



# Global governance and climate stress of incarcerated women: the case of the U.S

Daniela Jauk-Ajamie 

Departments of Criminal Justice Studies and Sociology, University of Akron, Akron, Ohio, USA

## ABSTRACT

This paper takes the United States as a case study on the gendered implications of hyper-incarceration in the age of climate emergency. Prisons here are often located on toxic sites and constitute sources of contamination; climate change and global warming exacerbate these conditions. Incarcerated women and their communities are particularly affected. The female incarceration rate has skyrocketed, and women come to the carceral complex with unique histories of abuse, and higher rates of physical and mental illness. Researchers and policymakers need to address, analyse, and include incarcerated women's experiences of climate stress in global policy mechanisms such as the UN Commission on the Status of Women (CSW) and the United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders ("Bangkok Rules"). Abolition feminism and the voices of incarcerated women should meaningfully help connect the dots in the larger framework of the Sustainable Development Goals (SDGs).

## ARTICLE HISTORY

Received 23 May 2022  
Accepted 4 November 2022

## KEYWORDS

Incarcerated women;  
environmental injustice;  
United States; climate  
change; global governance

## Introduction

I stood in the afternoon sun with three young women<sup>1</sup> in the backyard of a residential community correctional facility in a mid-sized city in the North American Midwest on a sunny summer day in 2020. We chatted while putting on garden gloves. It was the first time since the onset of COVID-19 that I had the opportunity to return and work on the 400 square-foot vegetable garden I helped plant a year earlier as a clinical sociological intervention (Jauk-Ajamie & Blackwood, 2022). I noted in my fieldnotes from that day:

A young Black woman said, "The water is brown and yellow." Women said they have to take their medications with brown water. They also said they have been eating bologna sandwiches ninety days in a row every night and that the food is garbage. They call it "mystery meat" because they do not know what it is, "maybe not even meat." One Black woman said she doesn't know what they serve. That day it was "either Meat Loaf or Sloppy Joe," which is a weird spectrum to describe two dishes that diametrically differ in colour and texture. (Fieldnotes, 1 August 2020)

While one might think this is an exception in a correctional facility in pandemic disaster mode, toxic water and dehumanising food conditions are a common threat to incarcerated people in the United States (Bradshaw, 2018; Opsal & Malin, 2020; Soble et al., 2020).

In this paper, I take overcrowded carceral facilities in the United States as strategic field sites to direct our attention to incarcerated women, like the ones I am gardening with, as one of the most vulnerable populations in times of climate crisis whose voices are smothered behind wire fences and

walls. In my quest to utilise global governance as a social change and organising tool, I find a disconnect between international norms on incarcerated women and the overarching discourse on sustainable development. Specifically, I am here interested in the representation of incarcerated women in the sixty-sixth session of the United Nations (UN) Commission on the Status of Women (CSW) meetings, the UN Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (the Bangkok Rules), and the Sustainable Development Goals (SDGs).

I first conceptualise the United States as a case study to look at climate stress and environmental injustice against incarcerated women because it is the biggest jailer of women globally (Kajstura, 2018). I then lay out some of the risks, climate stresses, and ecological injustices against incarcerated populations and explain how women and their communities are affected in specific and racialised ways. I conclude with a call to specifically address, analyse, and include the experience of incarcerated women in global policy mechanisms. While CSW66 deliberations focused on climate change, they did not specifically address incarcerated women. The “Bangkok Rules,” in turn, centre human rights of incarcerated women yet do not address the climate crisis and the lack of ecological sustainability in incarcerated settings. The SDGs can provide an overarching framework for action. Finally, I argue that intersectional feminist thought on prison abolition and climate activism can and should meaningfully inform future debate and research. As scholar-activists we must become active and utilise global governance structures to hold states accountable and create space for incarcerated women to tell their stories.

## Gender and Hyperincarceration in the US

The United States is the world’s biggest jailer of men and women alike (Fair & Walmsley, 2022; Kajstura, 2018; World Prison Brief, 2022). While the incarceration rate has slightly declined due to COVID-19 (573 per 100,000 residents, it was 629 per 100,000 pre-pandemic), with a staggering 1.9 million people behind bars, the United States holds the largest overall prison population globally (Sawyer & Wagner, 2022; World Prison Brief, 2022).<sup>2</sup> While male incarceration has been slightly declining, women’s incarceration has risen by more than 475% between 1980 and 2020 (Sentencing Project, 2022). Only 4% of the world’s female population lives in the United States, yet it accounts for over 30% of its incarcerated women (Kajstura, 2018). Women’s incarceration rates have risen globally. More than 740,000 women and girls are being held in penal institutions throughout the globe either as pre-trial detainees or having been convicted and sentenced (Fair & Walmsley, 2022). The United States holds the most extensive global share of about 211,375 women behind bars (Fair & Walmsley, 2022). With 64 women behind bars per 100,000 inhabitants, it is the country with the highest female prison population rate (Fair & Walmsley, 2022). This trend has been fuelled by various social, political, and economic factors, including “war on drugs” law enforcement approaches and “net widening” through state surveillance and increased discretion in criminal legal processing of women. This is a pattern also observable in other highly developed countries globally (Wang & Stamatel, 2018); for the United States it means that a majority of women are incarcerated for non-violent offences (23% property crime, 26% drug offences, 11% public order offences; Sentencing Project, 2022). Compared to men, women also face post-conviction barriers to re-entry that are based in lack of services, and gender based stereotyping and bureaucracy that complicate family-reunification (Kajstura, 2018; Sentencing Project, 2022; Swavola et al., 2016).

Hyperincarceration of women in the USA reveals a racist dynamic. Black, Indigenous, and People of Color (BIPOC) women face multiple marginalities due to race and ethnicity, gender, and poverty and are disproportionately affected by the criminal legal system. Although the rate of imprisonment for African American women has been declining since 2000, in 2020, African American women (65 per 100,000) were imprisoned over 1.7 times the rate of imprisonment for white women (38 per 100,000). Additionally, Latinx women were imprisoned at 1.3 times the rate of white women (48 vs. 38 per 100,000; Sentencing Project, 2022). In addition to facing extreme

sexualised violence, Indigenous women made up 2.5% of women in prisons and jails in 2010; that year, Native women were just 0.7% of the total United States female population (Wang, 2021a).<sup>3</sup>

Hyperincarceration of women affects their children and entire communities. While we must be careful with biologicistic reductions to women as child-bearers, incarcerated women are often financially responsible for dependents. Eighty percent of women in jails are mothers and frequently the primary caretakers of their children and families (Sawyer & Bertram, 2018). Fifty-eight percent of women in state and federal prisons reported having at least one minor child (Maruschak et al., 2021). An estimated 58,000 admissions of pregnant women into jails and prisons are processed every year, and thousands give birth or have other outcomes (e.g., miscarriages, stillbirths) while still incarcerated (USCCR, 2020; Wang, 2021b). When we think about environmental injustice against incarcerated women, we thus must also think about it more broadly as injustice against their families. The National Women's Law Center investigation assigned 38 states a failing grade because of the lack of adequate, or any, policies that ensure prisoners receive access to prenatal care; gynaecological and obstetric health care and pregnancy care are often unavailable entirely (Swavola et al., 2016). In terms of giving birth, as of 2022, ten states in the United States still violate the Bangkok Rules, as there are no legal restrictions on the practice of shackling restraints during childbirth (ARRWIP, 2022), and postpartum care is often insufficient and inhumane (including immediate separation from the child; for more details see Swavola et al., 2016; Wang, 2021b). Hyperincarceration also affects women's capacity to have children in the future if we consider that prisons as toxic sites have detrimental health effects that may bear long-term consequences.

