









School of Geography and Sustainable Development Radical Urban Lab / University of St Andrews

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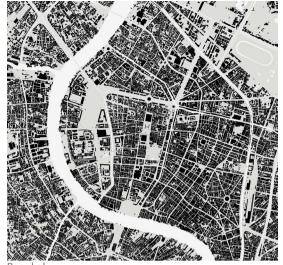
Sustainable Inclusive & Just CITIES

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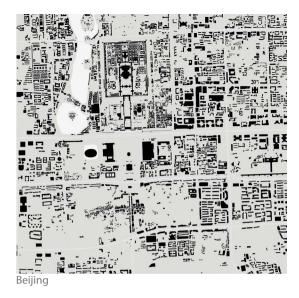




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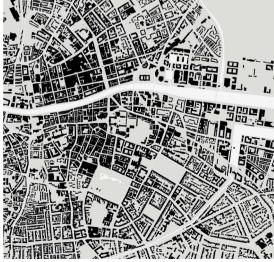


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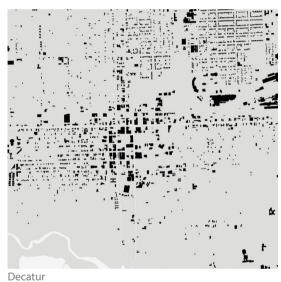


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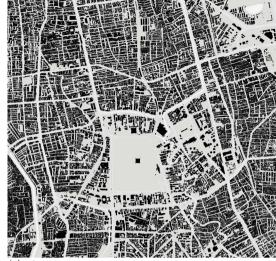


















Majuro

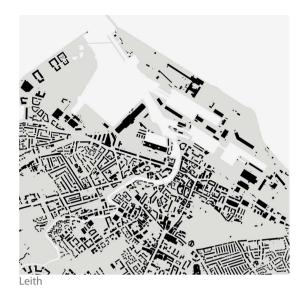


Manhattan



Niger Delta Region

Portsmouth













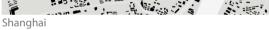
Pune













Stonington

INTRODUCTION: TOWARD SUSTAINABLE, INCLUSIVE AND JUST CITIES

Cities are, by their very nature, unsustainable, exclusive and unjust: they over-accumulate people and resources, they highlight and even exacerbate all the world's social ills... This, at least, if we were to take the mainstream narrative around them at face value: despite being the settlements that house an ever-increasing majority of the world's population, this narrative is profoundly anti-urban. And yet, if there is a chance to halt some of the most crucial challenges of our time, from climate change to social inclusion and justice, surely the economies and resources of scale that cities have mastered over the centuries will prove to be crucial: cities are the most tangible proof that we can live with more (of us) for less (of an environmental footprint, or social divides).

We started off our journey as a class in the fall of 2022, studying together some of the main principles and current ideas in urban studies. Most importantly, we augmented these theoretical takes with hands-on examples of communities the world over that are faced with challenges that stem from outside their locales – environmental degradation, political uncertainty, social injustice – and yet strive to find remedies and solutions within their communities. This ethos, of thinking locally in face of global problems, has transpired this collective volume in return. What follows in its pages is a collection of urban community challenges and recommendations for responses to global challenges. Each challenge and recommendation is written by a local expert – by which we mean, an author that has an excellent understanding, in most cases first-hand, of the city and the challenges they are grappling with; in that sense, they speak with, not to the community.

When we came together to plan out this volume, we quickly realised contributions fell under four broad themes: housing, infrastructure, environmental justice and social exclusion. Importantly, these four themes are complimentary to one another and – unsurprisingly – many could easily fall under more than one of these themes. Specifically:

Environmental Justice

It would make little sense to devote an entire volume on sustainable urban solutions without tackling the question of environmental justice.

Jakarta is infamously prone to flooding, due to its geographical location and as is often the case, the low-income communities are those to bear the brunt. Meanwhile, the disenfranchised communities are also the ones that face the bluntest of repercussions from solid waste dumping Majuro, Marshall Islands. In Beijing, the city's breathtaking growth has come with ensuing traffic challenges, and radical and innovative action is hereby needed as well – including zero-carbon parks. The bleak history of Chicago river's pollution is juxtaposed to the hearty tale of local NGO action in the region, once again showing how community-stemming action can tackle seemingly insurmountable challenges. In Portsmouth, New Hampshire, rising sea levels call for a community-focused resilience programme, while the phenomenal rise of e-cigarette usage in London brings to the fore questions of the environmental impact of these largely disposable items and the responsibility of communities to step in and tackle what is swiftly growing into a major issue.

What this wildly diverse set of contributions share is a fresh outlook toward environmental justice overall, and its urban expression in particular: questions of environmental degradation and threat, as discussed by our colleagues here, are of course inherently structural and international: climate change is meant to be blind to geographical borders and social divides – and yet as becomes evident in these contributions, it is most often the urban poor and disenfranchised that deal with its consequences. These contributions, finally, chime an optimistic note: contrary to the scholarly orthodoxy that environmental justice might require the great force of the state, these examples of communities in struggle around the world vividly show that change can indeed come, and be sustained, by much smaller actors and locally-focused activity and solutions.

Housing

Adequate housing as a basic human right is recognised by the United Nations. But why is it so? What is its significance? In its barest form, housing is a shelter, where one is protected from the elements, safe from strangers and the wilderness, and can attend to their most basic diurnal necessities: sleeping and eating. In these two criteria all dwellings meet, whether they be dugouts in Chinese re-education labour camps during the Cultural Revolution, the Balmoral Castle of the British royal family, favelas in the fringes of Rio de Janeiro, or modern penthouses overlooking the Central Park in New York City. Housing is important for without it, our very existence becomes vulnerable, if not downright threatened. Under such conditions, our survival instinct overwrites all other social and moral codes — leaving desperate people to do desperate things.

But is having a shelter enough? Is simply not living on the streets sufficient to leading a life of fulfilment? Or do we aspire for something more? Henri Lefebvre distinguishes between three spatial concepts: mental, social, and physical spaces. He points out that, mutually influenced by each other, these spaces are inextricably linked. There is no such thing as 'pure mental space' untouched by social relations and physical perceptions, nor can we understand physical space without drawing from its social and mental contexts. Thus, our surroundings — both immediate (house-home) and extended (city-home) — influence our mental and social spaces. Consequently, if we are to rise above mere sustenance, we need to turn our shelters into something that is conducive to self-fulfilment — into homes.

So, how is housing - a shelter - different from a home?

Home is a place that fosters a sense of belonging and community. Hence, the notion of a home can be — and indeed frequently is — extended to one's neighbourhood, town, country, or even continent, as opposed to the restrictive boundaries of a flat or a room. Home then starts where the search for necessities ends; it is a place for self-realisation that nurtures creativity, encourages culture-making, and fosters social interactions. This is true to both house-homes and city-homes, although with slightly different implications.

Now, how do we make our urban habitats homely? In other words, how do we get cities to do humans 'good'? To be inclusive and supportive, and not hostile and unwelcoming places engendering inequality and misery? Richard Sennett locates the solution in what he calls the 'open city' — an urban context that is a platform for interaction; an open system whose loose fit allows for creativity, and, most importantly, for opportunities. Because, he argues, having opportunities is the ineludible precondition to a thriving community. This resonates well with Fran Tonkiss' emphasis on cities' inherent need to provide contexts for forms of common life if they are going to be socially sustainable.

