

RESTRUCTURING DISASTER RELIEF IN PUERTO RICO

THE IMPACTS OF COLONIALISM AND
ENVIRONMENTAL RACISM



WRITTEN BY EMILY KONDO



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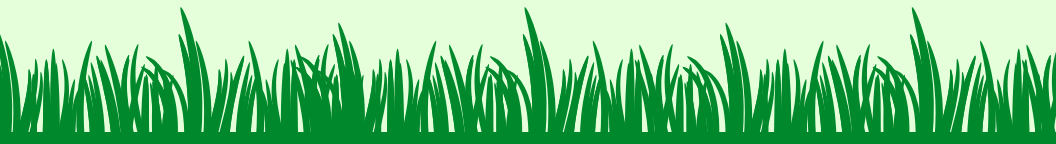


INTRODUCTION



In September 2017, over a period of two weeks, Hurricanes Irma and Maria hit Puerto Rico, wrecking homes, causing flash flooding, and damaging the power grid (Kaske & Lopez, 2017; Willison et al., 2019). Studies indicated that a lack of preventative infrastructural work caused the disproportionately high damage. However, despite the studies and calls for policy reformations, no change was made. Five years later, on September 18, 2022, Hurricane Fiona hit Puerto Rico, devastating communities and destroying the power grid (Crawford, 2022). This was due to a systemic failure to deal with environmental racism in disaster prevention and relief.

To present an overview of disaster relief efforts, Puerto Rico's colonial history is connected to present-day environmental racism and ineffective federal policies. How can preventative infrastructural changes and disaster relief efforts be restructured to better reflect the needs of the Puerto Rican community and aid its most-affected populations? This zine argues that preventative infrastructural changes and disaster relief efforts should be restructured from federal projects into local, community-centered, grassroots initiatives to better serve the needs of the Puerto Rican community and aid its most-affected populations.



METHODS

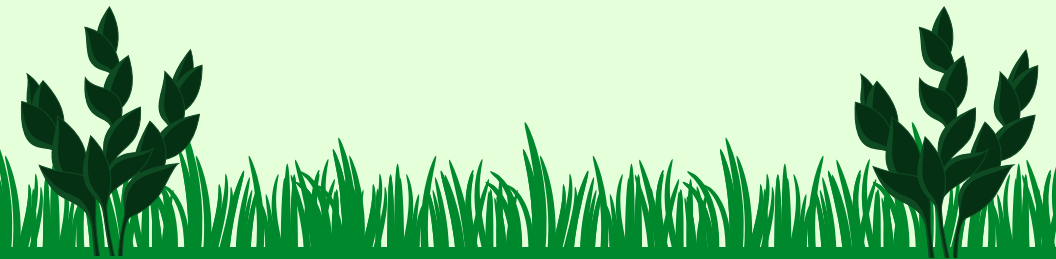
This zine is a communications-focused, academic research project. I draw from academic and popular media sources to analyze the complex issues surrounding disaster prevention and relief in Puerto Rico. To present a comprehensive overview of disaster efforts, I interweave Puerto Rico's colonial history with the resulting effects of present-day environmental racism and ineffective governmental policies. Multiple artifacts are interspersed throughout the zine to highlight local, grassroots organizations and show visual examples of concepts.

All graphics and images not directly attributed to a source on the same page or cited in the References are elements from Canva.



HISTORY OF COLONIALISM

Puerto Rico is more vulnerable to damage from disasters because of its history and status as a colonial territory. Puerto Rico was colonized by Spain in 1493 before being taken over by the United States in 1898 (de Onís, 2021). Since then, Puerto Rico has been subjected to oppression and exploitation due to colonial control over its natural resources and energy. Under Spanish colonization, indigenous Taíno people were forced to extract precious metals and Afro-descent Puerto Ricans were enslaved and segregated to the coast to work on sugarcane estates (de Onís, 2021). When the US took over, resource exploitation shifted to privatization and multinational corporations monopolized the control of energy. From 1976 to 2006, the Puerto Rico industrial tax exemption acts and US tax code section 936 fueled greater corporate exploitation through tax loopholes, duty-free trade, and a lack of labor regulations (de Onís, 2021). Puerto Rico's long history of colonization has centered a Eurocentric energy narrative that continues to affect its economy and energy system today. Therefore, when restructuring disaster prevention and relief, it's crucial to consider energy justice, environmental justice, and environmental racism.

