that stabilises the Earth’s climate and a reserve of flora, fauna and genetic diversity.¹³ However, Amazonian regions have been severely affected by the extractive industries.

The case of Brazil is of particular importance for this study. Ethnic dimensions are essential because its Afrodescendant population is the highest in the entire region (55.8%), according to data from the Brazilian Institute of Geography and Statistics (IBGE). With an approximate population of 209,469,333 million people, it is one of the most populous countries in the world. Many of these Afro-Brazilians live in *quilombos* – communities comprising descendants of enslaved African people who managed to escape and establish settlements – which since emancipation have struggled to secure property rights to collective land, protected in article 68 of the Brazilian constitution.

Deforestation in the Brazilian Amazon as of July 2019 was 278% higher than during the same

8 de Toro, A. D. (1999). Op. cit.

9 Inter-American Commission on Human Rights. (2019). Op.cit.

10 Puyana Mutis, A. (2017). El retorno al extractivismo en América Latina. ¿Ruptura o profundización del modelo de economía liberal por qué ahora? *Espiral*, 24(69), 73-113. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S1665-05652017000200073; Damonte Valencia, G. (2016, 16 June). Pueblos indígenas, conflicto e industrias extractivas: alcances latinoamericanos. *Pólemos*. <https://polemos.pe/pueblos-indigenas-conflicto-e-industrias-extractivas-alcances-latinoamericanos>; Villarreal, M., & Echart Muñoz, E. (2020, 6 February). Extractivism and resistance in Latin America and the Caribbean. *openDemocracy*. <https://www.opendemocracy.net/en/democraciaabierta/luchas-resistencia-y-alternativas-al-extractivismo-en-am%C3%A9rica-latina-y-caribe-en>

11 Human Rights Council. (2019). Op. cit.

12 Ibid.

13 Inter-American Commission on Human Rights. (2019). Op. cit.

period of 2018. These are official numbers from the National Institute of Space Research (INPE). Between 15 August and 20 August 2019, fires were reported in 131 Indigenous lands in Brazil. The information collected suggested that 15 fires were counted in lands where there are records of Indigenous peoples living in isolation, in the states of Mato Grosso, Pará, Tocantins and Rondônia.¹⁴

Agribusiness is another important factor. According to the information available, forced displacements in the Brazilian Amazon region, including those associated with mega hydroelectric, mining, agribusiness and transportation works projects, have been documented and discussed for decades, without any progress.¹⁵

Although some monocultures are dedicated to food production, their objective is not to solve the problem of hunger in the world, but to enrich a few companies controlling markets. To a great extent, this agro-industrial model has been imposed on Indigenous, Afrodescendant and peasant territories, causing increased instability in communities and generating displacement. The EJOLT Atlas reports 281 environmental conflicts related to the world's biomass.¹⁶

In Peru, as Ruiz Molleda explains:

There are various causes of conflicts between peasant and Indigenous communities, the state and extractive companies; however, the origin of a large part of these conflicts lies in the question of natural resources, such as minerals, hydrocarbons and forests (among others), that are under the territories of Indigenous peoples, those who are protesting today.¹⁷

It is important to note that the territories of peoples living in isolation or in initial contact in Peru are located mainly in areas of international borders, especially along the border with Brazil.

In the Amazon region of Peru specifically, the government has authorised the exploration of an oil lot (Lot 116) without first consulting the Awajún and

Wampis Indigenous peoples, although it is an activity that will have important and serious impacts on the habitat of both peoples.¹⁸

The fight against Lot 116 began in 2006, when the state, violating the right to prior consultation, awarded the lot to the oil and gas company Hocol. Against this outrage, the Awajún and Wampis peoples, through their representative organisations – ORPIAN-P, ODECOFROC, FISH, CPPAW and CIAP, among others – implemented a series of actions and advocacy and filed a lawsuit against the state, which was admitted in August 2014. The Superior Court of Lima resolved on appeal in favour of these peoples.¹⁹

Regarding Colombia, the Afrodescendant population is not the majority as in Brazil, but they do have protected reserve areas in the Pacific region, with a high level of biodiversity and cultural richness. This region, since and before colonial times, has been inhabited by Afrodescendant, Indigenous and tribal peoples who continue to develop their ancestral ways of life and rituals.