Each of the briefings within this section speak to the injustices heightened by housing insecurities and poor urban management: community health and wellbeing, population crises, physical displacement, and social inclusion. It is ultimately the restriction of opportunities that the ensuing community briefings tell of and propose remedies to.

Beginning at home: two briefings explore how housing issues in St Andrews have contributed to conflict between student bodies and the local authorities, as well as the impact that poor management on the University's part has resulted in the ongoing shortages and resultant deterioration in student well-being and academic performance.

Other briefings detail the evolving demographic changes in cities, such as the racial undertones in area zoning in San Francisco, California and Columbus, Ohio. San Francisco's substance abuse problems are especially prevalent amongst the city's homeless population, and the briefing explores how the opioid crisis has been handled within communities there. The homeless crisis of Colombus has been framed through a lens of social activism, the briefing describing the ongoing efforts within the city to provide housing but also to challenge the authorities responsible for the shortages.

The city of Stonington on Maine's Deer Isle adds a perspective on the thriving lobster industry, in juxtaposition to the city's declining population and loss of cultural participation. In the case of Dublin, Ireland's response to the nation's population boom is discussed, offering perspective on how a primate city in Western Europe responds to climate change, incoming populations, and unprecedented challenges on existing infrastructure.

Seattle, Washington is explored for how the issue of housing shortages has contributed to a wider conversation regarding social justice and inclusion. Seattle's Central District Neighbourhood, the city's historic home for a substantial proportion of the African American population, faces gentrification – the briefing discusses how this concept links to housing and how this has adversely impacted minority communities. Manhattanville, in New York City, the discourse surrounding gentrification continues. This briefing explores the displacement of the local community as a result of expansion into the area by Columbia University, as well as highlighting the divergence between the pledges of the institution

made to the community and their eventual actions. The briefing on Crystal City, Virginia also discusses community displacement due to the gentrification, which in this case, are inflicted by a new Amazon Hub there. The deliberate gentrification of the neighbourhood shifts the socio-econommic dynamic present within the community, further marginalising the already vulnerable citizens.

All of the briefings are thematically based around housing yet like the rest of the book, are diverse in their location and scale. However, they are united by their description of community activism in the face of these urban sustainability issues, as well as through their recommendations for future action. We invite the reader to consider both their own personal relationship with the concept of home and ask themselves the same questions posed in this section and, while learning about examples of community engagement schemes to combat housing shortages and rough housing, their ability to participate in efforts in their own communities. Crucially, regardless of these schemes, housing shortages in cities will continue unless the right pressure is put on local officials and national governments to address the conditions that allow these issues to thrive. For without increased awareness and community action, change is unattainable.

Infrastructure

There has been a longstanding, rich, and motley discussion on the definition of infrastructure that has characterised a fluid and conceptual understanding of the term. For the purpose of this section, infrastructure is defined as 'the physical components of interrelated systems providing commodities and services essential to enable, sustain, or enhance societal living conditions' (Fulmer, 2009, p.32). Infrastructure can therefore take on many forms. It can be both mundane or revolutionary, visible or invisible; infrastructure can serve both the 'esoteric and necessity of the human condition' (Steele and Legacy, 2017, p.1). In the context of this section, we will be specifically looking at how infrastructure projects manifest in the urban and the unique challenges and opportunities that arise in that socio-spatial circumstance in return.

So, what does this mean as we continue through the 21st century and the unique and complex challenges that are continuing to arise and shape the way we need to reconstruct our global outlook and behaviour? In answer to the growing call for sustainable development, scholars have looked towards how urban infrastructure can be realised as sustainable urban infrastructure (SUI) (Ferrer, Thomé and Scavarda, 2018). In literature, SUI was predominantly concerned with themes including climate change, developing countries, environmental impacts, life cycle, urban areas, maintenance, decision making, and vulnerability which tends to hone in on the scientific and environmental - or "greening" - advancement opportunities for urban infrastructure (Ferrer, Thomé and Scavarda, 2018). This section aims to expand our understandings of infrastructure beyond the technical by investigating how projects impact the communities they exist in through the application of a series of case studies. Through the briefings, topics are covered from soil sealing in Munich to traffic density in Bangkok, and from water access in Enugu State to urban blight in Detroit. Our contributors further look at controversial infrastructure project proposals on an environmentally hazardous site in Minneapolis, development along the Mula-Mutha riverbank in Prue, or pipeline construction through the Brooklyn borough of New York City. These case studies begin to demonstrate the vast array of infrastructure projects and the urban contexts they exist in; even expanding the boundaries of the city and how they

interact and rely on their surrounding areas to function.

When looking at infrastructure in the urban, common themes around disenfranchisement and injustice arise. Infrastructure developments by default occur from the top down, being directed and funded, often either by governments or through large scale public/private partnerships (Steele and Legacy, 2017). As Steele and Legacy explain, infrastructure shapes the physical, environmental, social, and political landscape of our cities, and its impact is not evenly distributed across a metropolitan area but instead may affect parts of the city differently, which could result in the varied patterns of socio-spatial inequity (2017). The briefings explore how this top-down approach can foster disconnect that impacts local communities the most. In instances of state led infrastructure projects, communities are often disenfranchised. Therefore, 'whilst infrastructure can change urban landscapes, it is also shaped by and through the forces that act upon it' (Steele and Legacy, 2017, p.1). This can be understood as an issue of injustice in the built environment. Infrastructure is a direct arm of the state in local communities, and it changes the built environment which exerts agency over the communities it affects.

Infrastructure is therefore the indelible fingerprint of the urban built environment. When looking towards the future, infrastructure projects can aim to fit the following broader ontological understandings. First, infrastructure can be a force that inspires and empowers. Infrastructure is shaped by the powers of force in an urban environment while also shaping the environment itself. This relational feedback loop can be understood and refined to develop infrastructure that empowers communities and improve the environmental and living conditions of a community to inspire sustainable futurities. Additionally, and of predominant importance, infrastructure projects should be underpinned by an understanding that communities and community members should have self-determination over shaping the environment they exist in. Self-determination, in this context, refers to a conscious agency that entrusts community members to take an active role in shaping their built environment through both institutional and grassroots methods. The partnership, therefore, between community members and municipal leadership is critical and must be infused with strong foundational tenants of justice, inclusion, and equity. However, these ideals are easily circumvented by inaction, bland symbolism, and empty rhetoric. Therefore, there exists a spectrum of empowerment and inclusion that must begin at the consultation phase and extend through the monitoring of an infrastructure project until the eventual ownership transfer to the community. Under this ideological framework, preference towards regenerative and "green infrastructure" is given as having SUI is imperative to the building of thriving, just, and resilient urban networks.

What is key to acknowledge is that these understandings are informed by the status of infrastructure, while predominantly structures of concrete and steel, as not static but instead potentially mutable yet vital arteries and organs of the urban anatomy. This status – and therefore the extent and efficacy of justly designed and implemented infrastructure – is informed by understandings of power and scale. Infrastructure is a manifestation of power, and often power imbalance between state actors or interests and the livelihoods and health of communities. Therefore, when examining the impact of an infrastructure project on the surrounding community, it is shaped by the power imbalances and histories of power that characterise the neighbourhoods, communities/community members, vulnerable population groups, and environmental indicators within the municipality. However, what

is critical to call into mind here is that this also is impacted out over both temporal and spatial scales. Infrastructure projects span decades, and their impacts – particularly to the environment – beyond. Short cuts and corruption have proven to have disastrous impacts on urban environments (Roy and Edwards, 2019). Over longer timescales, the mutability of the city's shape takes a distinctly hegemonic tone. What is being explored across this section is the way the impacts of infrastructure projects are manifesting in communities across various case study cities in the here and now. Therefore, the aim of this section is to investigate the impact on and the disenfranchisement of communities in the pursuit of large-scale, top-down infrastructure investment. Hopefully, highlighting the community in these briefings begins to demonstrate the challenges of developing just, inclusive, and sustainable cities in the ubiquitous context of infrastructure.