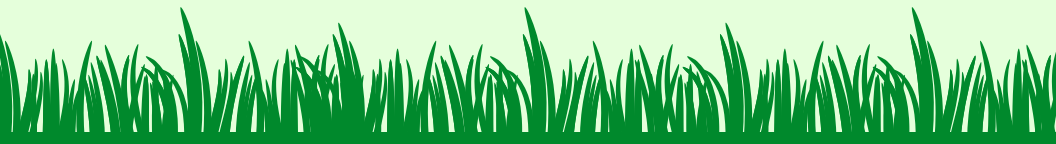


ENERGY JUSTICE

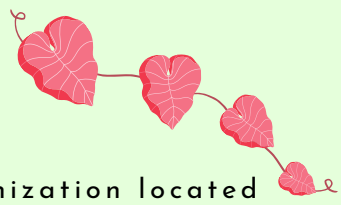


Puerto Rico's current power grid system is fossil-fuel-based and uses centralized energy generation. Most of the energy is generated in one region, then distributed using transmission cables, leaving the power system vulnerable to environmental threats and system failures (Palanco & Santiago, 2022). As a result of the unreliable power system, outages and blackouts are frequent, particularly in low-income and rural communities. Additionally, the power stations have contaminated the environment and caused health problems, inequitably affecting the low-income Afro-descendant communities that live in those regions (Palanco & Santiago, 2022).

To equitably restructure disaster prevention and find a better solution for Puerto Rico's power grid system, it is necessary to practice energy justice. Energy justice encompasses the fundamental right to energy as a basic need and includes factors such as affordability, ethical production, equitable distribution, and considerations for inequalities and burdens (Hernández, 2015). Energy benefits and burdens should be distributed equitably, access to energy should be affordable, and considerations for inequalities should be made so that the power grid system is sustainable and ethical.



CASA PUEBLO



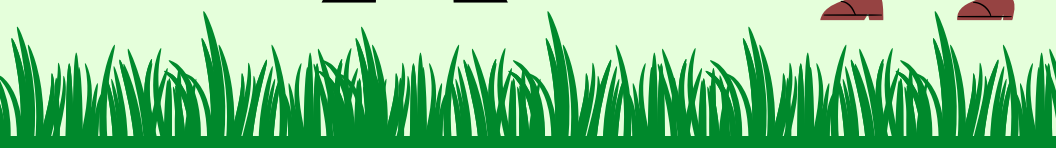
Casa Pueblo is a community-based organization located in Adjuntas, Puerto Rico. It advocates for environmental justice, renewable energy, and community involvement (de Onís, 2021). Some current projects include community management of the Bosque del Pueblo protected forest reserve; an ecological-focused radio station, Radio Casa Pueblo (WOQI 1020 AM); and community solar projects, like distributing solar-powered LED lamps for public lighting and creating an interdependent solar community with a solar-powered cinema by generating a microgrid. One of their goals is to install solar panels on enough buildings to generate 50% of the country's energy capacity from solar energy (50%conSOL).



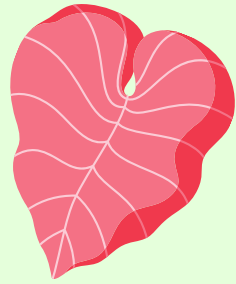
Steps to #50%conSOL:

- 1 - Solar LED lamps for public use
- 2 - Solar community in Adjuntas
- 3 - Other projects (e.g. solar cinema)
- 4 - Energy efficient appliances and utilities
- 5 - Solar powered grocery stores and barbershops
- 6 - Energy self-sufficient housing

<https://casapueblo.org/que-significa-50consol/>



RADIO CASA PUEBLO



Radio Casa Pueblo, WOQI 1020 AM, is a community and ecological-focused radio station run by Casa Pueblo. Its purpose is to produce programs that highlight perspectives often left out of mainstream media and promote greater access to telecommunication.

