

# GLOBAL INFORMATION SOCIETY WATCH 2020

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



ASSOCIATION FOR PROGRESSIVE COMMUNICATIONS (APC)  
AND SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY (SIDA)

## Global Information Society Watch 2020

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

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APC would like to thank the Swedish International Development Cooperation Agency (Sida) for their support for Global Information Society Watch 2020.

Published by APC

2021

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Global Information Society Watch 2020 – web and e-book

ISBN 978-92-95113-40-4

APC-202104-CIPP-R-EN-DIGITAL-330

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# UNITED STATES

## A DIGITAL TECH DEAL: DIGITAL SOCIALISM, DECOLONISATION, AND REPARATIONS FOR A SUSTAINABLE GLOBAL ECONOMY



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### Introduction: The environmental crisis and inequality

As we progress into the 21st century, the human race is driving planet Earth towards ecosystem collapse. Scientists fear that because humans are overheating the environment and overconsuming its material resources, we are generating a sixth extinction event that is extinguishing billions of animals. Without a rapid change in the way we conduct global civilisation, we will destroy much of life on Earth, including, potentially, our own species.

As scholars have long noted, capitalism, with its pursuit of profit and infinite growth, is the force driving the climate crisis.<sup>1</sup> From an eco-socialist perspective, institutional problems include global inequality, corporate power, and a growth-oriented and profit-centred model of development. During the neoliberal era (late 1970s-present), if we disaggregate China out from global economy metrics, inequality between the global North and the global South has increased, with Africa and South Asia losing the most ground.<sup>2</sup> At present, 58% of all people live on less than USD 7.40 per day, the meagre global poverty line required to achieve normal life expectancy.<sup>3</sup>

As political economist Sean Starrs has demonstrated, despite gains made by China – largely on

the backs of exploited labour – the United States remains at the pinnacle of global wealth and power. In the post-World War II period, US power globalised; its transnational corporations dominate nearly every sector of the world economy.<sup>4</sup>

The global inequality created by capitalism threatens the environment. Its insatiable appetite for profit and growth – a structural imperative – is environmentally unsustainable, not only because it will likely overheat the planet, but also because it is overconsuming material resources from the Earth. For decades, advocates of capitalism have argued that unequal growth is acceptable so long as the poor make marginal gains. Yet projections show that on the current capitalist growth model – about 2-3% annually – to achieve the extent of growth needed to eradicate global poverty, measured at a mere USD 5 per day, the global GDP would have to increase to 175 times its present size.<sup>5</sup>

The problem with capitalism, degrowth advocates observe, is that we can no longer fatten the pockets of those who are wealthy on the global scale, from the middle classes on up. Rather, we need to rapidly grow the livelihoods of the poor, redistribute and reduce the consumption of the well-off, and set the global economy into a balanced equilibrium.<sup>6</sup> This is a monumental task, as the rich and powerful – led by the US power elite – are marching ahead towards profit and growth, dragging the rest of life on Earth with them towards imminent destruction.

1 Williams, C. (2015). Marxism and the environment. *International Socialist Review*, 72. <https://isreview.org/issue/72/marxism-and-environment>; Weber, J. (1950). The Great Utopia. *Contemporary Issues: A Magazine for a Democracy of Content*, 2(5); Bookchin, M. (1962). *Our Synthetic Environment*. <https://libcom.org/files/Bookchin%20M.%20Our%20Synthetic%20Environment.pdf>; Bookchin, M. (1971/1986). *Post-Scarcity Anarchism*. Ramparts Press. <https://libcom.org/files/Bookchin-Murray-Post-Scarcity-Anarchism-1986.pdf>

2 Hickel, J. (2017). *The Divide: Global Inequality from Conquest to Free Markets*. W. W. Norton & Company; Alston, P. (2020). *The parlous state of poverty eradication: Report of the Special Rapporteur on extreme poverty and human rights*. <https://chrgj.org/wp-content/uploads/2020/07/Alston-Poverty-Report-FINAL.pdf>

3 Hickel, J. (2019, 4 February). A letter to Steven Pinker (and Bill Gates, for that matter) about global poverty. <https://www.jasonhickel.org/blog/2019/2/3/pinker-and-global-poverty>

4 Starrs, S. (2014). The Chimera of Global Convergence. *New Left Review*, 87. <https://newleftreview.org/issues/1187/articles/sean-starrs-the-chimera-of-global-convergence>; Starrs, S. (Under review). *American Power Globalized: Rethinking National Power in the Age of Globalization*. Oxford University Press.