Social exclusion

When deciding on this section, we were ambivalent on whether it should be called social exclusion or social inclusion – and this ambivalence somehow demonstrates, in the best possible way, that cities are the ultimate site where social cohesion can be both tested but also enhanced; that whether it becomes exclusion or inclusion lies on the particular dynamics formed by government policy and practice as well as the community responses from below. This rings true from reducing food insecurity in Glasgow and urban hunger in Prague, especially amidst a cost-of-living crisis, to reducing child poverty in Dundee or tackling social exclusion in the ever-gentrifying port of Leith, mental health crisis in London, well-being inequalities in Shanghai, the urban population decline in the case of Decatur, Illinois, the impact of environmental degradation upon the lower-income residents of the Niger-Delta region, and all the way to the challenge of forming a more urban environment for BIPOC and LGBTQ+ populations in Boston.

Once again, what this fantastically diverse set of contributions shares is a strong belief in community action that can, at its best, help tackle long-established and well-engrained patterns of systemic inequality and injustice. Our social exclusion contributors show that no topic is too big and no challenge is too established for local communities to take it up as a challenge and attempt to resolve it; that there is no pattern or history of social exclusion that cannot become, with patience and genuinely grassroots work, a wonderful opportunity for action toward social inclusion instead.

This last sentiment is one that is shared across the volume as a whole: we genuinely believe that community action can, in its persistent and long-term form, help alleviate and even change the course of long-term system issues. We hope that you enjoy reading through these community responses in this volume. Most importantly, we hope that they serve as inspiration and as a further spark for discussion and for action toward a more sustainable, inclusive and just urban future.

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The Environmental Issues Caused by Traffic Problems in Beijing, China

Mingyu Xu



INTRODUCTION

China has rapidly developed over the past few decades, as seen through the construction of new multi-storied buildings and multi-laned road networks. As a Chinese resident since 2002, it is not to say that I have witnessed the rise and fall, but rather a 'new' China. In this briefing for Beijing, China, traffic problems and related environmental problems have been raised and analysed. Further analysis of the relevant policies and actions are mentioned, and several suggestions are made to help the community progress and solve these issues. This briefing aims to delve into these issues that the community has been studying for a long time; critically analysing the several proposed governmental policies and the reasons for their little progress. The briefing concludes by recommending actions that both the government and the community can take to address such issues.

INTRODUCTION OF BEIJING AS THE CAPITAL OF CHINA

Within China, there are many megacities – cities with more than 10 million people. Beijing, the capital of China, is one of these megacities which has been chosen as a focal point for this briefing. Beijing is not only a modern metropolis, but it also retains many ancient architectural buildings. It is changing and developing rapidly every year. Different from years ago when most people relied on walking or rickshaw, it now has all the basic infrastructures, it has complex roads systems, countless commercial office buildings, shopping malls and schools are all over the place, convenient transportation like the underground, Bus Rapid Transit (BRT), shared vehicles, and so on. As of 2022, the population of Beijing is more than 21 million – more than twice the population of London. As a megacity, there are many sustainable-related problems; however, this briefing focuses specifically on transportation issues and the resulting environmental degradation within Beijing.

Among the world, there are numerous cites suffering from the high carbon emission problems, for instance, Seoul, South Korea, New York City, U.S., Tokyo, Japan and so on (Friedman, 2019). As most people know, the transportation problem has been one of the most severe and prolonged problems in Beijing. During the past few years, thousands of

news outlets have reported on how serious the transportation problem is within Beijing and the severity of the resulting environmental effects. Recently, the government has proposed several policies to address these issues. However, only slight progress has been made. Transport is an indispensable system that runs through the entire city daily; people need to go to work or school, shopping or travel. What's more, of all the carbon emissions around the world, about 25% of the carbon emissions are from transportation (The IEA, 2021). As a result, solving these problems has become urgent for the community.

THE CHALLENGES THIS COMMUNITY IS FACING

Traffic problems

Before delving into the serious environmental issues that Beijing is currently facing, from my point of view, it is important to analyse one of the causes of that first, which is the traffic problem. As a well-developed city in China, Beijing has a variety of transportation choices, but because of the massive population, the transport is consistently too crowded during peak hours. Research in 2013 by Beijing Municipal Transport Commission showed an average traffic jam of 2 hours per weekday (The Central People's Government of the People's Republic of China, 2014). Beyond peak hours, streets around substantial shopping malls and schools have also been found to be busy. One of the reasons causing traffic jams is because of the increment in sales of private cars. According to a recent report, the sales of private cars in Beijing are thriving, and the sales were already over three million units in 2016 in Beijing according to data (CEIC, 2021). One possible reason for the growing sales in bigger cities like Beijing is that the economic growth is faster than in small towns. Hence, people have more disposable incomes to purchase household essentials like cars (The World Bank, 2018).

Another cause of that might be the increasing population. More people move from surrounding minor cities to this community as they see Beijing as a city with more opportunities to gain more money to support families. From the data collected by the Beijing Municipal Bureau of Statistics (Beijing Municipal Bureau of Statistics Survey Office of the National Bureau of Statistics in Beijing, 2022), the migrant population was about eight million, accounting for 38% of the permanent resident population.

Traffic problems will lead to environmental issues like excess carbon emissions, which will cause climate change. While transportation occupies nearly quarter of the total global carbon emission, it is crucial to focus on reducing the carbon emissions in vehicles while dealing with global issues like climate change.

The resulting environmental issues

As more private cars exist, more vehicle emissions are exhausted, which causes greenhouse gas emissions, furthering the effects of climate change. Once greenhouse gases exceed atmospheric standards, it will cause the greenhouse effect, which is expressed as a rise in the global temperature. Under the influence of this, it is more likely to cause bushfires and glacier melting and so on. On July 18th, 2019, in the states of New South Welsh in Australia, a huge fire has been burning for 210 days. It was partially caused by human-induced global warming. Scientists from the Britain indicated that if the global temperature keeps raising, till the increment reaches 3 degrees Celsius, the fire in Australia will be the new norm

(McGrath, 2020). According to several research, it has been indicated that the air quality of numerous cities in China is the worst worldwide, that by 2010, 40% of premature deaths in China were caused by poor air quality (Lim et al., 2012).

In the 1990s, Beijing was included in the list of the world's top 10 most polluted cities (Hao & Wang, 2005). In 2018 in China, more than 13,000 million tonnes of greenhouse gas were emitted (UNEP, 2021), which had the most prominent increment among all countries since 1990. One of the indications of this is the severe haze problem. In Beijing, the haze situation is particularly tough, and the seriousness of it is evident in every photograph taken in Beijing. In times of heavier haze, the PM2.5 index is relatively high, harming public health. Studies have shown that traffic-related PM2.5 causes premature mortality and respiratory diseases, which puts the health of citizens at a high-risk level and causes many deaths (Tong et al., 2020). Therefore, the air quality in Beijing is a cause of concern, especially during the 2008 Summer Olympics and the 2022 Winter Olympics, where the international public reviewed the air pollution. The air quality in Beijing then becomes the representation of China.