<https://casapueblo.org/radio-casa-pueblo/>



COQUÍ SOLAR

Coquí Solar is a grassroots, community-based organization located in Coquí, Puerto Rico. It is based on the concepts of communal care and mutual support. Coquí Solar's work builds on a foundational network of community support to advocate for energy justice, rooftop solar power, and a just transition (de Onís, 2021). The networks of community support and care are necessary to ensure a just transition when incorporating solar power into the community. One way that Coquí Solar involves community participation is by holding *conversatorios comunitarios* (community conversations) at the local Coquí Communal Center to discuss solutions to community problems like the energy crisis.

<https://www.facebook.com/Junta-Comunitaria-Poblado-Coqu%C3%AD-1720924697923908>



ENVIRONMENTAL JUSTICE

Colonialism continues to permeate Puerto Rico's economy and energy system, making it particularly vulnerable to disasters. For example, the implementation of Eurocentric rather than local energy initiatives perpetuates the energy crisis by not effectively addressing the underlying factors. Trying to find universal solutions doesn't account for the complex contributing factors or allow for historically marginalized communities to voice their concerns and suggest community-based alternatives.

When restructuring disaster prevention and relief efforts, it's important to make environmental justice considerations. Environmental justice refers to the basic right of all people to be free of environmental hazards. It requires the redistribution of disproportionate burdens placed on poor people and communities of color as well as the creation of inclusive opportunities for those most affected to be heard in public policy and environmental movements (Pezzullo & Cox, 2021). To do this, disaster efforts should emphasize considerations for inequality and disproportionate burdens, shift toward self-determination, and center local organizations and members of the most-affected communities.



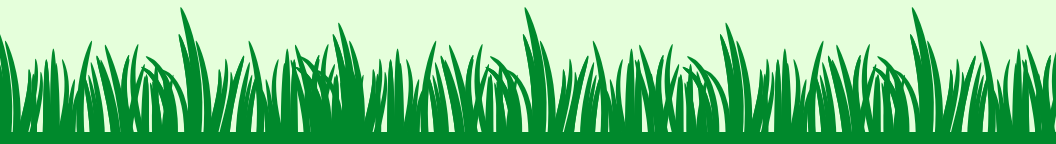
IDEBAJO



Iniciativa de Ecodesarrollo de Bahía de Jobos (IDEBAJO) is a grassroots network that advocates for environmental justice, energy justice, community engagement, and antipollution efforts (de Onís, 2021). It is a coalition of organizations that supports community action in the southeast region of Puerto Rico around Jobos Bay. IDEBAJO works to fight social inequality by involving historically excluded communities in their initiatives and protecting the natural and cultural heritage of the region. One way that IDEBAJO promotes community engagement is through its podcast, *Desde el barrio* (From the Neighborhood). Formerly a local radio show, *Desde el barrio* gives community members a space to talk about their experiences and concerns, which are often suppressed or ignored in governmental spaces.