5 Woodward, D. (2015). Incrementum ad Absurdum: Global Growth, Inequality, and Poverty Eradication in a Carbon-Constrained World. *World Economic Review*, 4, 43-62. <https://wer.worldeconomicsassociation.org/files/WEA-WER-4-Woodward.pdf>

6 Klein, N. (2014). *This Changes Everything: Capitalism vs. the Climate*. Simon & Schuster; Raworth, K. (2017). *Doughnut Economics: Seven Ways to Think Like a 21st Century Economist*. Chelsea Green Publishing; Vishwas, S. et al. (2018). *The Climate Crisis: South African and Global Democratic Eco-Socialist Alternatives*. Wits University Press; Hickel, J. (2020). *Less Is More: How Degrowth Will Save the World*. Penguin Random House. For an Indigenous climate plan that dovetails with this report's thesis, see The Red Nation. (2020). *The Red Deal: Indigenous Action to Save Our Earth*. [http://therednation.org/wp-content/uploads/2020/04/Red-Deal\\_Part-I\\_End-The-Occupation-1.pdf](http://therednation.org/wp-content/uploads/2020/04/Red-Deal_Part-I_End-The-Occupation-1.pdf)

## How digital colonialism threatens the environment

Within this cauldron of affairs, we now have Big Tech. In the US, the top five tech transnationals, GAFAM (Google/Alphabet, Apple, Facebook, Amazon and Microsoft), are collectively worth over USD 5 trillion. The Big Tech behemoths have concentrated wealth on the basis of owning the digital ecosystem – software, hardware, and network connection – the core infrastructure of the digital world.

As with the prior era of capitalist expansion, a new wave of corporations – mostly US transnationals – are colonising the global economy through the process of digital colonialism. At root, digital colonialism is about the ownership and control of the digital ecosystem for political, economic and social domination of a foreign territory.<sup>7</sup>

Under classic colonialism, Europeans seized and settled foreign land; installed infrastructure like railroads and sea ports; constructed heavy machinery and exploited labour used to extract raw materials; erected panoptic structures to police workers; marshalled the engineers needed for advanced economic exploitation; shipped the raw materials back to the mother country for the production of manufactured goods; undermined global South markets with cheap manufactured goods; perpetuated dependency of global South peoples in an unequal global division of labour; and expanded market, diplomatic and military domination for profit and plunder.

Today, the “open veins” of the global South are the “digital veins” crossing the oceans, wiring up a tech ecosystem owned and controlled by a handful of mostly US-based corporations. The transoceanic cables are often fitted with strands of fibre owned by the likes of Google and Facebook, for the purpose of data extraction and monopolisation. The cloud centres are the heavy machinery dominated by Amazon and Microsoft, proliferating like military bases for US empire, with Google, IBM and Alibaba following behind. The engineers are the corporate armies of elite programmers numbering in the hundreds of thousands, with generous salaries of USD 250,000 or more as compensation.

The exploited labourers are the people of colour producing the minerals in the Congo and Latin

America, the armies of cheap labour annotating artificial intelligence data in China and Africa, the East Asian workers enduring post-traumatic stress disorder (PTSD) to cleanse Big Social Media of graphic content, and the vast majority of people asked to specialise in non-digital goods and services in a worldwide division of labour. The centralised intermediaries and spy centres are the panopticons, and data is the raw material processed for artificial intelligence services.

The US is at the helm of advanced economic production, which it dominates through the ownership of intellectual property and core infrastructure, backed by imperial trade policies at the World Trade Organization. The missionaries are the World Economic Forum elites, the CEOs of Big Tech corporations, and the mainstream “critics” in the US who dominate the “resistance” narrative, many of whom work for or take money from corporations like Microsoft and Google, and integrate with a network of US-Eurocentric intellectuals drawn from elite Western universities. Added to this, state-corporate elites, entrepreneurs, and educational institutions in the global South are replicating the Silicon Valley model of digital capitalism.