Environmental justice issues

The environment contamination will cause further negative effects on environmental justice. Research found that within the disadvantaged and the poor group, especially the elderlies and migrants, they are facing more risks (Chen, Chen, and Landry, 2013; Zhao, Zhang and Fan, 2014). People live near main roads and richer regions are more likely to cause diseases because of more car ownerships and higher commuting rate (Ma et al., 2017).

WHAT HAS BEEN DONE

It is good to see that several policies have already been made by the government to deal with these sorts of issues.

In solving traffic challenges, a new traffic management policy called limited tail number policy was made to limit the number of cars during peak hours on workdays. The policy is set depending on the last number of the license plate number. To be more specific, different numbers are given on different working days, for instance, on Mondays from 3rd October 2022 to 1st January 2023, only vehicles with the last number 1 and 6 are allowed to travel.

While solving the related environmental issues, several goals have been set out. In September 2020, carbon neutrality and the peak carbon dioxide emissions were introduced to the community. Carbon neutrality refers to the total amount of carbon dioxide or greenhouse gas emissions produced by a country, enterprise, product, activity or individual over a certain period, which is offset through reforestation, energy conservation and emission reduction, thus achieving relatively zero emissions at last (IPCC, 2018). The Chinese government aims to reach carbon neutralisation by 2060. Beijing, as the host city of the Olympic Winter Games 2022, sought to make the Games carbon neutral; thus setting out a carbon management report. In this report, they stated several ways in which the Games will be carbon neutral. Firstly, as a city that previously held the Summer Olympic Games, many of the venues they built before could be reused and reconstructed for this Winter Olympic Games, such as the Bird's Nests and the Water Cube.

Moreover, the transport they use during the Games was green and low-carbon. Travel among the three central regions where the Games occur has been reduced from three hours to less than an hour due to the new transportation facilities: the interconnected high-speed railway and the highway (International Olympic Committee, 2022). To offset the emissions, nearly fifty thousand hectares of forests have been planted by Beijing since 2014 (International Olympic Committee, 2022).

The peak carbon dioxide emission is when CO2 emissions reach a peak and cease and then gradually fall back. The Chinese government also promises to peak carbon dioxide emissions by 2030. Together with carbon neutrality, they are called Double Carbon. To achieve these by the stated year, the carbon trading market was introduced to the community; in this market, corporations are given a fixed amount of carbon emissions, and some companies that need fewer carbon emissions can sell their share to companies that need more carbon emissions.

Another method is the promotion of the usage of electric cars. The government provides more than ten thousand yuan in subsidies to private drivers who purchase new energy cars by the end of 2022 to boost consumption and try to reduce carbon emissions. Surprisingly, the offerings are extended to 2030 (Interesse, G., 2022). Because of these welfares, the sales of electric vehicles increased during these years, such that in 2021, the sales reached 3.52 million units based on the China Association of Automobile Manufacturers, sales of electric vehicles in China will increase by 47 percent to five million by 2022 (Interesse, G., 2022). Charging piles are available everywhere in almost every car park; drivers can also install their charging spot in the garage for more convenient use. Even some of the old classic taxis are transforming into new electric vehicles.

The community has thought of further ways of reducing vehicle exhaust, thus the shared transport service was introduced. Shared bicycles are one of the services that are most commonly used. To use a shared bicycle, people just need to find the roadside bicycle piles and scan the QR code; they then gain access to borrow a bike. There are many advantages of using this service. For instance, riding bikes is already a method of green commuting, and by borrowing bikes, people don't even have to buy them, which saves more money. Similar to shared bikes, carpooling is a further solution; in this service, the drivers are typically commuters instead of fixed full-time drivers; they can choose to pick up customers on their way to work to give them a ride. Under this method, time and expenses for both driver and the customers are reduced, as well as the traffic jam and the air pollution (Asian Development Bank, 2018). With the development of technology, car sharing service is also being used. People who don't have cars or don't want to drive their cars can borrow shared vehicles just like the shared bikes; because these cars are all new energy vehicles, this approach is less carbon intensive.

Furthermore, special bicycle lanes have been built across the city. Compared to bike lanes in other cities across China, the bike lanes in Beijing are more expansive, which allows riders to ride more safely. The first bicycle-only lane in Beijing was 6.5 kilometres long (China Daily, 2019) and has been used widely since first being used; it gives bicycle riders a better experience of riding and assurance of safety, which could attract more people to start travelling by bike.

WHAT THEY'VE FAILED TO DO

The government has set many policies or goals to deal with the transportation problem and the related environmental problems; however, very little progress has been made. Even through green commuting methods have been suggested, the streets remain overcrowded with drivers frequently driving through red lights to avoid further delays. This makes cycling on the road dangerous because of its lower comparative speed. The streets are still very complex, and the passenger flow control is relatively poor at metro or bus stations.

Reading through the news, it is not hard to find that most of the progress is made during special gatherings or important meetings like the 13th Five-Year Plan and the annual plenary sessions, making it a symbolic presentation of results to the general public and national leaders showing they have made some progress on the issues, however, all of that progress will stop or retract as soon as the conferences are over.

There are drawbacks to the tail number limiting policy above. During the 2008 Summer Olympics, this policy was adopted, and the traffic congestion has eased somewhat; however, as the number of small cars continues to increase, the effect of the restriction policy is becoming less and less. Therefore, the tail number restriction policy only alleviates traffic congestion in the short term. Due to the demand for travel and the improvement of people's living standards, some car owners have started to buy a second private car to meet the travel demand when the first car is restricted (Felix, C., 2009). \

SUGGESTIONS

Although most of the traffic problems still must be intervened and implemented by the government, they still need the coordination and cooperation of the community. In addressing the congestion during rush hours, government actions are essential. Since the complex roads are one of the reasons causing congestion, a better and more rational road construction plan should be proposed by the urban construction authorities. Moreover, since the tail number limiting method can only work for a short period, a program that works for a more extended period needs to be presented, for instance, limiting the number of non-new energy cars each could purchase. Moreover, the current condition in Beijing is that most of the recreational areas, workplaces or well-developed facilities are concentrated in the very centre part; for those who live away from the centre to receive better life quality, they need to travel to the centre. However, this creates enormous traffic pressure on the centre part, to ease this pressure, another economic centre should be built for those people to reduce the stress.

One of the best ways to help the community deal with these issues is to learn from other communities. In a global context, a new concept of urban planning schemes emerges. It is to build zero-carbon communities. Zero-carbon communities are those communities aiming to develop a low-carbon economy, using innovative low-carbon technologies and making changes in lifestyle in urban communities to minimise greenhouse gas emissions in the city, to move away from the previous mode of mass production, mass consumption and mass waste, to form a material cycle system with optimised structure, recycling, energy efficiency and a healthy, economical and low carbon lifestyle and consumption pattern, and ultimately

to achieve several indicators such as zero energy consumption, and zero emissions in urban communities, and to reach clean, efficient and sustainable development in urban communities. There are already several low-carbon communities worldwide, and the BedZED in Hackbridge, London, is one of those. And it is the first huge community that is aiming for this. Looking at those already existing carbon-zero communities, it is not hard to gain some experience from them. Building a zero-carbon community helps promote the concept of low-carbon commuting; inside this community, it is just like a smaller version of the city; it has all kinds of shops that people need, and they limit the usage of cars by limiting the car parking space so that most residents choose to walk or cycle. Additionally, several job opportunities are offered in the community, and residents could walk to work to reduce traffic volume; it also has an excellent public transport network and provides free charging stations for electric vehicles. The community should actively develop and create zero-carbon community projects into action. However, it cannot be done only by the community itself; funds and sources are still problems that need intervention from the local government. Nevertheless, zero carbon may become a significant trend in the future. The zero-carbon community might not be suitable to be adopted by every community, for Beijing, there are some that can be adopted, and some are needed to be discarded. As a large-scale community burst with several districts, it is more feasible for Beijing to form a regionalized system while planning and managing. The zero-carbon community plan could be first built in the central part of the community, then gradually spread to the surrounding area to achieve continuous expansion.