<https://idebajo.wordpress.com>

<https://www.facebook.com/idebajo.idebajo>



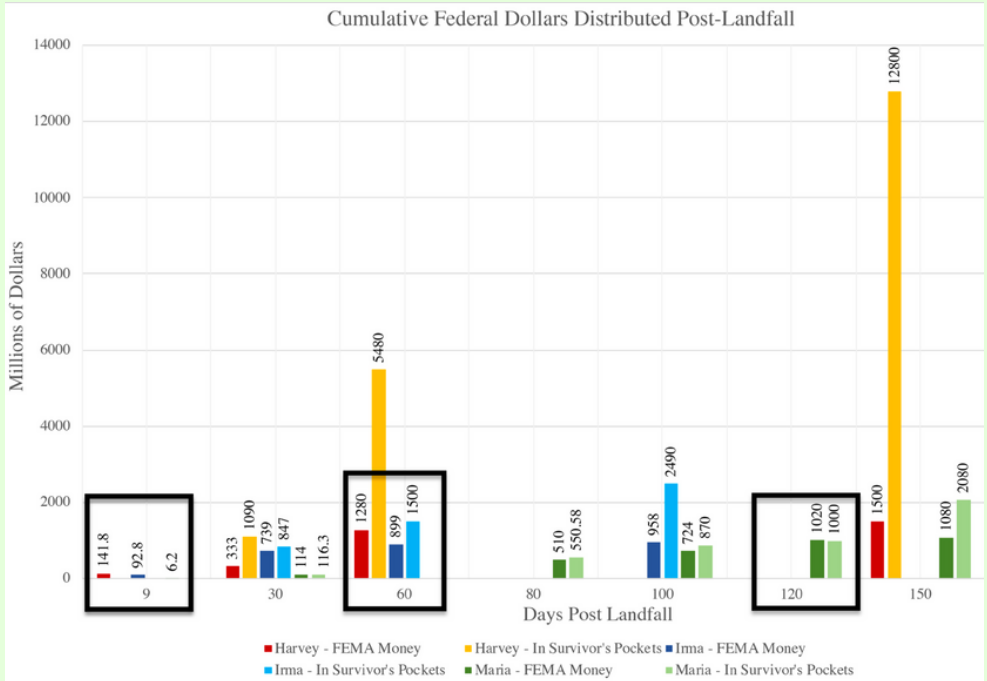
ENVIRONMENTAL RACISM

When practicing environmental justice, it is imperative to address environmental racism. Environmental racism is the systematic discrimination of people's health and well-being through inequitable public policy and decision-making (Pezzullo & Cox). It includes the disproportionate burden of environmental health hazards people of color face and their exclusion from public policy formation and decision-making. Environmental racism is inextricably tied to environmental justice because it feeds on systematic, institutional injustices. For this reason, it is inherent in Puerto Rico because colonization established systems of power that continue to disenfranchise historically marginalized communities.

To combat environmental racism in disaster prevention and relief, there need to be more opportunities for members of marginalized communities to engage in public policy-making and environmental health hazard burdens need to be equitably distributed. Furthermore, the continued colonial influences in the governmental framework for disaster efforts need to be addressed. Inequitable institutional structures perpetuate colonial influences and will continue to do so until they are decolonized and reformed equitably.

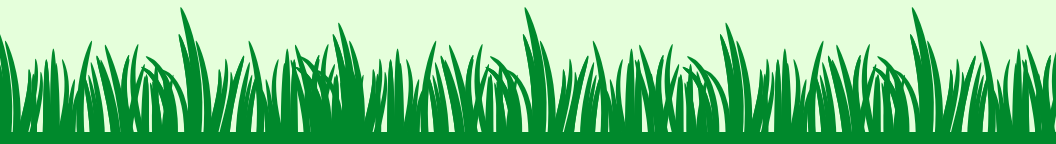


FEMA GRAPH

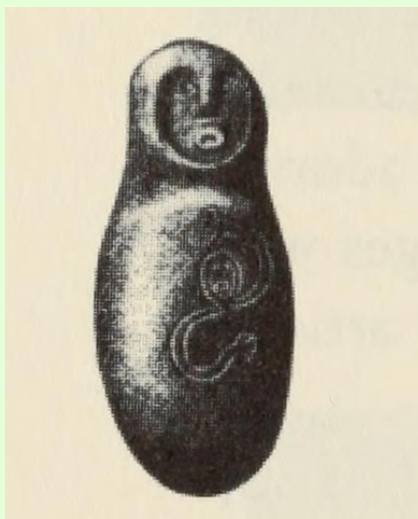


Willison et al., 2019

Although Hurricane Maria caused greater and wider spread destruction than Hurricanes Harvey and Irma, the federal disaster response was slower and smaller. Nine days post-disaster, Texas and Florida received about \$100 million in FEMA funding, but Puerto Rico only received \$6.2 million (Willison et al., 2019). It also took twice the time for Hurricane Maria survivors to receive \$1 billion as Hurricanes Harvey and Irma survivors (Willison et al., 2019). Though some variation in federal disaster response is normal, the significant differences at specific time points suggest that environmental racism was a contributing factor.