We must understand women's criminalisation and incarceration in the larger context of the patriarchal gender order that permeates socialisation and determines life chances of women. Ranking only 30 of 156 in the latest Global Gender Gap report, North American society is characterised by systematic gender violence (36% of women experience violence in their lifetime) and low participation of women in political leadership (World Economic Forum, 2021). Moreover, severe physical, sexual, and mental abuse often leads to women's convictions, intertwined with higher rates of mental illness and substance use, leading to the "criminalisation of survival" (Kaba, 2018). This dynamic applies especially to BIPOC women at the forefront of environmental injustice regarding exposure and resistance against toxic environments.

## **Environmental injustice and incarceration**

Female bodies are subjected to disproportionate amounts of gendered and state violence through the carceral system; prisons as contaminated and contaminating places exacerbate this violence. Predominantly populated by overpoliced and criminalised BIPOC communities that are most affected by poverty and environmental racism, new prison construction is "sold" back to poor communities as an economic stimulant (Davis, 2011; Perdue, 2021), amplifying environmental injustice on minority communities. Opsal and Malin (2020) suggest examining prisons as LULU (Locally Undesirable Land Use) in two distinct ways – regarding their "internal" impacts on prisoners caged within their walls and their "external impacts" on communities and environments sitting in their shadows. After clarifying essential terms in this context, I briefly outline the implications of these two angles in times of climate change.

Environmental Justice has become a common term in the North American public as activists pointed out a range of toxic hazards disproportionately in poor communities that produce less waste and use less energy but are most exposed to environmental hazards. Notably, a positive term pointing to a negative situation (Fritz, 2022), the scholar-activist Robert Bullard (2005) has coined the term and sharpened his analysis by pointing out that environmental inequity follows a racist logic in the United States. Environmental Racism denotes "a link in the chain of unsustainable development. It involves denying human rights, environmental protection, and economic opportunities to communities where people of colour

live and work” (Bullard, 2005, p. 1). Pellow et al., (2018, 2020) suggested the term Critical Environmental Justice studies and expanded the field to include incarcerated people in his analysis explicitly. He spearheads the Prison Environmental Justice Project at UC Santa Barbara and regularly publishes reports on environmental justice struggles in prisons and jails around the world (Pellow et al., 2020).<sup>4</sup>

### **Prisons on toxic sites**

Prisons have been built on the country’s least desirable and most contaminated land. The cartographer Paige Williams carried out a GIS analysis of a 2010 dataset of state and federal prisons and found that 589 of the 1,821 federal and state prisons are located within three miles of a toxic waste site, with 134 of those prisons situated in just one mile of the toxic waste site (an interactive map is available at Williams, 2017). Prisons are often located close to hydraulic fracturing (fracking) sites. Residents have no choice but to inhale the toxic fumes from these poisonous extraction technologies (Leon-Corwin et al., 2020; McGee et al., 2021; Pellow et al., 2020). A highly publicised case of prison site contamination is SCI Fayette in Pennsylvania which was built on top of one of the largest coal preparation plants in the world, where more than 40 million tons of coal refuse and coal ash containing high concentrations of mercury, lead, and arsenic was dumped (Bernd et al., 2017). Bradshaw (2018) delivers a compelling analysis of (mostly futile) organising around the Central Michigan and St. Louis Correctional facilities, which are located one and a half miles from a chemical Superfund site.

Leon-Corwin et al. (2020) examined differences in toxic release emissions between Oklahoma zip codes that contain (or are adjacent to) prisons compared to the remaining zip codes for a period of seven years (2011–2017) as measured by the Environmental Protection Agency’s (EPA) Toxics Release Inventory (TRI). The authors find that prisons are significantly more likely to be located in areas where there are higher reported TRI emissions compared to other areas of Oklahoma. They also find support for environmental justice arguments regarding class; lower median household income districts show higher TRI emissions (Leon-Corwin et al., 2020). The state of Oklahoma is of particular significance for the topic at hand. It incarcerates females at a rate that is 2.5 times larger than the (already high) national average (Leon-Corwin et al., 2020). According to the most recent data, Oklahoma has taken second rank (the incarceration rate of women is 106 in 100,000 inhabitants) after Idaho (110 in 100,000, see Sentencing Project, 2022). Toman (2022) has recently applied Leon-Corwin’s et al.(2020) research strategy on a national scale and results confirm a pattern of harm. While not generalisable for the entire United States, Toman (2022) finds that in the East North Central, Mountain, and Pacific regions, zip codes with prisons also had higher emission levels.

Besides class effects, links between environmental racism and criminalisation are evident in current United States immigration policy and institutional violence against migrants and refugees. Consider the increasing number of climate refugees that flee uninhabitable world regions that have been destroyed due to global and neoliberal extraction practices. They arrive in the United States and find themselves criminalised in immigrant detention centres located in sites plagued with hazardous chemicals in the ambient air, land, and water associated with developmental disorders, neurological damage, respiratory illnesses, and cancer. Pellow et al. (2020) report the case of mothers imprisoned at the Karnes County Civil Detention facility in Texas who went on a hunger strike in 2015 protesting heavily chlorinated tap water, most likely to disinfect any toxins related to the nearby fracking operations. The mothers had been purchasing clean water at the prison commissary to maintain their health (a privilege for those few with access to money), but the authorities had shut the store down. Carceral spaces become evident as sites of environmental violence against women and spaces of deep resistance against it. In June 2021, women at the Logan Correctional Center (the largest women’s penitentiary in Illinois) went on hunger strike as they were made to stand in their faeces for

days due to an unrepaired sewage leakage, exposing them to pathogens (Dolinar & Tsolkas, 2021).

### ***Prisons as toxic sites***

Prison siting is not only a threat to incarcerated populations but also a threat to ecosystems and non-human biodiversity considering the ongoing construction and operation of prisons in remote, environmentally sensitive rural areas. Prisons can significantly impact local air and water quality connected to industrial activities associated with prison labour programs, local power generation, wastewater management, trash disposal, or traffic from and to overcrowded prisons (Bernd et al., 2018; Opsal et al., 2022). Prisons contribute to greenhouse emissions, and overcrowded prisons also consume a lot of water which is particularly hazardous in areas affected by increased droughts due to climate change that share water sources with carceral facilities (Bernd et al., 2018; Opsal & Malin, 2020; Pellow et al., 2020). McGee et al. (2021) demonstrate that increases in incarceration are significantly associated with increases in industrial emissions across all states over the time span of 1997–2016. The authors convincingly argue that mass incarceration incentivises industrial development and ecological detriment through new prison construction, the economy of goods needed inside prisons, and the exploitation of cheap prison labour for prison industries and outside corporations (McGee, 2021). Opsal et al. (2022) show that correctional institutions produce notable environmental harms and injustices by analysing the EPA’s Enforcement and Compliance History database. Their research suggests that correctional institutions can be considered a high-polluting industry as they violate environmental laws at similar levels to other facility types. Their violation rates are similar to those of hazardous waste collections, petroleum, and natural gas extraction (Opsal et al., 2022).