Not only the zero-carbon community, but also the zero-carbon park is worth promoting. The idea of building zero-carbon parks is to use environmental protection technology and combines local characteristics to let people experience low-carbon life personally. In China, many areas have successfully established zero-carbon and low-carbon parks. They use solar energy to generate electricity, and some parks have planted countless green plants. Doing so can not only implement zero-carbon action, but also improve the quality of all the people in Beijing.

Rather than at a community level, citizens' actions are equally crucial. Citizens have the responsibility to reduce their carbon footprint. Some program developers have designed a mini app in WeChat where citizens can calculate the carbon footprint they create in a day, including what they eat, what they buy and so on; by doing so, people can have a clearer mind of the actual amount of each human activity will produce. In this way, the carbon footprint produced personally could be reduced effectively. However, the calculation tool still needs enhancements and should be advertised to more people to start using it to record their daily carbon footprint in the community. The community should also encourage green commuting to reduce personal carbon footprint and relieve traffic congestion. Cycling is one of those low-carbon commuting methods, especially during the covid pandemic; when people lack exercise, cycling is an excellent opportunity to get fitness and avoid the risk of catching the virus. Moreover, for industries, they should be advised and reduce factory carbon emissions consciously and strengthen the study of carbon emission reduction technology.

If possible, try to avoid travel during peak hours, especially during special holidays, when there will be a sharp increase in traffic in and out of Beijing, people should be suggested to travel before or after the rush hours to enjoy a faster journey.

CONCLUSION

Beijing's transport problems are severe and need to be taken seriously, not only in terms of transport but also in terms of environmental issues. Although the government has made many efforts to address these issues, such as launching policies like limiting the number of cars during weekdays using the 'tail number' method and setting development targets like achieving peak carbon dioxide emission by 2030 and reaching carbon neutrality by 2060, holding carbon neutral Olympic Games, providing subsidies and other facilities like charging machines to promote the sales of new energy vehicles, proposing carpooling services to save time and money for both passengers and the drivers and also reduce carbon emissions, shared vehicles like shared bicycles and shared cars are used by an increasing number of people and building more infrastructure like wider bicycle-only lanes. Nevertheless, these are still not enough, and gaps do exist. Many of these are far from being followed up by action. All these cannot be solved only by the community itself; support is needed from the government and the citizens. For the government, more improved road and city layout planning should be rethought. For the community, zero-carbon and urbantype communities can be established. Moreover, parks operated with low-carbon energy are also introduced. While for the citizens to reduce personal carbon emissions, a carbon footprint calculator and green commuting could be promoted. Not only the citizens should act, actions by local enterprises are also important. Carbon emission reduction technologies should be learnt and enhanced. Only with the concerted efforts of the whole community can this environmental problem be completely solved.

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Coastal Resilience: A community action plan for coastal resilience in Portsmouth, New Hampshire

Connor Durkin



AN OPEN LETTER TO PORTSMOUTH RESIDENTS

Dear inhabitants of Portsmouth,

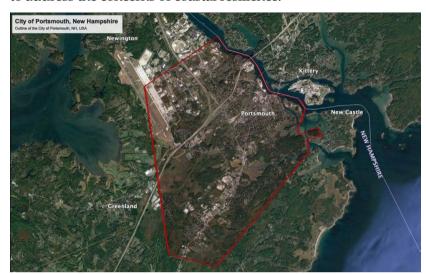
This community report aims to equip you (the community) with the tools necessary to implement your vision of coastal resilience to preserve the historic city of Portsmouth. This report encompasses feasible recommendations developed through academic research, interviews with local governmental representatives, case studies from around the globe, and conversations with neighbours and classmates. This briefing intends to offer recommendations to ensure that Portsmouth stands the test of time in the fight against rising sea levels and coastal storms.

INTRODUCTION

Coastal communities are particularly vulnerable to climate- and weather-related hazards, erosion, subsidence, inundation, and sea-level rise. The city of Portsmouth, New Hampshire, is no exception. In this report, sea-level rise (SLR) refers to the combination of climate-induced effects of rising sea levels – intensified storm surges, frequent cyclones, and extreme flooding events (Saleem Khan et al., 2020). SLR affects communities of different temporal and spatial scales, where threats vary from imminent and extensive to ones that are distant and isolated. Currently, the city of Portsmouth focuses on the traditional understanding of sustainable cities regarding scientific and technological advances and policy-dominated approaches (Williams, 2009). Current municipal policy focuses on top-down approaches, relying heavily on strong governance, intending to address SLR and coastal resilience through reactive and resistant approaches. Research suggests that this is not enough, and instead, to focus on proactive and adaptive methods and the integration of the social dimension.

Coastal resilience, in many cases, can be related to a community's social, regional, political, institutional, and ecological factors (Haque et al., 2016). Viewing resilience beyond the lens of physical infrastructure engages with a new dimension of climate change adaptation and offers insight into new innovative approaches. Relying on themes of Critical Urban Theory, this

briefing aims to provide an alternative approach to accompany the city's sustainability plan through social change. Critical Urban Theory simultaneously critiques ideology and power, inequality, injustice, and exploitation within cities (Brenner, 2012). Within this briefing, the critical urban theory is used to facilitate the already momentous paradigm shift, shifting risk mitigation and prevention policy towards community-based resilience approaches (Hung et al., 2018). The briefing recommends community-based action (CBA) to educate and bring awareness to SLR, develop urban blue spaces, build social networks, and initiate community partnerships to address the concerns of coastal resilience.



Arial view of Portsmouth, NH (Source: Google Earth Pro)

BACKGROUND

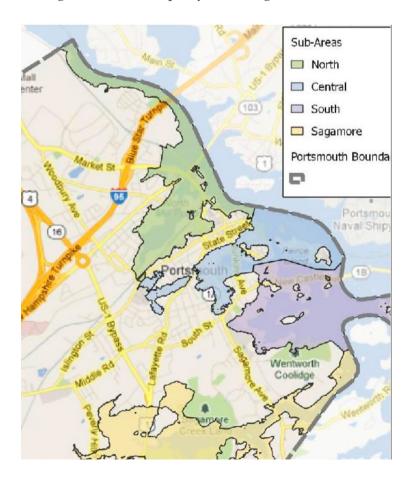
Portsmouth, NH, is a coastal city in southern New Hampshire, as seen in figure 1. Portsmouth is the only city within Rockingham County and is home to 22,277 inhabitants (United States Census Bureau, 2022). The city forms a natural border to the neighbouring state of Maine via the Piscataqua river, a tidal river that connects the Great Bay to the Atlantic Ocean. The city has a lively waterfront comprising the state's only deep-water seaport and many historic buildings, home to various shops, restaurants, and residential units. Portsmouth is fortunate to have Prescott Park. This riverfront park was given to the city in the mid-1900s to facilitate community interaction and has been the catalyst for the Prescott Park Music and Arts Festival, a non-profit organisation dedicated to organising a free summer music and art series (City of Portsmouth, 2017). Adjacent to Prescott Park is the Strawberry Banke Museum, a living museum comprising colonial homes of Portsmouth's first settlers from 1653. The riverfront of Portsmouth is situated on a filled-in tidal marsh leaving the city susceptible to SLR.