This problem intersects with the environment, compounding challenges to developing a sustainable economy, for a number of reasons. First, digital capitalism concentrates wealth. We have already seen the technology industry create new monopolies, ultra-wealthy oligarchs, exploit and threaten to undermine labour through gig labour, and gentrify cities like San Francisco.<sup>8</sup> In most parts of the world, US-based transnational corporations dominate the broad range of products and services in the digital ecosystem.<sup>9</sup>

As digital technology spreads, if wealth further accrues to the Silicon Valley colonial metropole and elites within global South countries, then wealth inequality will further obstruct a just and sustainable resolution to the environmental crisis.

Second, the Silicon Valley model of digital society includes the use of powerful new technologies to police communities. At this moment in history, we need radical transformation of the status quo, which requires a radical redistribution of wealth and power. Yet throughout history, we have seen those with power use technology as tools to suppress social justice movements. Big Tech corporations like

7 See Kwet, M. (2019a). Digital Colonialism: U.S. Empire and the New Imperialism in the Global South (draft from 2018 free at: [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3232297](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3232297)); Kwet, M. (2019b). Digital Colonialism: South Africa's Education Transformation in the Shadow of Silicon Valley. PhD Dissertation, Rhodes University. [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3496049](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3496049). (For a brief overview of other scholarship, see p. 27.) Of course, digital colonialism includes “the empire within”, where neocolonial actors exploit the people inside their own borders.

8 Spencer, K. (2018). *A People's History of Silicon Valley: How the Tech Industry Exploits Workers, Erodes Privacy and Undermines Democracy*. Eyewear Publishing Ltd.

9 Kwet, M. (2020). *People's Tech for People's Power: A Guide to Digital Self-Defense and Empowerment*. Right2Know; Kwet, M. (2019a). Op. cit.

Microsoft, Amazon and Google are partnering with a shadow industry of corporations to provide law enforcement agencies and the US military to service police and US empire, including in countries like South Africa, Brazil and India.<sup>10</sup>

Third, the Silicon Valley business model is broken. There are two primary ways Big Tech makes money. The first is to charge users for using their technology. This requires them to offer a product you either purchase by the unit (such as proprietary software you install on your computer) or subscribe to (such as software owned and controlled by corporations running in their cloud). The second is to force-feed users ads and/or monetise surveillance.

This capitalist model poses numerous problems. If people have to pay out-of-pocket for tech services, then the world's poor majority will be excluded, because they have very little or no disposable income. Moreover, in order to compel payments or force-feed ads, the technology has to be owned and controlled by the product or service provider, giving them the power to exercise control over the users, who would otherwise resist the ads.<sup>11</sup> This problem also inheres with the enforcement of copyright, which requires draconian control over the means of computation to prevent people from copying and sharing published works without paying on the market.<sup>12</sup>

Fourth, the constant stream of advertisements pushed at users provokes consumerism at a time when we have to shift from a consumerist lifestyle to a societal orientation which values free time, leisure, creativity and spiritual fulfilment.

Fifth, an enormous amount of waste goes into efforts to manipulate people with corporate consumerist propaganda, including labour time to run, execute and develop AdTech and useless big data technologies, as well as the computer storage capacity and computer processing in the cloud dedicated to wasteful products and services. With the internet of things (IoT), we will allegedly build internet-connected technology into all of our “things”, from baby diapers to toothbrushes and toasters. IoT providers see a new market to continuously replace and “upgrade” our everyday items, instead of building them to last.

## People's Tech: Digital socialism and a Digital Tech Deal

To fix these problems, we need to build a socialist tech ecosystem that produces for need instead of exchange value, equality instead of profit and power, and sustainability instead of endless growth. In other words, we need to develop digital socialism.<sup>13</sup>

Any tech solution we introduce must be green and within the parameters of sustainable material throughput. The following solutions, therefore, must be developed within the context of green energy and material limitations – a production challenge in immediate need of study and attention.

