

## Intersection of Racism and Environmental Exposure

### **Introduction**

Environmental racism has been a systemic injustice that has been rooted in society for many generations due to discriminatory policies, economic inequality, and neglect by political authorities. Environmental racism is manifested in scenarios where marginalized communities, particularly Black, Indigenous, and low-income populations are put at higher risk of pollution and environmental hazards. Existing literature offers several definitions of the term “environmental racism” that dates to the 20<sup>th</sup> century. For example, Pulido (1996) defines environmental racism as a broad set of concerns regarding the interconnected relationship between marginalized groups and environmental issues. Moreover, Johansen (2020) argues that environmental racism and the pursuit of justice against it intertwine ecological problems with issues of race and class, involving poor, often racial minority communities whose residents are subjected to disproportionate levels of ecological disturbance (such as water and air pollution, as well as unsustainable use of natural resources). The effects of environmental racism include health complications, socioeconomic consequences, and environmental degradation, to mention a few.

Although environmental racism is considered an aspect of environmental justice and therefore may be used interchangeably, there is a fundamental difference between the two concepts as they are not synonymous. Environmental racism refers to a form of environmental

injustice in which marginalized communities disproportionately bear environmental harms. According to Holifield (2001), the goal of environmental justice as defined by an order from President Clinton (1994) is to ensure that all people, irrespective of race, income or nationality are protected from disproportionate environmental impacts. In this paper, I use the two terms interchangeably while acknowledging that environmental racism is a subset of environmental injustice.

Environmental justice is an important concept for understanding the disproportionate environmental responsibilities imposed on vulnerable societies. Beyond environmental conservation, it emphasizes equitable treatment, equal access to resources, and equal rights to a healthy environment. However, the ongoing reality of environmental racism shows that many racialized communities, notably Indigenous peoples, continue to face relatively high levels of pollution, resource exploitation, and land dispossession and according to the Senate of Canada (2007), First Nation communities have been victims of this injustice due to the remoteness of their lands, lack of clear responsibility, and jurisdictional challenges. Environmental racism is a significant issue because it exacerbates the existing racial and economic disparities in society by exposing underprivileged groups to all sorts of risks, including health problems, economic disadvantages, and displacement. Moreover, it restricts economic opportunities for affected people, while industries and governments that ignore their obligations remain the beneficiaries. This inequity undermines social cohesion, increases systematic inequality and reduces public trust in institutions.

There are established patterns in how Indigenous communities have historically endured environmental racism such as forced displacement due to industrial development, pollution exposure, and exclusion from decision-making. As Johansen (2020) points out, environmental racism relates human and civil rights to urgent ecological challenges, underlining the inextricable link between environmental protection and justice. Indigenous resistance movements, such as opposition to pipeline expansions and mining projects, highlight the urgent need for legislative frameworks that acknowledge Indigenous sovereignty and environmental stewardship.

In this paper, I investigate the historical context of environmental racism in Canada, highlight Indigenous resistance actions, draw parallels with affected Indigenous people in other parts of the world, and propose a legislative framework to secure environmental justice. This study is extremely significant for me since I am an Environment and Sustainability student as well as an anti-racism advocate. As someone who has lived through racial and environmental injustices, my goal in this paper is to shed light on environmental racism while contributing to policy reforms. By highlighting the consequences of structural injustices and Indigenous-led solutions, this paper stimulates more discussion about the need for policymakers to formulate equitable environmental policies in Canada.