Currently, the city is facing high levels of flooding due to the vulnerability of the city's low-lying coastal area, seen in figure 2 and again in Appendix A in more detail. These maps highlight the vulnerability of public and private infrastructure within the flood zone, including Prescott Park, the Historical South End, the city centre (shops, restaurants, etc.), the Strawberry Bank Museum, and the Portsmouth Middle School. Portsmouth experiences multiple forms of flooding: coastal and surface flooding, subsurface flooding, combined sewer overflow, and flooding from storm surges. The flooding poses a threat not only

physically and economically but also to the integrity of the community. The City of Portsmouth and its community need to bring awareness to the severity of SLR and become vigilant in the coastal resilience initiatives by engaging community stakeholders to become physically and socially resilient.

POLICY

Within the past decade, the city has published three documents detailing the policy and infrastructure the city intends to carry out to adapt to changing coastal conditions. The city's plans followed in response to the increased funding allocated to coastal communities in the aftermath of Hurricane Sandy in 2012 (City of Portsmouth, 2013). The Coastal Resilience Initiative: Climate Change Vulnerability Assessment and Adaptation Plan (2013), a result of the funding, discuss adaptation strategies in three categories: protection, accommodation, and retreat. All three adaption categories rely on the construction of hardened, engineered structures, starting with the construction of seawalls, and concluding with the elevation of roads and bridges, expressing the potential for property abandonment. In February 2017, the City of Portsmouth published The Portsmouth 2025 Master Plan, comprising five central themes: vibrant, authentic, diverse, connected, and resilient (City of Portsmouth, NH Planning Department, 2017). The five themes encompass the city's ambitions and incorporate actionable steps the city can take to represent the themes throughout the municipality. Focusing on the theme of resilience, the city set out goals and



Map of the flood zones of Portsmouth

practical steps for coastal adaptation, natural resource management, and environmental preservation. While the policy incorporated the construction of physical infrastructure comprising seawalls, floodgates, and stormwater pump systems, it failed to mention the social dynamic of resilience. The following year, the city of Portsmouth (2018) published a report titled Preparing Portsmouth's Historic District for Sea Level Rise. The report consisted of updating the historic district register and detailing the vulnerability of landmark foundations and septic tanks to the rising water table. For the first time, the report outlined adaptation measures at the household level and the cost analysis per square foot of dry and wet floodproofing.

The policy of coastal resilience, while progressively engaging in actions within the social dimension of resilience, the governmental policy lacks the instruments necessary to implement social attributes of resilience and instead focuses on the physical. Approaches outlined in the policy documents are insistent on reactive and resistant approaches and fail to address the underlying causes. To accompany the current municipality policy, community action recommendations have been set out in the following section to further awareness within the community and to devise proactive and adaptable approaches to coastal resilience.

COMMUNITY RECOMMENDATIONS

These recommendations aim to provide possible ways to address coastal resilience issues through community-based action and are intended to accompany pre-existing government policy.

Traditional' top-down,' policy-dominated approaches have permeated Western governance's mentality, models, determination, and analyses. This method approaches sustainability issues as problems that can only be solved through strong policy and government intervention. While government intervention can play an important role at times, there are many ways in which the community of Portsmouth can help facilitate coastal resilience in the absence of government. I suggest community-based action (CBA), a community-led process based on an individual community's needs, priorities, knowledge, and capacity (Saleem Khan et al., 2020), to further coastal resilience throughout the city. Principles derived from Arnstein's (1969) ladder of citizen participation help model an understanding of how the degree of citizen participation in government can affect public perceptions of legitimacy, authority, and good governance. Community engagement must be markedly strong as climate change is experienced at the local level.

Awareness and Education

Capacity building, referring to the practice of enhancing the strengths and attributes of, and resources available to a community to respond to change, has been regarded as a critical element in the ongoing effort to improve responses to climate change at the local, urban, and national levels (Saleem Khan et al., 2020). It is suggested that education and awareness of the SLR is the first step to building capacity within the city. Raising awareness includes establishing an overview of SLR, communicating its risk, and building capacity through education.

At present, the State of New Hampshire Board of Education fails to incorporate any form of

climate science into the public-school education curriculum (2022). It has been found that individuals with higher education were found to be more likely to adopt implementation measures (Koerth et al., 2016). In partnership with the Parent Teacher Association (PTA), I suggest that the community pushes for climate science and SLR to be taught within schools. Educating the younger generation will encourage dialogue between children and parents, indirectly informing a generation of community members. Currently, through Portsmouth High School, the Portsmouth High School Environmental Change Organisation (PHS ECO club) supplements the education curriculum. It provides insight into sustainability and climate change science for the high school-aged population of the city. The PHS ECO club is an avenue for younger community members to engage with sustainability issues. Over fifty high school students participate in the club, organising sustainability events and occupying seats on the Mayor's Blue Ribbon sustainability committee. I suggest that the PHS ECO club engages with the broader community, organising youth climate strikes, as seen in figure 3. In the centre of Portsmouth lies a space dedicated to a public forum for speech and debate. The central location of the public forum area offers the opportunity for



A Youth Climate Strike organised in Portsmouth, NH, in March 2019 as part of the global Fridays for Future movement commenced by Greta Thunberg. (Source: Author's own)





the message to be spread to the broader community. Members of the community walking their dogs, running errands, or enjoying a meal out at a restaurant can view the protest or may choose to partake and listen to the speakers.

Further awareness of coastal resilience can be fostered by painting predicted high water lines on the facade of waterfront buildings and nearby telephone poles, along with an accompanying plaque explaining the meaning and expected date when the water will reach the predicted level. A proposed location for the design is along Ceres Street, a high foot traffic area along the Piscataqua Riverfront, seen in figure 4. This location is suggested as they are historically significant as they were the tallest buildings in the United States of America at the time of construction. The visual design can spark debate between friends and family while walking around the city and will encourage community members to think of adaptation strategies to protect their property before it is too late.

The Portsmouth Historical Society, pictured in figure 5, is a community-run non-profit organisation dedicated to celebrating Portsmouth's history, arts, and culture. Apart from the many historical buildings the society has preserved over the years, there have been various exhibitions curated by local historians, countless community events, and educational school field trips within the building. The historical society attempts to engage with the broader community by showcasing numerous exhibits and hosting a variety of guest speakers of interest to a wide audience. I suggest the community engage with the historical society to open an exhibition encompassing coastal resilience. Far too often, it is found that while science is often available, the public has difficulty accessing the information, and the data is often hard to follow. The exhibit should therefore detail the effects of SLR on Portsmouth, incorporating representative concentration pathways of SLR visually and easy-to-follow, interactive models. The visual aid will make the information accessible to the wider community, increasing awareness and building capacity. While at the exhibit, community members could have the option to sign up for the community Facebook group, newsletter, or online forum where members of the community could voice their concerns about SLR as well as offer each other support during times of crisis. The community group would include flood forecasts, warnings, insurance options, instillations of retention basins, changes in land use, and suggestions for implementing behavioural and structural adaptation measures.