Incarcerated people in the United States face water contamination, air pollution, and heat stress through missing air conditioning, especially in the Southern States (Bradshaw, 2018; Gribble & Pellow, 2022). In addition, they are provided low-cost industrial food supplied by three large corporations (Soble et al., 2020). The largest to date report on food in prisons finds that prisons are “out of sight food deserts” (Soble et al., 2020). Incarcerated folk often do not get enough to eat and lack nutritious food options leading to chronic illnesses in bodies that arrive behind bars already incapacitated from systemic inequality. Then they often receive inadequate medical care. The women’s quotes in the introduction to this paper speak to the dehumanising food conditions in United States prisons. This issue affects all incarcerated people but is exacerbated for folks with mental and physical health issues, both of which we find in higher rates among the female incarcerated population. Most incarcerated individuals will be provided processed foods high in sodium, sugar, and fats; some institutions even distribute tainted or spoiled food to their inmates, which leads to, and aggravates existing chronic illnesses and is detrimental to mental health and overall wellbeing (Soble et al., 2020). Many correctional institutions in the United States have witnessed a deterioration in food quality over the last few years, particularly during COVID-19 (Blakinger, 2020; Soble et al., 2020).

Housing inmates in overcrowded living quarters is dehumanising and threatens mental and physical health. It increases their risk of catching an infectious disease, a significant concern in the era of COVID-19. The pandemic brought to light how dangerous overcrowding really is. As of 13 September 2022, there have been 620,939 known COVID-19 infections in North American prisons and 2,903 COVID deaths, not counting staff deaths and infections.<sup>5</sup> Incarcerated women have been particularly vulnerable and underserved during the pandemic. Welch and Deitch (2021) describe a “pandemic gender gap” with faltering services for women in prisons that are still predominantly designed for males. Even though the release of women with non-violent charges would be the best mitigation strategy in the pandemic, androcentric risk assessments result in women’s “overclassification,” resulting in too restrictive eligibility criteria for release (Welch & Deitch, 2021). In addition, pregnant women have not been prioritised for release, even though they

are especially vulnerable (Arregi et al., 2020; Ellis, 2020; Welch & Deitch, 2021). The first woman to die in prison in the United States from the novel virus was Andrea High Bear, who was imprisoned in South Dakota on a non-violent drug-related charge eight months pregnant and contracted COVID-19 shortly after arrival. She delivered a premature baby on April 1 and died on 28 April 2020, after being transferred to a facility in Texas (Ellis, 2020).

Taken together, carceral environments are fundamentally toxic to all beings trapped within their confines and in their proximity; for women, the impacts are exacerbated. There is a pattern of incarcerated people and their communities being exposed to toxins that already contaminate prison grounds. Prisons on toxic sites then provide a dehumanising and sickening experience through the negligence of care for mental and physical health, including insufficient nutrition and lack of protection from infectious diseases. While largely undiscussed in emerging literature, carceral facilities as toxic and toxifying places hold increased concern for incarcerated women. Women, specifically BIPOC women, are captured by the carceral system disproportionately and so exposed to it increasingly. In addition to showing higher rates of trauma, mental, and physical illness women may be or want to become pregnant in the future, and toxic prisons put their bodies at risk. For pregnant women, the health of the foetus is at risk. Young children visiting their mothers in prison are at risk of increased exposure to environmental harm (Leon-Corwin et al., 2020).

### ***Climate stress***

When it comes to the intersection of toxic prisons, medical neglect, and climate change, women are the most vulnerable and overlooked demographic. Coming from systematically marginalised and disenfranchised circumstances, women who are caught in the criminal legal system, face greater economic marginalisation and health issues than their male counterparts. They face greater exposure to environmental injustice and anthropogenic climate disasters even before arriving in a carceral environment. As the climate crisis worsens, so does the suffering of those incarcerated in overcrowded jails and prisons, exposed to temperature stress and toxic living conditions without the possibility to flee. Prisons are built to keep prisoners in and the public out. This makes climate change especially problematic, as incarcerated populations are captive to climate and heat stress. Even in disaster situations, such as hurricanes, evacuations of prisons have been refused in past United States hurricanes (Gribble & Pellow, 2022; Purdum et al., 2021).

The temperature average in the summer of 2021 in the United States was 74 degrees Fahrenheit, or 2.6 degrees warmer than the long-term average, capping off a season of droughts, wildfires, record-breaking heat waves, hurricanes, and other extreme weather exacerbated by climate change (NCEI, 2021). Heat stress is a severe problem in prisons and jails, as the leading study of the implications of climate change for the US correctional sector attests (Holt, 2015). Southern prisons' lack of air conditioning creates unsafe and lethal conditions, especially for the elderly, chronically ill, and individuals with disabilities. While there are no national statistics on air conditioning in prison, Jones (2021) found that at least 13 states in the country's hottest regions lack universal air conditioning in their prisons.<sup>6</sup>

Incarcerated women are more vulnerable to toxic environments and heat stress as more than half of women in jails report having a current medical problem – compared to 35% of men (Swavola et al., 2016). In addition, approximately two-thirds of jailed women report having a chronic condition – compared to half of the men in jails and 27% of people in the general population (Swavola et al., 2016). Compared with men, women entering prison are more likely to suffer from chronic or severe mental health issues, are more likely to be survivors of trauma and/or sexual violence and have higher rates of substance abuse than their male counterparts (Swavola et al., 2016; USCCR, 2020). Given the reproductive capabilities of most women (and some men and gender-diverse people), we have to consider that heat exposure adversely impacts birth outcomes, including, but not limited to: changes in the length of gestation, birth weight, stillbirth, and neonatal stress

in unusually hot temperature exposures (Kuehn & McCormick, 2017). This evidence clarifies that a discussion of incarcerated women and environmental justice is a discussion of reproductive justice.

While vulnerable and exposed to disaster, incarcerated women and men are called on to mitigate climate effects as firefighters and clean up after devastation through forced labour (Gribble & Pellow, 2022). Prison labour was utilised for the clean up after significant hurricanes such as Harvey and Irma and after oil spills, and they are engaged in combating wildfires. Hotter, drier weather, misled development, and decades of fire suppression have increased wildfires in the United States South and West. States have relied on an invisible workforce of “inmate firefighters” to work the frontlines. With 9,280 wildfires and 2,233,666 acres burnt in 2021, California is the state most affected by wildfires nationally (NIFC, 2022), and incarcerated people comprise up to 30% of California’s wildland fire crews that are incarcerated in 35 fire camps, of which three are female only (Gribble & Pellow, 2022; Lowe, 2021).

In 2016, a boulder struck and killed 22-year-old Shawna Jones while she battled the Mulholland Fire in Malibu. Jones was the first incarcerated woman to die while fighting a fire since 1983, the year women first joined California’s inmate firefighting program, which started in 1946 (Gribble & Pellow, 2022; Lowe, 2021). There are about 200 female firefighters in California who earn between \$2 and \$5 a day for this gruelling and risky labour which saves the state of California \$90 m to \$100 m a year (Singh, 2020). California Governor Newsom passed a bill to ease restrictions for formerly incarcerated firefighters to gain meaningful employment. Still, there is no data on how many people can actualise a career in firefighting post-release. Nevertheless, for many women, the firefighting program offers relative dignity and purpose compared to the grim realities of incarceration, as they receive better food and outdoor exposure (Lowe, 2021).