### **Historical Context**

This section investigates the historical roots of environmental racism in Canada against Indigenous people. Environmental injustice and environmental racism dates back to the era of colonization and is still prevalent now. According to a report from the Auditor General of Canada (Auditor General, 2011, Section 4.24), Indigenous communities have not benefitted from

protection of drinking water unlike the population that does not live on reserves due to the lack of adoption of provincial regulations and legislation on their lands. This disparity exists due to the Federal government, formerly known as the Crown, having assumed responsibility of water on Indigenous lands, dating back to 1763 (White et. Al, 2012). A larger history of colonial governance, in which choices about Indigenous lands and resources were made without the permission of Indigenous peoples, is reflected in this absence of regulatory protection. The Crown's 1763 takeover of water authority paved the way for federal accountability without much action, resulting in persistent deficiencies in environmental protections and infrastructure. Because of this, many Indigenous communities still have to deal with contaminated drinking water, damaged ecosystems, and structural obstacles that keep them from having complete control over their lands and resources. These persistent issues show how environmental racism in Canada has been shaped and perpetuated by colonial policy.

We can acquire a better grasp of how systemic environmental injustices have disproportionately harmed marginalized communities throughout time by examining early examples of environmental racism, government policies towards reform, and community opposition. It is also important to highlight the interaction of colonialism and other determinants of health, particularly of Indigenous peoples (Venkataraman et. Al, 2022). Canada's history has featured broken treaty pledges, discriminatory acts, and policies aiming at assimilation, and the acquisition of land and resources that exclude Indigenous peoples (Venkataraman et. Al, 2022).

In terms of environmental racism, colonialism has resulted in institutional racism that continues to impact environmental policies and practices today. This can be highlighted in procedures, education and involvement of Indigenous groups in policy. According to

Venkataraman et. Al (2022), it is imperative to understand how Canada's history of colonization is a critical foundation towards the environmental racism faced by Indigenous communities and how it plays through today's society. This can better help guide how projects are evaluated with respect to this historical context.

Remoteness has been a major issue with respect to jurisdictional equity. According to the Senate of Canada (2007), the remoteness of some First Nation communities has led to a lack of clear responsibilities for the health of these communities. Closer to home in Black Tickle, Labrador, Maura Hanrahan conducted a study in 2003 about the remote fly-in Metis community that can only be accessed via air with respect to their water supply. This community comprised of 286 individuals with restricted access to water that is only available through community wells and running brooks in the summer and winter respectively (NAHO, 2002). The community also had 366 shallow ponds that were vulnerable to contamination from animal waste (Hanrahan, 2003). Moreover, the community lacked resources for sewage treatment and testing drinking water for impurities (NAHO, 2002). Furthermore, other studies show that the residents in Black Tickle use far less water than other Canadians with a daily average of 112 litres which is slightly over a third of the Canadian average of 326 litres (Hanrahan, 2003). Before Newfoundland joined the Canadian confederation, its dominion status in 1948 didn't contain any information about the islands or Labrador's Indigenous groups, which means their recognition and rights have been little to none constitutionally (Hanrahan, 2003). Unfortunately, homes in Black Tickle do not represent an isolated case of water challenges. Indeed, this is the reality in many other Indigenous communities in Canada.

Another major concern for Indigenous communities is poor air quality. In Sarina, Ontario, the Aamjiwanaang First Nations group have about 850 band members living on the Aamjiwanaang Reserve. The reserve is surrounded by a large concentration of manufacturing plants - large petrochemical, polymer and chemical plants (Keith et al., 2005). According to Canada's National Pollutant Release Inventory (NPRI) report in 2005, 5.7 million kilograms of air pollutants had been released in the environment. Such pollutants are linked to developmental and reproductive disorders and cancer (MacDonald & Rang, 2007).

Moreover, water pollution in the St. Clair River (the main water source for the Aamjiwanaang First Nations) has been an environmental hazard. "Between 1974 and 1986, a total of 32 major spills and 300 minor spills have contributed to approximately 10 tons of pollutants in the St. Clair River" (Mascarenhas, 2007, p.567). Since then, there have been multiple other issues with agricultural runoff and multiple hazardous spills.

These issues have resulted in multiple health implications for members of the Aamjiwanaang First Nations group. A 2006 survey that was undertaken by the Aamjiwanaang Environment Committee highlighted the health impacts of air pollution. Almost half of the band members used an inhaler and there are high numbers of asthma recorded in both children and adults (MacDonald & Rang, 2007). The community has also experienced disruptions to traditional fishing, medicine, and gathering and hunting (MacDonald & Rang, 2007). This shows how discriminatory policies, and the lack of enforcement of environmental regulations have been a hinderance to this community on their ancestral land.