Historic Buildings that were the tallest in the United States of America at the time of construction are a proposed location in Portsmouth to have the predicted sea level rise high tide mark for 2100 pained alongside the building or the nearby telephone and street poles. (Source: Google Earth Pro)



Image of the outside of the Portsmouth Historical Society, which showcases local history and issues on the city's history (Source: Author's own)

Social Networks

Hurricane Sandy in October 2012 was a catalyst for increased Federal interest in coastal protection and the need for resilience-based solutions (Sutton-Grier et al., 2015). The President's executive order 13653, 'Preparing the United States for the Impacts of Climate Change, prepared in 2013 following Hurricane Sandy, specifically focused on building community resilience (Preparing the United States for the Impacts of Climate Change, 2013). Social (community) resilience is defined as a 'social unit or a group to cope with or respond to external stresses collectively and disturbances resulting from social, political, and environmental stresses' (pp. 198) and the capacity of people and communities to deal with external pressures and shocks (Kwok et al., 2016). Social resilience measures reflect the structural and cognitive dimensions of the social environment, encompassing the people and communities in addition to the beliefs and perceptions (Kwok et al., 2016).

To promote social resilience within the community, it is suggested that social networks are improved, and public community spaces such as the Portsmouth Public Library, the Portsmouth Historical Society, and the Portsmouth Chamber of Commerce are used as centre to share information and create conversation relating to coastal resilience. Beyond physical locations, community Facebook groups and online forums focusing on coastal resilience and risk communication should address risk perception and provide information on the feasibility and efficacy of potential adaptation measures (Koerth et al., 2016). The City of Portsmouth Facebook group currently offers information on the community, such as street closures due to construction and city events. Adding in a new dimension of coastal resilience to inform community members of concerns about SLR offers the potential for further community discussion and individual and community-based adaptation measures to be implemented. This group can further increase resilience by providing an avenue during storm recovery that members of the community severely affected by the storm, disabled and elderly community members can access community support without feeling ashamed or a burden to others.

Urban Blue Spaces

Contemporary sustainable development studies have emphasized the importance of urban green spaces. Urban green spaces - open-space areas reserved for parks – and other 'green spaces,' including plant life and different kinds of the natural environment, have received

significant attention following the COVID-19 pandemic. Green spaces transform and improve the urban environment, such as engendering a sense of place, providing a range of physical and psychological health benefits, promoting biodiversity, and facilitating critical environmental functions and ecosystem services.

Similar comparisons can be made regarding blue spaces. Blue spaces are defined as hydrographic features that can be waterbodies or flowlines that make up a linear surface water drainage network (Haeffner et al., 2017) or, simply put, any standing or moving body of water. A recent study by the United Kingdom Environmental Agency highlighted how individuals utilise blue space, ranging from recreation, physical health, mental health, social interaction, place of attachment, education, and tourism (Brown, 2020). They are acknowledged for their carbon sequestration, oxygen production, noise reduction, microclimates, and importance for outdoor recreation and social interaction (Haeffner et al., 2017).

I suggest to the community of Portsmouth that residents and, more specifically, neighbourhood associations petition for neighbourhood water access. These coastal water access areas create spaces that encourage social interaction and a shared appreciation for nature. As Kwok et al. (2016) noted, one of the most referenced social resilience attributes is community gathering spaces and having a sense of community, where urban blue areas achieve both. Neighbourhood associations should incorporate all neighborhood members to participate in the process, as each water access point can be tailored to the needs of each neighbourhood with two potential designs shown in figure 6. Engaging all community members strengthens a feeling of responsibility, thus contributing to risk sharing and reducing social vulnerability (Koerth et al., 2016). In areas with access to deeper water, a boat launch and a community dock may be incorporated as opposed to coastal areas consisting primarily of sand and shallower water which may focus on creating seating areas and integrating a few picnic tables into the design.

Community Partnership

According to a study completed in 2016, community members in New Zealand determined that a resilience community consisted of four aspects: (1) having plans developed and the presence of strong leadership at the grassroots and government levels, (2) knowledge of hazards, risks, and community assets and gaps; (3) availability of resources – human, financial, goods, and services; (4) as well as solid and connected social and institutional networks (Kwok et al., 2016). Partner organisations within the region, including Save the Great Bay – Piscataqua Estuary, PHS ECO Club, 350.org New Hampshire, and Sustainable Seacoast, to name a few (more can be found in Appendix C), all operate independently of one another, focusing on specific environmental and sustainability concerns. I propose that the local community action groups form a working group of members from each grassroots movement organisation to provide coastal, community, and social resilience plans and devise ways in which the community can be brought together on the common issue of coastal resilience.

Save the Great Bay – Piscataqua activist group has a Facebook page updating group members with flooding reports, predictions, and information on when to limit fertilizer use if a heavy rainstorm is soon to help protect coastal ecosystems.





Household and Community Adaptation

Coastal risk management policies often include adaptation measures that should occur at the

household level to supplement municipal plans to deal with SLR. However, methods lack the communication tools necessary to explain the efficacy of household-level adaptation (Koerth et al., 2016). It has been found that providing hazard risk information is one step toward encouraging private autonomous adaptations (Hung et al., 2018). Coastal resilience, while a community issue, can effectively be managed at the household scale. Adaptation measures can come in many forms. To start, individual households should create community forums similar to a community Facebook page to report any flooding within basements, a sign of a raised water table. When community members report these findings, other community members can offer solutions to what they have done in the past, as almost every house in the downtown district of Portsmouth has had issues with wet and flooded basements within the past decade. Once sufficient information is publicised to the broader community, pamphlets informing citizens and discussion panels on Facebook groups can share different floodwater mitigation strategies. Household-level adaptation strategies are often viewed as expensive; however, adaptation strategies could include simple things such as elevating furniture or electrical objects a few inches off the ground during a king tide or storm surge. Emergency sandbags or new high-tech absorbable sandbags, pictured below in figure 7, should be stocked in houses most vulnerable to flooding and deployed during storm surges and king tides.

Community Facebook groups can offer an avenue for residents to request emergency floodproofing supplies from residents less affected by the flooding waters. This would create a stronger community and provide ample flood protection for all residents. Further adaptation measures should be incorporated into new construction within the town, such as floodproofing buildings using dry or wet techniques or even building structures on stilts in high-risk areas of the city.

FURTHER THOUGHT

Community-based action and multi-level social networks are essential for the development of social capital and the emergence of community resilience. While community-based adaptation strategies have increasingly gained traction among national governments and international non-governmental organisations (Saleem Khan et al., 2020), they often fail to address how to encourage communities to act. Building capacity through awareness and education has been accepted as a critical element in improving responses to climate change (both mitigation and adaptation) at the local, urban, and national levels (Saleem Khan et al., 2020), as this report has offered recommendations on how to increase capacity within the community.





Flood Bags - absorbable sandbags that can be stored and moved quickly to supplement traditional sandbags to allow for easier manoeuvrability for disabled and elderly residents.

Social networks are critical for using information rather than connecting to official networks (Koerth et al., 2016). Community Facebook groups should therefore be used within the community for community support and knowledge rather than as an access point to implement change on the municipal government level. Communities should focus on gathering a diverse group of citizens for working groups and spearheading change at the community or neighbourhood level. Community knowledge is fundamental in developing and processing risk communication (Koerth et al., 2016). While the aim is not to scare citizens into adaptation measures, it has been found that worry, hazard intrusiveness, and perceived dread is positively related to the expectation of participation in programs and adaptation behaviour (Koerth et al., 2016).

Incorporating community participation into broader regional and national strategies will result in resilient communities that can outlast the effects of SLR and develop effective adaptation and socio-ecological resilience systems. To prepare Portsmouth for SLR and ensure coastal resiliency, the community should devise social networks and partnerships with local institutions and grassroots networks to supplement the municipal governments' coastal resilience strategy.