In this context, the history of the Chocó territory (part of the Colombian Pacific region) is linked to slavery on the Pacific Coast due to its wealth in precious natural resources, specifically gold, which was an indispensable resource for the monetary economies of that historical period.

According to Rodríguez and Durán, the Chocó territory is home to 50,000 Indigenous people of the Emberá, Katío, Chamí, Wounan and Tule ethnic groups, as well as around 400,000 Afro-Colombians. Today, they say:

[It] is cornered either by violence or displacement, mining concessions, illegal mining, drug trafficking, fumigation areas, pollution, illegal armed actors, the public forces, corruption, politicking, diseases of poverty, starvation, or by the bad educational and health system; or all these evils together.²⁰

Moreover, the Colombian Amazon region has also been affected for different reasons:

The Institute of Hydrology, Meteorology and Environmental Studies of Colombia – IDEAM registered 138,176 hectares deforested in

14 Land is Life. (n/d). Regional Note for the Protection of Indigenous Peoples Living in Isolation and Initial Contact in the Amazon and Chaco. *Amazon Frontlines*. <https://www.amazonfrontlines.org/chronicles/note-protection-indigenous-isolation-amazon-chaco>

15 Inter-American Commission on Human Rights. (2019). Op. cit.

16 Carvajal, L. M. (2016). *Extractivism in Latin America: Impact on Women's Lives and Proposals for the Defense of Territory*. Urgent Action Fund for Latin America. https://fondoaccionurgente.org.co/site/assets/files/1175/b81245_6cc6d3d7edd447doab461860ae1ae64f.pdf

17 Ruiz Molleda, J. C. (2015, 6 September). Conflictos entre el Estado, empresas extractivas y pueblos indígenas en Perú. *Centro Latinoamericano de Ecología Social*. <http://extractivismo.com/2015/09/conflictos-entre-el-estado-empresas-extractivas-y-pueblos-indigenas-en-peru>

18 Ibid.

19 Vega Díaz, I. (2018, 22 August). Awajún and Wampis Win Historic Battle: Ordered to Perform After Consultation Through its Territory. *Pan-Amazon Social Forum*. <https://www.forosocialpanamazonico.com/en/Awaj%C3%BA-and-Wampis-win-historic-battle-ordered-to-perform-after-consultation-through-its-territory>

20 Rodríguez, D., & Durán, J. O. (2014). SOS Chocó. *Revista de la Coordinación Regional del Pacífico Colombiano*, 8. https://coordinaciondelpacifico.org/media/attachments/2020/04/06/revista_8.pdf

the Amazon in 2018. From 2016 to 2018 the Colombian Amazon has lost 478,000 hectares of forest of which 73% (348,000 hectares) corresponds to primary forest, and, so far in 2019, alerts indicate the additional loss of 60,600 hectares, of which 75% (45,700 hectares) was primary forest. These mainly impact four protected areas: Tinigua National Park, Sierra de la Macarena, Nukak National Reserve and the Chiribiquete mountain range. [These] have been under pressure from exploitation and hydrocarbon exploration, the advance of the agricultural frontier, the development of road infrastructure and mining.²¹

Finally, in Bolivia, contradictions have also arisen between the rights of Indigenous peoples and peasant organisations – particularly the coca growers – and the state. Privileging an economicist conception of the territory, Evo Morales' government implemented oil, open pit mining and transport infrastructure projects that have provoked the resistance of various Indigenous communities throughout the country.²²

In general, these issues fall under the jurisdiction of the United Nations, as a common political authority for all of humanity. However, there is no doubt that extractive industries and environmental racism exist in Latin America depending on world hegemony as well as variables such as race and class.

Conclusion

Environmental racism is a phenomenon that affects both Indigenous and tribal populations, including peoples living in isolation or initial contact, as well as Afrodescendants in Latin America and the Caribbean. It combines different practices including not only the destruction of the environment, but also affects the survival of ethnic groups when it prevents them, for example, from accessing essential natural resources or when those are destroyed.