## **Incarcerated women, climate, and global governance**

So far, I have argued that the United States is an example to illustrate that the criminal legal system, as a capitalist system of formal social control disciplining the poor, (re)creates racialised and gendered environmental inequalities. In this context, incarcerated women are among the most vulnerable populations on our warming planet – and the most ignored. Recognising gendered implications of hyper-incarceration in the age of increasing climate emergency, the paper highlights the need to specifically address, analyse, and include the experience of incarcerated women in global policy mechanisms. Incarcerated women and their allies are fighting back, rising, demanding clean water, pushing for decarceration, early release, and the abolition of the prison industrial complex (Davis et al., 2022; Pellow et al., 2018). How might we engage and utilise global norms and global governance in these efforts?

### **UN CSW**

The UN Commission on the Status of Women (CSW) is a stage for a diverse global women’s movement and the production of international gender equality norms that can advance gender equality in its member states. The CSW was established in 1946 as a functional commission and intergovernmental body of the United Nations Economic and Social Council (ECOSOC) of the United Nations (UN) dedicated exclusively to the advancement of women and gender equality. The Commission consists of one representative from each of the 45 Member States, which are elected by ECOSOC from the 193 total Member States of the UN based on equitable geographic distribution. CSW Member States serve for a four-year term. The CSW advanced its place in the UN system through the four world conferences on women and convenes annually at the UN Headquarters in New York. Research has shown that at the CSW, feminist sociologists have successfully challenged knowledge and global norm construction, despite the increasing exclusion of civil society actors

from the intergovernmental negotiations of the 193 Member States of the UN (Jauk, 2017). All Member States strive for “Agreed Conclusions” at every session, a jointly negotiated document to serve as global guideline and agenda for the priority and emerging themes of the particular year. The CSW in 2022 focused on achieving gender equality and empowering all women and girls in climate change, environmental, and disaster risk reduction.

The CSW Agreed Conclusions from 25 March 2022 (Commission on the Status of Women Sixty-Sixth Session, 2022) call to “promote and protect the rights of all women and girls related to the enjoyment of a clean, healthy and sustainable environment and adopt policies and programmes for the enjoyment of these rights, including by addressing the impacts of climate change, environmental degradation and disasters,” yet incarcerated women are neither named nor addressed. An analysis of the schedules of side events (sponsored by Member States and UN entities) of the 66th session of the CSW in 2022 and the parallel events (organised by ECOSOC accredited NGOs and civil society actors) that accompany and inform the closed deliberations of the CSW reveals that realities of incarcerated women are marginalised.<sup>7</sup> On the schedule of side events, we find that incarcerated women are entirely missing. Only two events relate to female criminal legal professionals.<sup>8</sup> Of the impressive almost 800 scheduled parallel events, only four presentations specifically focused on incarcerated women.<sup>9</sup> There is space here to advocate for incarcerated women from the bottom up. To advance environmental justice, scholars, activists, policy makers, and practitioners must address the climate plight of incarcerated women, formerly incarcerated women, and LGBT+ prisoners and their communities.

### **Bangkok rules**

Another set of guidelines are The United Nations Rules for the Treatment of Women Prisoners and Non-custodial Measures for Women Offenders (“Bangkok Rules;” UN, 2010). These rules can be considered “needs-based human rights, in that they are based on women prisoners’ needs as documented by research and practice, which they enshrine into rights that states, as the ones responsible for penitentiary institutions, must uphold” (Barberet & Jackson, 2017, p. 217). While by no means a progressive document, as “soft law” they are a global benchmark and a written global norm that can be utilised by states, advocacy and social pressure groups on the ground to advocate on behalf of women prisoners. The Bangkok Rules centre the human rights of incarcerated women yet do not address the climate crisis and missing ecological sustainability of incarcerated settings.

Barberet and Jackson (2017) offer a feminist critique of the seventy Bangkok Rules and illuminate that they reify sexist stereotypes and heteronormative femininity in their embrace of heteronormative gender role expectations through (exclusively) cisgendered motherhood, the notion of a fragile femininity and women’s specialness as victims of crime and circumstance, and the absence of gender diversity and intersectionality (Barberet & Jackson, 2017). The Bangkok Rules do little to challenge the dominance of “carceral feminism,” whereby feminist organisations and actors rely on the state for protection through criminalisation. The Bangkok Rules also lack an understanding of gender-diverse people, and reflect assumptions of heteronormative, cis-normative nature. They may do more to affirm and strengthen institutions of oppression and violence rather than challenge or help end them (Barberet & Jackson, 2017; Davis et al., 2022). The most important strategy to mitigate climate change for incarcerated women is decarceration and addressing environmental racism in communities (Bradshaw, 2018; Pellow et al., 2020; Purdum et al., 2021). Adding to these important critiques, the Bangkok Rules push for access to sanitary needs of women who menstruate and call for gender-specific health care and programming (UN, 2010). Still, climate stress and sustainability are not addressed at all.

## **Sustainable development goals**

While we have not seen any advocacy on the level of CSW and Bangkok Rules to connect the dots between climate justice and the silenced voices of incarcerated women yet, first attempts have been made to utilise the overarching framework of the Sustainable Development Goals (SDGs) for prisoner's rights and climate and health justice behind bars more generally (Ismail et al., 2021; Penal Reform International, 2017). Ismail et al. (2021) point out that the 11 million incarcerated people in the world are undoubtedly "the left behind." However, neither the Millennium Development Goals (MDGs), which preceded the SDGs nor the SDGs themselves have specific references to people's health in prison. This gap in international health strategies overlooks the potential contribution of prison health to the SDGs. Ismail et al. (2021) propose a conceptual framework for a prison health agenda in 2030 that aligns with the SDGs and demonstrates how such a framework is compatible with existing international concordats. They link nine SDGs directly and six SDGs indirectly to prison health and suggest how these can be actualised, cross-referencing existing international prison health regulations.

Eight of the nine SDGs suggested by Ismail et al. (2021) overlap with the analysis and application of the SDGs to the criminal legal system by the international NGO Penal Reform International (2017). These are: No Poverty, 2 Zero Hunger, 3 Good Health and Wellbeing, 4 Quality Education, 6 Clean Water and Sanitation, 8 Decent Work and Economic Growth, 10 Reduced Inequalities, and 16 Peace, Justice and Strong Institutions. While Ismail et al. (2021) conceptualise SDG 11 Sustainable Cities and Communities as directly linked to prison health and leave out SDG 5 Gender Equality, Penal Reform International (2017) leaves out SDG 11 while pointing out the violent and discriminatory nature of penal systems across the world that reifies and exacerbates gendered violence. This difference is ironic and substantiates my point that we must connect the dots between sustainable communities and gender equality in light of climate emergency. Feminist thought on prison abolition and climate activism can meaningfully inform future debate and help policy makers make more gender-informed decisions.