A similar case of water pollution is that of the Kashechewan reserve in Northern Ontario. In late 2005, about 1,000 residents of the Kashechewan reserve were forced to evacuate by the Minister of Aboriginal Affairs due to positive E. coli bacteria that was discovered in their drinking water (Kashechewan, 2006). Prior to this, the community was under a boil advisory for about 2 years and almost 2,000 people suffered from chronic illnesses such as skin infections (Senate of Canada, 2007). The foundational cause of this issue was the placement of the water treatment plant downstream from a sewer lagoon (Senate of Canada, 2007), insufficient training to increase staff and a lack of ongoing maintenance. The solution deemed viable was to introduce chlorine as an agent in the water to kill the bacteria. However, the amount of chlorine used was far beyond what is healthy, intensifying the ongoing ailments experienced by the people (Kashechewan, 2006). Although simple changes could have been made to avoid the widespread health crisis, an entire community was displaced at a significant cost and with additional detrimental social effects mainly due to environmental injustice (Senate of Canada, 2007).

The above historical examples highlight the effects of environmental injustice on Indigenous communities and partly explain why such injustices persist in Canada today. The Canadian Environmental Protection Act (CEPA), adopted in 1999, was aimed at protecting the environment, human life, and health from the risks associated with toxic substances and to contribute to sustainable development through pollution prevention (CEPA, 1999). However, the foregoing evidence suggests that Indigenous communities have been at the short end of the deal as the CEPA has not necessarily resulted in an improvement in environmental outcomes, particularly in remote indigenous communities. To promote equity and fair treatment of

Indigenous people, legislation should clearly consider equality of protection. Without such explicit provision together with a strong commitment, these injustices may persist into the future.

Despite increased awareness of these injustices, environmental racism is still profoundly embedded in Canadian society. The absence of strict environmental legislation, corporate impunity, and government inertia prolong cycles of harm to Indigenous populations. Without institutional reforms, Indigenous communities will continue to bear the brunt of environmental deterioration, as industries and authorities prioritize economic interests over environmental and human rights concerns. However, there have been examples where stewardship has brought about significant change. The Inuit of the Arctic, for example, confront not just the effects of climate change but also the intrusion of contaminants into their food supply. As Johansen (2020) puts it, environmental discrimination involves a broad spectrum of damage to human health inflicted by corporate emissions, resulting in air and water pollution that limits many minority people's access to clean resources. Similarly, for decades, the Tsilhqot'in Nation in British Columbia has fought against extractive industries that harm their sacred waters and grounds. Legal victories, such as the rejection of the New Prosperity Mine, demonstrate the power of Indigenous-led campaigns to oppose environmental injustice and demand accountability.

### **Indigenous Resistance**

In this section, I highlight some examples of Indigenous resistance to environmental racism in Canada. The examples reveal the imminent need for changes in policies governing the use of Indigenous lands so as to reduce the disproportionate negative impacts caused by the government, big corporations, and individual investors. The examples seek to highlight the

enormous sense of stewardship displayed by Indigenous people in confronting environmental injustices.

The first case of Indigenous resistance to environmental injustice relevant for this paper is the issue of toxification due to biomagnification of persistent organic pollutants in Inuit communities in the Arctic region (Koutouki, 2017). Inuit mothers rallied against the toxification of their land and fought for the preservation of their culture for future generations (Johansen, 2020). This initiative reached a global audience and was a pivotal framework for international agreements such as the Stockholm convention which is used to protect Indigenous groups from persistent organic pollutants that affect their food sources and overall health (Koutouki, 2017). Their efforts highlight a global acknowledgement that the hazardous chemicals were not only an environmental concern, but also a direct cause of fatalities, erosion of culture and a detriment to the survival of Arctic communities.