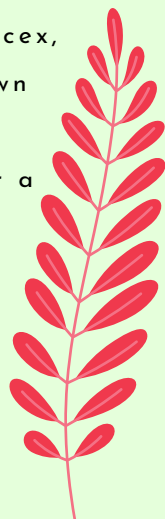


TAÍNO METEOROLOGY

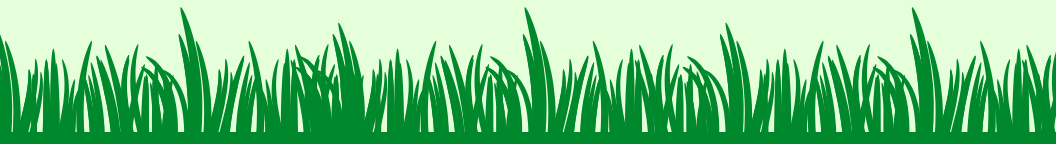


A stone effigy of Guabancex, a Taíno *zemi* (deity) known as the goddess of storms, with the Taíno symbol for a hurricane engraved on it

The Taínos: Rise & Decline of the People Who Greeted Columbus
by Irving Rouse



Taíno people understood and respected the power of hurricanes. They noted that a red sun, a strong smell from the sea, and a rapid change in wind direction were signs of an approaching hurricane (Schwartz, 2005). However, when Spain colonized Puerto Rico, they criminalized Taíno meteorology as witchcraft (Rivera, 2022). This unwittingly made them reliant on weather reports from neighboring islands (Schwartz, 2005). Under US colonization, meteorological data was withheld to coerce nearby Caribbean countries into allowing the US to establish weather stations in their countries (Rivera, 2022). The suppression of Taíno meteorology and withholding of data is a form of environmental racism that promotes poor disaster prevention, maintains colonial effects, and supports colonial control.



SELF-DETERMINATION & AUTOGESTIÓN

Critical to decolonizing disaster relief and shifting to self-determination is the concept of autogestión.

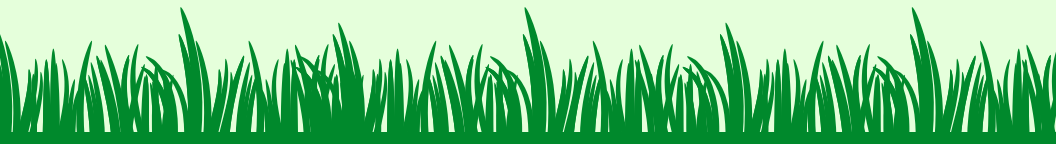
Autogestión is a form of self-management focusing on the actions of individuals and communities. Developed as a counter praxis to corruption and injustice under colonialism, autogestión is a socio-political movement that centers on individuals and affected communities taking control (Roque et al., 2021). To restructure disaster relief, two forms of autogestión are often used: radical transformative & neoliberal reactionary.



Radical transformative autogestión is a countermeasure to governmental violence that addresses decolonization and climate justice. It utilizes radical and decentralized resistance to protest unethical policies that harm the people and the land (Roque et al., 2021).



Neoliberal reactionary autogestión involves creating a more self-sufficient community due to the failure of governmental support. Organization, decision-making, and provision of services rest on the efforts of individuals and local organizations (Roque et al., 2021). This form of autogestión functions on self-sufficiency, social support, and generalized reciprocity.



QUEREMOS SOL

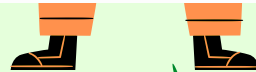
Queremos Sol is a coalitional network of organizations across Puerto Rico that advocates for environmental justice, energy justice, and sustainability using renewable resources. One of their main goals is to achieve 50% renewable energy generation by 2035 and 100% by 2050. To do this, they created an Energy Proposal that outlines their plan to move toward a more sustainable, resilient energy system, using a two-part energy transformation model: a technical transformation of the energy system and a governmental transformation of the Puerto Rico Electric Power Authority (PREPA).