## **Connecting the dots**

I have highlighted the ways that environmental justice is inextricably linked to the prison industrial complex in the United States, and the position of women as a vulnerable population in this scenario. While "greening prisons," fuelling them with more sustainable energies, and providing clean water and air in prisons are crucial short-term interventions to mitigate institutional and environmental violence towards incarcerated women, we need to move away from a myopic focus on penal institutions towards a more radical, expansive vision of the social, political, and economic processes of incarceration (Bradshaw, 2018; Davis et al., 2022; Lara, 2022; McGee et al., 2021). As a profoundly feminist and "practical organising tool and long-term goal," prison abolition to eliminate policing and surveillance and create lasting alternatives to imprisonment is an appropriate political vision in times of climate disaster (Davis et al., 2022, p.50). It is now necessary to form interdisciplinary alliances to "fight the epidemic of toxic prisons" (Bradshaw, 2018, p.410).

Incarceration itself mirrors the harm and destruction of a disaster (Purdum et al., 2021), and it constitutes a form of gender violence (Swavola et al., 2016; USCCR, 2020). Davis et al. (2022) feature the work of activist Monica Cosby, a Chicago-based abolition feminist, showing that prison is quite literally a form of gender violence. She developed a power and control wheel often used in violence prevention work and shows that through prisons, harm results from arbitrary use of authority, abuse of power, control over bodies, minds, and spirits of survivors, as well as the impact of both gender violence and imprisonment are minimised and ignored (Davis et al., 2022, p.11f.). Ultimately, environmental justice does not solely involve one's right to be free of pollution; it also concerns how one's body is treated and impacted by institutional actors (Barberet & Jackson, 2017; Bradshaw, 2018; Pellow et al., 2020). Finally, the UN system itself provides norms and

guidance to detect and address violations of incarcerated women's rights as a type of violence against women. How can we connect the dots and provide better advocacy for incarcerated women trapped in toxic and overheated cages?

On the level of scholarly research, it is necessary to specifically address and include the perspective of incarcerated women. While early research has emerged on environmental injustice towards incarcerated people in the United States, women have been rendered invisible in the literature so far. Women and their communities are affected in specific and aggravated ways by climate emergency and harsh androcentric carceral conditions, and we need to examine intersectional impacts on BIPOC women and LGBT+ detainees specifically. A rights-based framework as promoted in clinical sociology can be helpful. It means that we assume that all people have a right to well-being and freedom, as laid out in the Universal Declaration of Human Rights. We must thus include the voices of incarcerated women in a penal system that directly opposes the feminist ideal of gender, class, and racial equality (Davis et al., 2022; Davis, 2011; Kaba, 2018). A rights-based framework in research also means that scholars include global governance in their thinking and start holding their respective states accountable to existing international human rights norms.

On the level of ECOSOC-accredited NGOs who have access to the CSW meetings and other civil society forums, it is essential to directly include incarcerated and formerly incarcerated women and provide the space for them to share their stories. One way to do this is to organise parallel events that centre the voices of incarcerated women themselves. While accreditation to obtain the right to offer similar events and access the CSW is a cumbersome process, as a first step, existing accredited NGOs and civil society actors should make an active effort to provide a stage for incarcerated women and related researchers in the future and further connect the dots between sustainability, human rights, and gender behind bars. As scholar-activists and activists, we need to shed light on prison conditions in times of climate emergency and make women's voices heard by political representatives. This requires an active and focused effort to set the agenda at CSW parallel events, so we never again experience a CSW meeting with less than 0.5% of parallel events remotely addressing incarcerated women. NGOs should also actively "translate" UN governance and existing norms such as the Bangkok Rules and SDGs to activists on the ground to give them more tools and resources to draw from in their work.

We can also engage existing mechanisms to intervene and interact with global governance (or help incarcerated women and their advocates to do so). The CSW communications procedure for instance is open to any individual, non-governmental organisation, group or network that may submit communications (complaints/appeals/petitions) to the CSW containing information relating to alleged violations of human rights that affect the status of women in any country in the world.<sup>10</sup> A United States based NGO involving formerly incarcerated women could take the lead in engaging this avenue to raise awareness. We might also monitor specific calls for input by Special Procedures of the United Nations Human Rights Council.<sup>11</sup> Special Procedures are either an individual (called "Special Rapporteur" or "Independent Expert") or a working group. They can undertake country visits, send communications to Member States, and conduct thematic studies. Since October 2021 there are 45 thematic and 13 country mandates. The Special rapporteur on violence against women, the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment, the Special Rapporteur on torture and other cruel, inhuman or degrading treatment or punishment, the Special Rapporteur on the right of everyone to the enjoyment of the highest attainable standard of physical and mental health, and the Independent Expert on protection against violence and discrimination based on sexual orientation and gender identity might be good places to start inquiries and communications (OHCHR, 2021).

On the level of the individual Member States, it is imperative that they be held accountable to international norms and standards. In the case of the United States, we even have to dial back and demand that the United States ratify international norms in the first place. Of 18 international human rights treaties, the United States has ratified only five, and the Convention on the

Elimination of All Forms of Discrimination against Women (CEDAW) is *not* one of them.<sup>12</sup> The United States is the only established industrialised democracy in the world that has failed to ratify a convention that is a primary goalpost and guideline for the reduction of gender inequality around the world. The push to ratify CEDAW is essential as it triggers periodic evaluation reporting that can hold states publicly accountable to gender equality goals and open a platform for shadow reports from civil society actors to be seen and heard. Yet, we can actively engage the SDGs (Ismail et al., 2021; Penal Reform International, 2017) and the Bangkok Rules (Barberet & Jackson, 2017) in our research and work and increase the expectations of elected representatives to address the climate plight of incarcerated women.

The United States delegates to the CSW should proactively listen and engage civil society actors and consult them. This is an easy task as many NGOs are organised within the US Women's Caucus at the UN,<sup>13</sup> an alliance of US feminists and non-governmental organisations engaged in joint advocacy at the CSW. The caucus captures a wealth of knowledge and experts, collects research, and promotes the principles of the women's human rights agenda declared in CEDAW. The Beijing Platform for Action is monitored within the CSW. The United States government oversees the Environmental Protection Agency, which has not considered prisoners within federal environmental justice guidelines (Bradshaw, 2018).<sup>14</sup> Here is another opportunity for the State to become active and set the agenda to include incarcerated women and their communities when addressing the climate emergency. First and foremost, the prime global jailer of women – the United States – must decrease the number of prisoners generally, and more specifically, the number of incarcerated women (Bradshaw, 2018; Davis et al., 2022; Lara, 2022).

A clear limitation of my contribution here is that it is United States-centric and does not contain internationally comparative data. As a next step, it is imperative to do this critical work and analyse data on female incarceration through an environmental justice and green criminology lens on an international level. It is essential that also the UN system starts to collect data on female incarceration worldwide and puts the topic on the agenda in all possible contexts. It will be of particular interest to consider and compare if countries who have ratified CEDAW show different patterns in the criminalisation of women. Along these lines, it would be beneficial if the CEDAW committee asked specific questions about female incarceration and sustainability when eliciting country reports. We might also systematically analyse past shadow reports to explore if NGOs in countries that ratified CEDAW utilised it to address the situation of incarcerated women.