Another example is a case study is documented in British Columbia by the Tsilhqot'in Nation's decades-long opposition to Taseko Mining Company's New Prosperity project (Johansen, 2020). To the community, the mine was an imminent attack on their sovereignty, land, and culture and not a new economic opportunity, as their traditions heavily relies on wild trout fisheries. Chief Marilyn Baptiste of the Xenigwet'in, a community within the Tsilhqot'in National Government, made it clear that there was no room for negotiation when it came to protecting their sacred waters as they concluded that their land would not be for sale (Ball, 2012). The governance structure between legal action and Indigenous resistance forced the federal government to relentlessly reject the project despite Taseko's attempts to portray the project as environmentally friendly. The Ministry of the Environment finally concluded that the

mine would produce "significant adverse environmental effects that cannot be mitigated" (Lazenby, 2014).

This victory, like the Inuit's success in advocating for the prohibition of persistent organic pollutants, highlights the power of Indigenous-led resistance to environmental injustice. The Tsilhqot'in did more than just protest; they strategically employed legal channels, built coalitions with environmentalists, and rallied national support to ensure that their views were heard. Their battle sheds light on the fact that, when indigenous rights are properly upheld, environmental racism can be significantly limited, particularly when profit-seeking corporations attempt to put their profit motive above the wellbeing of marginalized communities. The closure of the New Prosperity Mine was about more than just averting an environmental disaster; it was also about reaffirming Indigenous sovereignty and highlighting that traditional lands cannot be treated as disposable goods for economic gain. However, as history has demonstrated, victories like these are frequently temporary. Indigenous communities across Canada are constantly threatened with displacement, contamination, and cultural deterioration because of corporate interests and government inaction.

Furthermore, Indigenous victories in environmental justice cases established legal precedents that spanned well beyond Canada. The Tsilhqot'in Nation's success in resisting the New Prosperity project has reinforced Indigenous land rights and set a great example for other Indigenous settlements/communities facing similar issues around the world. Other jurisdictions can learn from this example by recognizing that, Indigenous sovereignty in environmental governance calls for deeper integration of Indigenous knowledge systems into decision-making processes, and challenging traditional state-centric methods. As more Indigenous groups exercise

their rights through legal action and direct protest, a change toward more equitable environmental policy becomes more likely. Their efforts highlight the importance of reframing development to promote environmental sustainability and cultural preservation over corporate interests.

### **Environmental Racism in other Countries**

Environmental racism has not only been an issue faced by Indigenous peoples in Canada but a global phenomenon that has been brought about by colonialist structures targeting marginalized communities. In recent years, toxic waste dumping from affluent western countries into less developed nations has become a highly debated issue due to the absence of enforceable transboundary regulations. Governments have been unable to monitor and track the amount of imported waste into their countries and the Gulf of Guinea has been very disadvantaged. Historically, the European Commission has made attempts to set legislation that support the protection of health of both the people and the environment (Pratt 2011: Simonsson 1994, 3). Tight measures were necessary for dangerous waste to be disposed of, which made it very costly within the controlled regions which consisted of countries in the Gulf of Guinea at an estimated USD 2,500 per tonne. This led to the search for countries to dispose their waste in countries that were outside the control region, where institutional structures such as corruption control were weak (Brooke, 1998). Countries situated in the Gulf of Guinea (list some of the countries in parenthesis here) were willing to accept the waste at USD3 per tonne. However, there was not enough infrastructure to safely dispose the waste, even though they did not know the contents of the waste (Udeze 2009, 269). For example, in Nigeria in 1998, Koko Delta State received 4,000

tonnes of waste that was deemed as non-explosive chemicals by an Italian importer that was paying USD100 a month to Sunday Nana to store this waste at his property (Okafor-Yarwood & Adewumi, 2020). Moreover, in Equatorial-Guinea in 1988, 10 million drums of toxic waste were dumped in the island of Annobon by the British Government in conjunction with Axim Consortium Group, a US based firm (Brooke 1988).