Drawing from the free/libre and open source software (FLOSS) philosophy and movement, I have suggested that we develop and expand “People's Tech for People's Power” – a digital ecosystem based on a free software and internet decentralisation, supported by socialist legal solutions, critical education, grassroots movements, and bottom-up democracy.<sup>14</sup>

On a “People's Tech” model, a set of interlocking solutions would transform the digital ecosystem. Software would be free and open sourced under strong copyleft licences, which require the disclosure of modified source code downstream as software develops. Copyleft ensures that the software commons is not enclosed by private owners and remains available for anyone to use, study, modify and distribute, for free. Wherever possible, cloud-based services like social media networks and platforms would be decentralised, interoperable and open sourced, so that there is no centralised intermediary in control. Legal solutions, including new laws and regulatory bodies, would support this arrangement, to ensure that the people directly own and control the networks as a democratic commons. Knowledge would be freely accessible to everyone on equal terms.

Strong privacy rights would ban surveillance imposed on workers, students, teachers and members of the public, including by law enforcement agencies and city authorities for “safe” and “smart” cities. Technology systems would be developed not to collect data by their very design, or keep it to a minimum where it is absolutely necessary (i.e. privacy by design). The right to repair and product design for longevity would help reduce e-waste and ensure compatibility with degrowth objectives.

10 Kwet, M. (2020, 27 January). The Rise of Smart Camera Networks, and Why We Should Ban Them. *The Intercept*. <https://theintercept.com/2020/01/27/surveillance-cctv-smart-camera-networks>; Kwet, M. (2020, 14 July). The Microsoft Police State: Mass Surveillance, Facial Recognition, and the Azure Cloud. *The Intercept*. <https://theintercept.com/2020/07/14/microsoft-police-state-mass-surveillance-facial-recognition>; Robinson, W. (2020). *The Global Police State*. Pluto Press.

11 Kwet, M. (2020, 19 May). To fix social media, we need to introduce digital socialism. *Al Jazeera*. <https://www.aljazeera.com/indepth/opinion/fix-social-media-introduce-digital-socialism-200512163043881.html>

12 Kwet, M. (2019a). Op. cit.

13 Kwet, M. (2019a). Op. cit.; Tarnoff, B. (2019, 30 November). A Socialist Plan to Fix the Internet. *Jacobin*. <https://jacobinmag.com/2019/11/tech-companies-antitrust-monopolies-socialist>; Kwet, M. (2020, 19 May). Op. cit.

14 Kwet, M. (2020). Op. cit.

Resources for infrastructure and development would be extended to people in the global South as reparations for colonialism and slavery, including recent revenue extraction through digital colonialism. Big Tech corporations – and corporations in general – would be phased out of existence. Their property, both intellectual and physical, would be socialised for democratic self-management and collective ownership.<sup>15</sup> Production and consumption of goods and services would be coordinated locally, regionally and globally for wealth and income redistribution. Advertising and consumerism would be abolished, as would wasteful production geared towards overconsumption and behavioural manipulation.

To set this agenda in motion, it will take a committed grassroots movement that intersects with other social justice movements. There are three ideological forces standing in the way.

First, ruling class elites, especially in the US, will do everything in their power to prevent it from happening.

Second, other elites, including those at the World Economic Forum pushing the Fourth Industrial Revolution, will continue to pressure their own societies to adopt digital capitalism, for the gain of local elites, often in collaboration with US and other powerful actors.