Even if prison abolition is the only humane solution to this crisis and a long-term goal, the bare minimum we can do is to make a real and concerted effort to listen to and centre the voices of incarcerated women who are on the front lines of environmental racism and criminalisation, as the example of the United States shows. There is an urgent need to address mental and physical health, including food access for incarcerated women, and address climate stress in toxic prison environments and its impacts on women and gender-diverse people's wellbeing and human rights. As clinical sociologists, international feminist criminologists, scholar-activists, and advocates for incarcerated women in global governance, we can use our resources and social and cultural capital to access UN discourses and do our best to interrupt and shape deliberations informed by abolition feminism and environmental justice.

This paper reflects my clinical sociological understanding of my fellow gardeners in the Midwestern carceral backyard in a global context. Ultimately, environmental justice is a call against violence in all forms, investment in marginalised communities, and disinvestment from criminal legal systems perpetuating violence against women. In the Midwestern rec yard and beyond, we need to foster economies of care, respect, equity, and sustainability, on our path towards multi species justice (Lara, 2022).

## Notes

1. I follow an inclusive understanding of the category *woman* that includes non-binary and gender creative identities independent of sex assignment at birth. The United States carceral system does not. It follows a binary system of sex-segregated facilities. All the women I met during my field research were assigned “female” at birth; their gender identities were not the focus of data collection.
2. The carceral complex in the United States consists of thousands of federal, state, local, and tribal systems. It consists of 1,566 state prisons, 102 federal prisons, 2,850 local jails, 1,510 juvenile correctional facilities, 186 immigration detention facilities, and 82 Indian country jails, as well as military prisons, civil commitment centres, state psychiatric hospitals, and prisons in the United States territories (Sawyer & Wagner, 2022).
3. Consider the staggering numbers of murdered and missing Indigenous women, girls, and two spirits in the United States Homicide is the third leading cause of death among Native girls & women aged 10 to 24; four out of five Native women experienced some form of violence in their lifetime. More than half of Native women have experienced sexual violence, and they are 2.5 times more likely to experience rape than other women in the United States For more data and advocacy, see Coalition to Stop Violence Against <https://www.csvanw.org/> or National Indigenous Women’s Resource Center <https://www.niwrc.org/>.
4. A notable initiative in this realm is the *Prison Ecology Project* established in 2014 by the Human Rights Defense Center (<https://www.humanrightsdensecenter.org/>). It evolved out of Prison Legal News which had been founded by the then incarcerated organiser Paul Wright and regularly compiles and publishes reporting on environmental harm within and by ways of the carceral complex. Another intersectional collaborative is Fight Toxic Prisons! (<https://fighttoxicprisons.wordpress.com/about/>), described more in-depth in Bradshaw (2018).
5. Data are continuously updated on <https://covidprisonproject.com/>.
6. The investigative independent outlet *Intercept* mapped climate risks (heat risk, wildfire risk, flood risk) for 6,500 United States detention facilities based on 2020 data with an interactive map available here <https://projects.theintercept.com/climate-and-punishment/index.html>.
7. Keywords addressing women and incarceration are entirely missing; I searched the publicly available programs using the individual search terms: prison, incarcer\*, incarcerated, detention.
8. Publicly available here <https://teamup.com/ksjgjdxx23dq947md>.
9. A panel on “Lack of Women’s Access to Justice in Turkey” organised by the NGO Set Them Free, is available here <https://www.youtube.com/watch?v=fYq73VpK9-M>, as well as three presentations in the context of the “Feminist Approaches to Justice” series organized by the International Sociological Association in cooperation with the Division of Women and Crime of the American Criminological Society, World Society of Victimology, and Criminologists without Borders: Redefinition of “Incarcerated Women’s Identities in South Africa” (Dr. Nontyatyambo Pearl Dastile, Walter Sisulu University South Africa) available here <https://youtu.be/IN10UPPPF5I>, “Women’s Experiences Navigating Prisons in India” (Dr. Penelope Tong, School of Social Work, Tata Institute of Social Sciences, India & Ntasha Bhardwaj, Founder-South Asian Institute of Crime & Justice Studies, India; Doctoral Candidate, Rutgers School of Criminal Justice, USA) available here <https://youtu.be/92crY4abgHY>) and), and my own presentation on “Prison Gardens as a Pathway to Climate Justice in the United States” is available here <https://youtu.be/8o8aEH49Ojo>.
10. More information and deadlines here <https://www.unwomen.org/en/csw/communications-procedure>.
11. More information and detail can be found here <https://www.ohchr.org/en/special-procedures-human-rights-council/special-procedures-human-rights-council>. For example the Special Rapporteur on the issue of human rights obligations relating to the enjoyment of a safe, clean, healthy and sustainable environment issued a call for input on women, girls to a clean, healthy and sustainable environment (October 14, 2022) that should include the perspective of incarcerated women, <https://www.ohchr.org/en/calls-for-input/2022/call-inputs-women-girls-and-right-clean-healthy-and-sustainable-environment>.
12. See the ratification status dashboard of the OHCHR for specific country information <https://indicators.ohchr.org/>.
13. Website of the caucus <https://www.uswomenscaucus.org/>.
14. While discussing this paper during the CSW parallel event on March 24, 2022, I was made aware by Dr. Jan Fritz that the EPA has a National Environmental Justice Advisory Council (NEJAC) which provides independent recommendations to the EPA and allows for public comments. I have taken the opportunity to intervene at the meeting on April 20–21, 2022 and submitted a written comment on prisons on toxic sites in order to avoid new prison construction on a toxic site in Cleveland/Ohio. [https://www.epa.gov/system/files/documents/2022-09/NEJAC%20Public%20Meeting%20Summary%20April%202022\\_0.pdf](https://www.epa.gov/system/files/documents/2022-09/NEJAC%20Public%20Meeting%20Summary%20April%202022_0.pdf).

## Acknowledgments

I am grateful and humbled by the women who gardened with me and shared their time and stories with me. I thank Melissa Thompson, Susan Lee, Marion Boeker, and Kathryn Feltey for feedback on earlier drafts. I thank Rosemary Barberet for inspiring me to think and write about this topic and all the editors of this special issue for their time and great effort to make this a better paper.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

## Funding

The author(s) reported there is no funding associated with the work featured in this article.

## Notes on contributor

*Daniela Jauk-Ajamie*, PhD, is an Assistant Professor for Sociology and Criminal Justice at the University of Akron, Ohio. She received her master's degree in Sociology from the University of Graz in her home country, Austria. She completed her PhD in Sociology as a Fulbright student at the University of Akron/OH in 2013. Her areas of research interest and teaching are gender and sexualities, inequality in the criminal legal system, and qualitative methods. She is currently working on projects in clinical sociology and research around environmental injustice, reproductive justice, and gardening in carceral and re-entry settings.