In Western Nations, there are a few distinct case studies pertaining to residential conditions of black communities. Specifically, there is frequently observed concentration of exposure to environmental pollutants whilst isolating them from adequate healthcare (Dimick et al. 2013). In Dickinson, Tennessee, the Holt Family participated in a study on how exposure can harm individuals, and this case has been viewed as clear case of environmental racism, confirming that the government chose to neglect poor black residents with respect to pollution and water supply (Huang, 2011). Government records show that as early as 1968, several local industries buried their waste at a landfill in Dickinson County, which was primarily a Black settlement. This landfill included waste material that had been cleaned up from other landfills in predominantly White counties (Johnson et al. 2008). The family in question were black farmers and they lived near the landfill (Bullard et al. 2008). This increased their risk to the harmful chemicals through their water supply whilst white families were warned about the contaminants and urged to use alternative municipal water sources. Despite the Holt family's transition by the government in the early 2000s, the health damages to multiple generations had already occurred and were irreversible (Johnson et al. 2008).

Another prime example in the United States is in *Buchanan v. Warley* case in Birmingham, Alabama, where the city has an ordinance to enforce segregation in housing. The

Supreme Court overturned the ordinance as not only was it a violation of the Fourteenth Amendment's protection of property rights but it would also lead to social unrest (Henderson & Wells, 2021). The situation in Birmingham reflects the pattern of legislation that has reinforced environmental racism in black communities and the push of industrial pollutants (from the burning of coal to manufacture coke – a material used in the of metals and steel) to black neighborhoods, (Allen et al. 2019). This led to air pollution in black communities subsequently resulting in health hazards such as respiratory illness and a reduction in life expectancy. These American examples offer a prime insight as to how environmental racism encroaches itself in communities due to race and systemic injustices.

Systemic and institutional disparities are profoundly ingrained in environmental policy, as demonstrated by the continuation of environmental racism in both the Global North and South. Race still plays a significant role in determining whose environment and health are preserved and whose are sacrificed, as evinced by the examples presented above. These incidents highlight a concerning trend of post colonial frameworks that encourage marginalization of underprivileged communities and corporate exploitation. To address environmental racism and guarantee fair environmental protection for all, comprehensive changes to institutional frameworks is nonnegotiable.

### **Policy Recommendations for Canadian Legislation**

Addressing environmental racism in Canada requires systemic and targeted policy changes that prioritize Indigenous rights, expertise, and leadership. Indigenous people have not only fought against environmental degradation but have also spearheaded many of the country's

most significant environmental justice wins. Policy improvements must therefore consider their roles as critical stakeholders and environmental stewards, while also addressing the root causes of environmental racism, namely colonialism, poor regulatory enforcement, and the lack of a voice in environmental decision-making.

Legislating the right to clean air, water, and land as a constitutional right for all Indigenous communities is an important step toward eliminating environmental racism. While Canada acknowledges general environmental rights, they are not always enforced or treated consistently across jurisdictions. Indigenous populations frequently face long-term drinking water advisories and disproportionate exposure to contaminants. Incorporating environmental rights into the Constitution or as part of a national environmental bill of rights would provide legal justification for contesting inequitable conditions. The Tsilhqot'in Nation's success in halting the project by New Prosperity Mine emphasized how Indigenous Stewardship can use legal measures to safeguard their land, setting a good example of how clear and defined legal procedures can be used to benefit a community.

Co-governance is also a critical reform and although it has been implemented before in Canada, as seen in Yukon with the Yukon water board that is responsible for water use and waste deposit licenses, there are not enough resources to ensure enforcement and compliance of environmental regulations (Wilson, 2020). These boards should have the capacity to conduct efficient monitoring as the current frameworks don't hold violators accountable and focus on more