Energy Transformation Model:

1. Focus on efficiency, conservation, and demand management
2. Use renewable distributed rooftop solar generation with storage, not industrial solar farms
3. Accelerate the elimination of fossil fuels
4. Change PREPA into a public entity

<https://www.queremos-solpr.com>

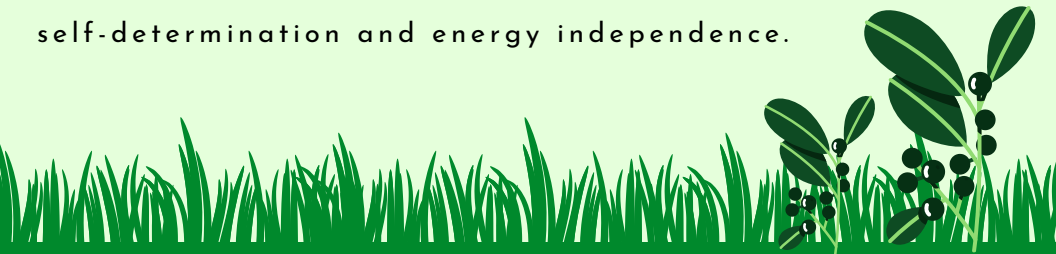


DISCUSSION

Disaster prevention and relief efforts in Puerto Rico are affected by continued colonial effects like an unreliable energy system, unequal distributions of burdens, institutionalized environmental racism, and reactionary neoliberalism. To equitably restructure disaster efforts, the framework needs to be decolonized and shift toward a future of self-determination and energy independence.

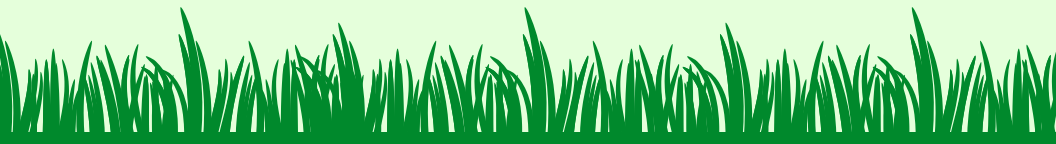
Utilizing principles of energy and environmental justice, disaster efforts should encourage community engagement and involve the most-affected, marginalized communities in public policy decisions. Additionally, community-centered, grassroots initiatives should be prioritized over privatization and government efforts. For example, the renewal of the LUMA Energy deal to privatize PREPA and rebuild the existing power grid (de Onís, 2021) should be discontinued in favor of distributed generation and reformation of PREPA as a public entity.

To get involved, people outside of the affected community like myself can learn more about colonialism's continued effects, support local organizations, amplify the voices of those affected, and endorse legislative actions to decolonize disaster efforts by moving toward self-determination and energy independence.



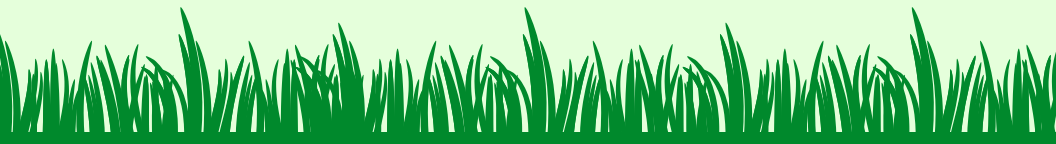
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CREATOR BIOGRAPHY

My name is Emily Kondo. I am a student at the Clark Honors College at the University of Oregon. I am pursuing a Psychology major and Ethnic Studies minor with an interest in the connections between mental health and social justice. In this zine, my goal is to address how the complex, systemic issues derived from Puerto Rico's colonial history impact disaster damage and recovery. I hope to create an informative project that can function as a resource for restructuring disaster prevention and relief efforts. I would like to gain a better understanding of how environmental racism impacts the Puerto Rican community. However, as I am arguing that disaster prevention and relief should be focused on community-centered, grassroots initiatives, I need to take a step back in my activism. My role is that of an academic outside of the affected community. In this zine, I make recommendations from resources I have gathered, but it isn't my place to take an active role in the restructuring process.