## ORCID

Daniela Jauk-Ajamie  <http://orcid.org/0000-0001-8475-830X>

## References

- Arregi, A. E., Conley, B., Siegel, M., & Herzig, A. (2020). *Forgotten victims?: Women and COVID-19 behind bars*. <https://www.genderandcovid-19.org/resources/forgotten-victims-women-and-covid-19-behind-bars/>
- ARRWIP. (2022). *Anti-shackling legislation and resource table. Advocacy and research on reproductive wellness of incarcerated people*. [https://livejohnshopkins-my.sharepoint.com/personal/ckrame13\\_jh\\_edu/\\_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fckrame13%5Fjh%5Fedu%2FDocuments%2FARRWIP%20shackling%20laws%20and%20aclu%20preg%20resource%20table%20for%20shackling%20map%5F7%2E2022%2Epdf&parent=%2Fpersonal%2Fckrame13%5Fjh%5Fedu%2FDocuments&ga=1](https://livejohnshopkins-my.sharepoint.com/personal/ckrame13_jh_edu/_layouts/15/onedrive.aspx?id=%2Fpersonal%2Fckrame13%5Fjh%5Fedu%2FDocuments%2FARRWIP%20shackling%20laws%20and%20aclu%20preg%20resource%20table%20for%20shackling%20map%5F7%2E2022%2Epdf&parent=%2Fpersonal%2Fckrame13%5Fjh%5Fedu%2FDocuments&ga=1)
- Barberet, R., & Jackson, C. (2017). UN rules for the treatment of women prisoners and non-custodial sanctions for women offenders (the Bangkok rules): A gendered critique. *Papers: Revista de Sociologia*, 102(2), 215–230. <https://doi.org/10.5565/rev/papers.2336>
- Bernd, C., Loftus-Farren, Z., & Mitra, M. N. (2018). America's toxic prisons: The environmental injustices of mass incarceration. *Prison Legal News*. <https://www.prisonlegalnews.org/news/2018/apr/2/americas-toxic-prisons-environmental-injustices-mass-incarceration/><https://earthisland.org/journal/americas-toxic-prisons/>
- Bernd, C., Mitra, M. N., & Loftus-Farren, Z. (2017). America's Toxic Prisons: The Environmental Injustices of Mass Incarceration. *Thruout*. <https://truthout.org/articles/america-s-toxic-prisons-the-environmental-injustices-of-mass-incarceration/>
- Blakinger, K. (2020). Coronavirus has made texas prison food even more gross. *The Marshall Project*. <https://www.themarshallproject.org/2020/05/11/ewwww-what-is-that>
- Bradshaw, E. A. (2018). Tombstone towns and toxic prisons: Prison ecology and the necessity of an anti-prison environmental movement. *Critical Criminology*, 26(3), 407–422. <https://doi.org/10.1007/s10612-018-9399-6>
- Bullard, R. D. (2005). *The quest for environmental justice: Human rights and the politics of pollution* (1st ed.). Sierra Club Books.
- Commission on the Status of Women Sixty-Sixth Session. (2022). *Achieving gender equality and the empowerment of all women and girls in the context of climate change, environmental and disaster risk reduction policies and programmes*. Agreed Conclusions (E/CN.6.2022/L). <https://documents-dds-ny.un.org/doc/UNDOC/LTD/N22/303/59/PDF/N2230359.pdf?OpenElement>
- Davis, A. Y. (2011). *Are prisons obsolete?*. Seven Stories Press.

- Davis, A. Y., Dent, G., Meiners, E. R., & Richie, B. E. (2022). *Abolition. Feminism. Now*. Haymarket.
- Dolarin, B., & Tsolkas, P. (2021). Hunger strike, ceiling collapse, lawsuit spotlight deteriorating conditions at women's prison in Illinois. *Prison Legal News*. <https://www.prisonlegalnews.org/news/2021/oct/1/hunger-strike-ceiling-collapse-lawsuit-spotlight-deteriorating-conditions-womens-prison-illinois/>
- Ellis, R. (2020). In prison in a pandemic: Gender behind bars. *Gender Policy Report*. <https://genderpolicyreport.umn.edu/in-prison-in-a-pandemic-gender-behind-bars/>
- Fair, H., & Walmsley, R. (2022). *World female imprisonment list. Women and girls in penal institutions, including pre-trial detainees/remand prisoners* (5th ed.). World Prison Brief. [https://www.prisonstudies.org/sites/default/files/resources/downloads/world\\_female\\_imprisonment\\_list\\_5th\\_edition.pdf](https://www.prisonstudies.org/sites/default/files/resources/downloads/world_female_imprisonment_list_5th_edition.pdf)
- Fritz, J. M. (2022). Environmental injustice and incarceration. In M. K. Verma (Ed.), *Environment and sustainable development: Perspectives and issues* (pp. 121–139). Routledge India. <https://doi.org/10.4324/9781003093503>
- Gribble, E. C., & Pellow, D. N. (2022). Climate change and incarcerated populations: Confronting environmental and climate injustices behind bars. *The Fordham Urban Law Journal*, 49(2), 341–370. <https://ir.lawnet.fordham.edu/ulj/vol49/iss2/2>
- Holt, D. W. E. (2015). *Heat in US prisons and jails. Corrections and the challenge of climate change*. Sabin Center for Climate Change Law, Columbia Law School. [https://web.law.columbia.edu/sites/default/files/microsites/climate-change/holt\\_-\\_heat\\_in\\_us\\_prisons\\_and\\_jails.pdf](https://web.law.columbia.edu/sites/default/files/microsites/climate-change/holt_-_heat_in_us_prisons_and_jails.pdf)
- Ismail, N., Lazaris, A., O'Moore, É., Plugge, E., & Stürup-Toft, S. (2021). Leaving no one behind in prison: Improving people's health in prison as a critical contributor to meeting the sustainable development goals 2030. *BMJ Global Health*, 6(3), e004252. <https://doi.org/10.1136/bmjgh-2020-004252>
- Jauk, D. (2017). Feminist scholar-activism goes global: Experiences of “sociologists for women in society” at the UN. *Brock Education: A Journal of Educational Research and Practice*, 27(1), 79–100. <https://doi.org/10.26522/brocked.v27i1.627>
- Jauk-Ajamie, D., & Blackwood, A. (2022). “I grow every day, like plants.” An evaluation of a gardening program for women in a residential community corrections setting. *Women & Criminal Justice*, 1–24. <https://doi.org/10.1080/08974454.2022.2053031>
- Jones, A. (2021). Cruel and unusual punishment: When states don't provide air conditioning in prison. Prison Policy Initiative. <https://www.prisonpolicy.org/blog/2019/06/18/air-conditioning/>
- Kaba, M. (2018). *Criminalising survival: A resource of curricula and activities*. <https://survivedandpunished.org/2018/10/16/criminalizing-survival-a-resource-of-curricula-and-activities/>
- Kajstura, A. (2018). States of women's incarceration: The global context 2018. Prison Policy Initiative. <https://www.prisonpolicy.org/global/women/2018.html>
- Kuehn, L., & McCormick, S. (2017). Heat exposure and maternal health in the face of climate change. *International Journal of Environmental Research and Public Health*, 14(8), E853. <https://doi.org/10.3390/ijerph14080853>
- Lara, E. (2022). Prison gardens and growing abolition. In S. Chao, K. Bolender, & E. Kirksey (Eds.), *The promise of multispecies justice* (pp. 103–124). Duke University Press.
- Leon-Corwin, M., McElroy, J. R., Estes, M. L., Lewis, J., & Long, M. A. (2020). Polluting our prisons? An examination of Oklahoma prison locations and toxic releases, 2011–2017. *Punishment & Society*, 22(4), 413–438. <https://doi.org/10.1177/1462474519899949>
- Lowe, J. (2021). *Breathing fire*. Farrar, Straus and Giroux.
- Maruschak, L., Bronson, J., Alper, M. (2021). *Parents in Prison and Their Minor Children*. (Report No. NCJ 252645). U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. <https://bjs.ojp.gov/content/pub/pdf/pptmcspi16st.pdf>
- McGee, J. A., Greiner, P. T., & Appleton, C. (2021). Locked into emissions: How mass incarceration contributes to climate change. *Social Currents*, 8(4), 326–340. <https://doi.org/10.1177/2329496520974006>
- NCEI. (2021). Assessing the United States climate in August 2021. National Centers for Environmental Information. <http://www.ncei.noaa.gov/news/national-climate-202108>
- NIFC. (2022). *National report of wildland fires and acres burned by state*. [https://www.predictiveservices.nifc.gov/intelligence/2021\\_statsumm/fires\\_acres21.pdf](https://www.predictiveservices.nifc.gov/intelligence/2021_statsumm/fires_acres21.pdf)
- OHCHR. (2021) *Directory of special procedures mandate holders*. <https://www.ohchr.org/sites/default/files/Documents/HRBodies/SP/VisualDirectory.pdf>
- Opsal, T., & Malin, S. A. (2020). Prisons as LULUs: Understanding the parallels between prison proliferation and environmental injustices. *Sociological inquiry*, 90(3), 579–602. <https://doi.org/10.1111/SOIN.12290>
- Opsal, T., Malin, S. A., & Ellis, T. (2022). Prisons as law-violators and sites of environmental injustice. *Critical Criminology*, 21. <https://doi.org/10.1007/s10612-022-09647-8>
- Pellow, D. N., Lake, F. R., Wilson, C. A., & Baker, E. J. (2020). *Environmental justice struggles in prisons and jails around the world. The 2020 annual report of the prison environmental justice project*. [https://gejp.es.ucsb.edu/sites/default/files/sitefiles/publication/PrisonEJ Project 2020 Report-compressed.pdf](https://gejp.es.ucsb.edu/sites/default/files/sitefiles/publication/PrisonEJ%20Project%202020%20Report-compressed.pdf)
- Pellow, D. N., Vazin, J., Ashby, H., Austin, M. A., Kime, S., & Mcalpine, S. (2018). Environmental justice behind bars: Toxic imprisonment in America. The Global Environmental Justice Project. [https://gejp.es.ucsb.edu/sites/secure.lsit.ucsb.edu/envs.d7\\_gejp-2/files/sitefiles/publication/PEJP%20Annual%20Report%202018.pdf](https://gejp.es.ucsb.edu/sites/secure.lsit.ucsb.edu/envs.d7_gejp-2/files/sitefiles/publication/PEJP%20Annual%20Report%202018.pdf)