restorative practices like education and encouragement to correct behavior rather than strict sanctions as expressed by the Tr'ondëk Hwëchin First Nation group in Yukon (Wilson, 2020). Current frameworks, such as the consultation duties under Section 35 of the Constitution Act that is aimed at legally protecting the rights of Indigenous people based on traditions frequently fall short of ensuring meaningful Indigenous participation as it is assumed that section 35 has increased the legal stature of Indigenous rights in Canada. Co-governance should guarantee that Traditional Ecological Knowledge (TEK), Indigenous laws, and environmental goals are not only considered but hold value when it comes to decision making. Throughout time, Indigenous communities have established accurate methods of evaluating biodiversity changes and sustaining natural resources based on TEK. Formally integrating this perspective in conjunction with western systems would ensure that a duality lens is employed in environmental governance. These initiatives show how Indigenous-based land management can increase community resilience and maintain biodiversity. The Inuit's involvement in global policy through the Stockholm Convention which is aimed at protecting human health and the environment from Persistent Organic Pollutants (POPs) conveys that community voices can have an impact on the top levels of government (Lallas, 2001). This is seen in the case study of the Inuit mothers who managed to rally against the toxification of their lands preserving them for future generations. A national monitoring paradigm led by such leaders would value long-term sustainability over predatory short-termism.

Furthermore, Impact Assessments (IAs) must be strengthened with a special focus on long-term impacts of policy decisions affecting marginalized communities. The current framework only consider economic gains in isolation whilst disregarding the potential harm to

indigenous communities. In the case study of the Aamjiwnaang First Nation, decades of industrial contamination had plagued the community because the implications of the manufacturing processes of the industrial production plants on health and the environment were not adequately considered. Incorporating cumulative IAs would help policymakers understand and mitigate the mounting harms faced by Indigenous communities. These assessments should be created in partnership with Indigenous knowledge holders and local health authorities to consider both ecological and social aspects of harm. In tandem with improving regulations, Indigenous land systems should help guide policy with respect to environmental management. It is imperative that policy changes get addressed for inclusivity towards environmental justice for Indigenous and marginalized communities drawing from local and global perspectives.

## **Conclusion**

Inadequate environmental regulations, systematic neglect, and the disproportionate exposure of Indigenous people to pollution and resource exploitation are all examples of environmental racism, which has its roots in Canada's colonial past and continues to sustain inequality. The historical background examined in this paper shows that environmental injustice is a purposeful result of policies and actions that disenfranchised Indigenous peoples and weakened their sovereignty, rather than solely a consequence of industrial expansion. Case studies, like those of the Kashechewan and Aamjiwnaang populations, show how persistent environmental health crises have been caused by jurisdictional issues, lax regulatory frameworks, and systemic injustices. Nonetheless, the accomplishments of Indigenous resistance movements, such as the Tsilhqot'in Nation's opposition to the New Prosperity Mine and Inuit

support in the Stockholm Convention, show that when Indigenous leadership and stewardship are prioritized, significant change may be achieved. Systemic change, legislative accountability, and a steadfast dedication to justice and reconciliation are all necessary to combat environmental racism in Canada.

Behind every case study, there are communities whose health and livelihood have been sidelined to cater for profit and convenience. The concept of environmental racism is not just about hazardous waste, but it encompasses lives that are deemed expendable and silenced voices. It is evident that these injustices span across continents, revealing a global trend of racialized environmental harm. To break the cycle, a call to action should be made and governments need to be holistically involved in enforcing waste regulation and equitable infrastructure for environmental protection. Intersections of race, class and geography should be acknowledged in legislation as environmental justice is at the epicenter of human rights and sustainability.

Indigenous opposition to environmental degradation is expected to have a crucial role in shaping Canada's future climate and conservation strategies. As people become more aware of climate change and biodiversity loss, Indigenous-led groups are gaining ground in national and international sustainability discussions. Indigenous cultures' land stewardship beliefs provide an important framework for addressing contemporary environmental issues. Indigenous groups continue to combat environmental racism by advocating for legal recognition, legislative reforms, and direct action to conserve their lands, waterways, and cultures for future generations. These ongoing disputes show that the fight for environmental justice is about more than just the present; it is also about ensuring a sustainable and just future for all.

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