Ethnic groups, as observed, are the ones that suffer most from global, regional and local extractive policies. However, norms and laws are development-oriented as a process that promotes extractive policies in protected reserve areas and, in many cases, without respect for free, prior and informed consultation as a human right of

Indigenous, Afrodescendant and tribal populations in their territories.

Although human activity is intense and goes beyond the use of the planet's resources, technological advances must make it possible to greatly reduce irreversible environmental damage.

The challenge is for science and technology to be united as factors that dialogue with the needs of these communities and do not undermine ancestral rights. Technological innovation in the exploitation and exploration processes must be a fundamental tool to mitigate the damages of environmental exploitation in order to take advantage of natural resources without slowly destroying the planet.

Deforestation, climate change and the extraction of natural resources, in general, are serious challenges and problems of a world order, which is why we all must act to protect our planet's biodiversity.

Action steps

Academics and international human rights organisations have said very insistently what the urgent measures are, but not all have been heard by the various governments in the region. The ancestral ethnic groups and environmental movements need full participation in the new projects that impact on them, especially if these do not promote their own conservation and cultural development.

Mining operations are complex. The life cycle of mining begins with exploration and ends with the closure of mines and use of the land after extraction, with which it is possible to directly affect the ecosystems and life of Indigenous and tribal peoples and their ancestral lands. In this context, the use of sustainable technologies could inspire governments in the construction of public policies, in a sustainable way. The technological revolution can at least help companies plan more thoroughly in order to avoid such unnecessary damage.

Artificial intelligence (AI) is affecting the future of every industry and every human being. The World Economic Forum (WEF) estimates that “the adoption rate for autonomous machines in mining will rise from 0.1% today to 25% by 2025.”²³ However, governments will need to ensure that AI technologies not only contribute to the protection of the environment, but also that there is a balance between employment and protection of the territory with the development of sustainable technologies.

21 Land is Life. (n/d). Op. cit.

22 Rivera Cusicanqui, S. (2015). Strategic Ethnicity, Nation, and (Neo) colonialism in Latin America. *Alternautas*, 2(2), 10-20. <https://www.alternautas.net/blog/2015/11/5/strategic-ethnicity-nation-and-neocolonialism-in-latin-america>

23 World Economic Forum. (2017). *Digital Transformation Initiative: Mining and Metals Industry*. <https://reports.weforum.org/digital-transformation/wp-content/blogs.dir/94/mp/files/pages/files/wef-dti-mining-and-metals-white-paper.pdf>

Indigenous peoples must be directly involved in the conservation of their territories according to their ancestral customs and rituals. The foregoing is, among other things, a requirement of the International Labour Organization's Indigenous and Tribal Peoples Convention (1989), also known as ILO Convention 169.²⁴

Measures must be adopted to prevent natural disasters and eliminate harmful extractive and socioeconomic activities. Actions must also be taken to halt the alarming decline in fauna and flora at all levels in order to progress towards the

protection of the economic, social, cultural and environmental rights of ancestral peoples in their territories.

Lastly, one way for increasing the participation of Indigenous groups is through using the internet. Increasingly, Indigenous peoples are turning to the internet for their activism. Governments could focus more on providing internet access to Indigenous groups through, for example, community networks, and in this way encourage their participation in the planning and implementation of projects that will impact directly on their lives.

²⁴ https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C169

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The world is facing an unprecedented climate and environmental emergency. Scientists have identified human activity as primarily responsible for the climate crisis, which together with rampant environmental pollution, and the unbridled activities of the extractive and agricultural industries, pose a direct threat to the sustainability of life on this planet.

This edition of Global Information Society Watch (GISWatch) seeks to understand the constructive role that technology can play in confronting the crises. It disrupts the normative understanding of technology being an easy panacea to the planet's environmental challenges and suggests that a nuanced and contextual use of technology is necessary for real sustainability to be achieved. A series of thematic reports frame different aspects of the relationship between digital technology and environmental sustainability from a human rights and social justice perspective, while 46 country and regional reports explore the diverse frontiers where technology meets the needs of both the environment and communities, and where technology itself becomes a challenge to a sustainable future.

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