- Penal Reform International. (2017). *The Sustainable Development Goals and criminal justice*. Penal Reform International and Thailand Institute of Justice. [https://cdn.penalreform.org/wp-content/uploads/2016/06/Global\\_Prison\\_Trends\\_2017\\_Special\\_Focus.pdf](https://cdn.penalreform.org/wp-content/uploads/2016/06/Global_Prison_Trends_2017_Special_Focus.pdf)
- Perdue, R. T. (2021). Trashing Appalachia: Coal, prisons and whiteness in a region of refuse. *Punishment & Society*, 146247452110115. <https://doi.org/10.1177/14624745211011526>
- Purdum, C., Henry, F., Rucker, S., Williams, D. A., Thomas, R., Dixon, B., & Jacobs, F. (2021). No justice, no resilience: Prison abolition as disaster mitigation in an era of climate change. *Environmental Justice*, 14(6), 418–425. <https://doi.org/10.1089/env.2021.0020>
- Sawyer, W., & Bertram, W. (2018). *Jail will separate 2.3 million mothers from their children this year*. Prison Policy Initiative. <https://www.prisonpolicy.org/blog/2018/05/13/mothers-day-2018/>
- Sawyer, W., & Wagner, W. S. (2022). Mass incarceration: The whole pie 2022. Prison Policy Initiative. <https://www.prisonpolicy.org/reports/pie2022.html>
- Sentencing Project. (2022). Incarcerated women and girls. Sentencing Project. <https://www.sentencingproject.org/wp-content/uploads/2016/02/Incarcerated-Women-and-Girls.pdf>
- Singh, M. (2020, July 10). Pandemic sidelines more than 1,000 incarcerated wildfire fighters in California. *The Guardian*. <https://www.theguardian.com/us-news/2020/jul/10/california-wildfire-coronavirus-prison-incarcerated-firefighters>
- Soble, L., Stroud, K., & Weinstein, M. (2020). Eating behind bars: Ending the hidden punishment of food in prison. Impact Justice. <https://impactjustice.org/wp-content/uploads/IJ-Eating-Behind-Bars-Release1.pdf>
- Swavola, E., Riley, K., & Subramanian, R. (2016). *Overlooked: Women and jails in an era of reform*. Vera Institute of Justice. <https://www.vera.org/publications/overlooked-women-and-jails-report>
- Toman, E. L. (2022). Something in the Air: Toxic Pollution in and around U.S. Prisons. *Punishment & Society*. Online first publication. <https://doi.org/10.1177/14624745221114826>
- United Nations. (2010). The Bangkok rules. United Nations rules for the treatment of women prisoners and non-custodial measures for women offenders. A/RES/65/229. <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N10/526/28/PDF/N1052628.pdf?OpenElement>
- USCCR. (2020). *Women in prison: Seeking justice behind bars*. United States Commission on Civil Rights. <https://www.usccr.gov/files/pubs/2020/02-26-Women-in-Prison.pdf>
- Wang, L. (2021a). The United States criminal justice system disproportionately hurts native people: The data, visualized. Prison Policy Initiative. <https://www.prisonpolicy.org/blog/2021/10/08/indigenouspeoplesday/>
- Wang, L. (2021b). Unsupportive environments and limited policies: Pregnancy, postpartum, and birth during incarceration. Prison Policy Initiative. [https://www.prisonpolicy.org/blog/2021/08/19/pregnancy\\_studies/](https://www.prisonpolicy.org/blog/2021/08/19/pregnancy_studies/)
- Wang, T., & Stamatel, J. P. (2018). Cross-national differences in female offending and criminal justice processing. *International Journal of Comparative and Applied Criminal Justice*, 43(3), 219–239. <https://doi.org/10.1080/01924036.2018.1558082>
- Welch, A., & Deitch, M. (2021). *The pandemic gender gap behind bars*. LBJ School of Public Affairs Research, The University of Texas Austin. <https://repositories.lib.utexas.edu/handle/2152/85440>
- Williams, P. (2017, February 15). *Prison ecology project*. <https://paigewilliamscartography.wordpress.com/portfolio/prison-ecology-project/>
- World Economic Forum. (2021). *Global gender gap report 2021*. World Economic Forum. <https://www.weforum.org/reports/global-gender-gap-report-2021/>
- World Prison Brief. (2022). *Highest to lowest—Prison population rate*. [https://www.prisonstudies.org/highest-to-lowest/occupancy-level?field\\_region\\_taxonomy\\_tid=All](https://www.prisonstudies.org/highest-to-lowest/occupancy-level?field_region_taxonomy_tid=All)