And third, this will require challenging the US “soft left”, where the dominant “resistance” narrative has been formulated by a liberal imperialist “techlash” that claims it is critical of Big Tech, but focuses on a narrow set of problems, such as algorithmic bias, facial recognition, unionising US tech workers (without challenging private property or digital colonialism), weak “privacy” laws (like the EU’s General Data Protection Regulation and the US’s California Consumer Privacy Act), content moderation, and US-based antitrust for “competitive” markets. In this worldview, problems revolve around making Big Tech nicer – much like the Sullivan Principles during apartheid<sup>16</sup> – instead of eradicating Big Tech, corporations and capitalism, including in its digital form. This “tech ethics” circuit is dominated by US-Eurocentric researchers working for or taking money from corporations like Microsoft and Google, academ-

ics at elite Western universities, prominent NGOs, wealthy foundations, and big corporate media outlets, who together form a connected network and shared ideology.<sup>17</sup>

## Conclusion

The prospect of backlash from resistance to the US tech empire is enormous, and activists and scholars must build solidarity across the world. Pressure must be centred on the US to change its behaviour. Activists and intellectuals must develop a different, more principled path on the digital society if they are to avert ecological breakdown and global catastrophe. They cannot take their cues from the US soft left. Sustainable development requires the rapid breakdown of capitalism. This includes its dominant, authoritarian institution, the corporation; intellectual property; and the private ownership of infrastructure like software, cloud server farms, minerals and networking hardware.

Allies will emerge – including some in the West – if a clear and principled message of resistance is articulated by a grassroots movement working from below. Policies and activism cannot be developed in isolation – intellectuals, activists, unions and policy makers in government must come to the table and form eco-socialist legal solutions in tandem with others across the world.

People on the ground have nothing to lose but their chains. Google, Apple, Facebook, Amazon and Microsoft, as well as the other Big Tech corporations – including Chinese giants like Huawei and Alibaba – are colonising the digital landscape. Global South corporations and entrepreneurs are following suit. The challenges are difficult, but must be overcome.

There is a rich history of resistance to digital colonialism for activists to draw upon. During South African apartheid, the world’s people called for boycotts, divestment and sanctions (BDS) against corporations like IBM and Hewlett Packard, which aided and abetted the apartheid government and businesses. US corporations, in response, pushed a reformist agenda called the Sullivan Principles said to improve worker conditions. Anti-apartheid activists rejected the Sullivan Principles as corporate propaganda designed to manufacture consent while US corporations continued to profit from apartheid misery.

The movement against digital colonialism needs to be resurrected to meet the current environment. This time, the US fully occupies the centre, through its endless pursuit of racialised economic and

15 Kwet, M. (2019a). Op. cit.; Schneider, N. (2020). *Tech New Deal: Policies for Community-Owned Platforms*. [https://osf.io/t7z2m/?view\\_only=c8ed9a48a9c04c509c890894d169b206](https://osf.io/t7z2m/?view_only=c8ed9a48a9c04c509c890894d169b206) (on financing cooperatively owned platforms).

16 Schmidt, E. (1980). *Decoding Corporate Camouflage: U.S. Business Support for Apartheid*. The Institute for Policy Studies. <https://kora.matrix.msu.edu/files/50/304/32-130-24F-84-Decoding%20Corporate%20Camouflage%20resized%20opt.pdf>

17 For a short, preliminary overview of this “techlash” circuit, see Kwet, M. (2019b). Op. cit.

political domination, which is driving the environment to the brink of collapse.

### Action steps

The following action steps should be taken to decolonise tech for environmental sustainability:

- *Implement People's Tech:* Develop and replace Big Tech products and services with free software and decentralisation technologies.
  - *Create socialist legal solutions:* Push for laws and regulations to socialise the digital ecosystem as a socialist commons based on direct democracy. Demand wealth redistribution and reparations.
  - *Unite for anti-colonial resistance:* Globally unite to resist digital colonialism. Consider boycott, divestment and sanctions targeting Big Tech, especially Silicon Valley. Tools available include
- direct action like boycotts against Big Tech and establishing a People's Tribunal to determine reparations and concrete blueprints for decolonisation.
  - *Union power:* Unions should put People's Tech on the workplace agenda and develop critical consciousness. Non-technology workplaces should pressure to abolish Big Tech and help develop a programme for a just transition to digital socialism.
  - *Educate:* Replace Big Tech products and services with People's Tech in schools and universities. Debate, learn, and develop critical consciousness about tech and society.
  - *Green tech:* Study how to ensure tech is green and environmentally sustainable. Produce and distribute technology within the bounds of ecological sustainability.

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

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.

GLOBAL INFORMATION SOCIETY WATCH

2020 Report

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