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Disposable e-Cigarettes in London: A New Phenomenon Gripping the Urban Youth

Angus Chambers



INTRODUCTION

In no more than 18 months (Tattan-Birch, et al. 2022), disposable e-cigarettes have emerged from relative obscurity to become conquerors-in-waiting of the e-cigarette market. I worked in Victoria, Central London, during the summer of 2022 and saw the unbelievable popularity these disposables have with teenagers and young people. Every corner shop, convenience store and some conventional supermarkets stock them, and every street and park is littered. On multiple occasions, I was even approached by children asking me to purchase one.

The scale of this problem is substantial and growing massively. Disposable e-cigarettes are cheap, accessible, and addictive. They pose severe challenges regarding public health, the environment, and waste management. Their rapid growth and widespread popularity have outpaced the regulatory processes on which we usually rely to keep people safe (Krause and Townsend 2015). While this presents a significant challenge for public health officials and regulatory bodies, this phenomenon also leaves communities vulnerable. Teenagers and adolescents are not sufficiently looked after, and communities must step in. The purpose of this community briefing is threefold:

- 1. Inform community members, particularly adults and community leaders, of the prevalence of these disposable e-cigarettes and their target demographic.
- 2. Explain the scale of the challenge and demonstrate why action must be taken.
- 3. Recommend some potential solutions and strategies to tackle these challenges.

This briefing will also explore the potential unequal distribution and injustice in who is most susceptible to use and who is targeted by marketing techniques used by e-cigarette and tobacco companies.

As this problem is so novel, there isn't enough research to pinpoint one community or area of London that is particularly impacted. This briefing will be addressed to London as a whole, and I believe all urban communities could benefit from understanding these challenges and implementing some solutions.

BACKGROUND TO THE CHALLENGE

E-cigarettes first became popular in the late 2000s (Pesko and Robarts, 2017) and have since become increasingly so with people of all ages. They were originally aimed at cigarette smokers and presented as a way to help people quit or as a less harmful alternative. These e-cigarettes use a 'lithium-ion battery, light-emitting diode lights, micro-processor, metal casings, wires, plastics and other absorbent polymers' (Lerner et al. 2015). They utilise the battery to 'generate an inhalable aerosol from a solution that typically contains nicotine, flavoured chemicals and other additives' (Owotomo and Walley, 2022). They essentially function similarly to cigarettes, with users inhaling from a mouthpiece and exhaling smoke. Cigarettes burn tobacco; e-cigarettes use nicotine-infused chemicals.

What are disposable e-cigarettes, and where have they come from?

Disposable e-cigarettes have been part of the market for some time but have only enjoyed popularity quite recently (Williams, 2020) (Tattan-Birch et al., 2022) (Gaiha, Rao and Halpern-Felsher, 2022). When e-cigarettes first became popular, disposables were marketed to attract smokers to try something that looked and felt more like a cigarette (Williams, 2020). This was largely unsuccessful, and e-cigarettes soon moved more towards the larger classic 'tank' and 'mod' style (Williams, 2020).

This remained the case until JUUL launched their product with a smaller and sleek design and quickly dominated the market with a 75% share. Using this momentum, several smaller companies tried to capitalise on their popularity, creating disposable e-cigarettes that were cheaper and more accessible (Williams, 2020). Examples of this are Elf Bars and Puff Bars. Since January 2021, there has been an 18-fold increase in the percentage of vapers using disposables, rising from 1.2 to 22.2% (Tattan-Birch et al., 2022). While this growth signifies a general increase across all demographics, young people, in particular, have taken to disposables, with it becoming the most used type of e-cigarette among adolescents, and more than half of 18-year-old vapers mainly using them (Tattan-Birch et al., 2022).

Why are they so popular, particularly with young people?

The amount of young people using these devices is of considerable concern and increasing rapidly (Noland et al., 2018). It also implies that e-cigarettes are used not only as smoking cessation devices as initially intended but also as an introduction to nicotine (Wagoner et al. 2022). While research does suggest that e-cigarettes are less harmful than conventional cigarettes, there is still substantial risk involved with using them (Owotomo and Walley, 2022).

There are various reasons for the uptick in usage amongst young people, driven mainly by the e-cigarette and tobacco companies. Aggressive and innovative advertising that obscures potential risks and targets adolescent mindsets are helping them recruit young consumers (Pesko and Robarts 2017) (Langston et al. 2020) (Owotomo and Walley 2022). Further, research suggests this marketing intensifies near schools and centres of higher education (Pesko and Robarts, 2017).

Disposable e-cigarettes are becoming increasingly accessible to young people and represent a cheaper option than traditional models (Williams 2020). Notably, disposable e-cigarettes like Elf or Puff Bars tend to be sweet or fruit flavoured, which younger people overwhelmingly

prefer (Bold et al., 2022). All of these facts are compounded by the fact that the sellers of disposable e-cigarettes' age verification practices are 'questionable' (Williams, 2020).

Young people are essentially being targeted, manipulated and deceived by powerful companies. All young people are susceptible to these tactics, but e-cigarettes use has grown more dramatically in urban areas (Pesko and Robarts, 2017) and by certain demographics. This constitutes a serious public health challenge that communities can help to address. The challenges extend beyond just general health, particularly regarding the actual disposal of these e-cigarettes and their threat to the environment. These will all be considered in the next section.

THE CHALLENGE

Disposable e-cigarettes are not a problem exclusive to London, but research suggests that e-cigarette use in general, including disposables, is growing faster in cities than anywhere else (Pesko and Robarts, 2017) (Dai, Hao and Catley, 2017). While none of this research is specific to London, I know from my experience and the patterns regarding other urban areas that disposable e-cigarettes are a serious challenge and public health concern in London.

Public Health

Part of the challenge is the accessibility of e-cigarettes and vape shops in urban areas. Research suggests there is a 'higher vape shop density in urban versus nonurban' areas, and there tends to be a decrease in vape shop density in areas with 'larger household sizes' and a 'higher percentage of owner-occupied housing' (Dai, Hao and Catley, 2017). Smaller household sizes and rented accommodation are more prevalent in cities, including London, meaning it is far easier for young people in urban areas to access e-cigarettes than their rural counterparts. It is important to recognise this, as it reinforces disposable e-cigarettes and e-cigarettes in general as being more of a problem in cities, especially considering that in rural areas, cigarettes are more common (Pesko and Robarts, 2017). Nicotine consumption is not exclusive to urban areas, but e-cigarettes are used more in cities, and hence is an urban challenge mainly.

While initially touted as smoking cessation devices, new risks have emerged from the prevalence of e-cigarettes. These risks mainly affect adolescents and young adults in cities like London. Disposable e-cigarettes are being used as an introduction to nicotine, which, while damaging in itself, can also lead to cigarette smoking later on (Owotomo and Walley, 2022). Further, most recent studies suggest that even conventional smokers may be more at risk of continued nicotine addiction if they use e-cigarettes for smoking cessation (Owotomo and Walley, 2022). E-cigarettes are leading to more and more sustained nicotine addictions. The aggressive advertising used by e-cigarette companies (Wagoner et al., 2022) masks the fact that an Elf Bar, for example, does contain a substantial amount of nicotine. These disposable vapes, costing as little as £5 and allowing for up to 600 'puffs,' are popular with young people and incredibly accessible in cities like London (Hambly 2022).

While nicotine addictions and progression to conventional cigarette smoking are known and researched short-term impacts of using disposable vapes (Owotomo and Walley, 2022),

there remains a great uncertainty about the long-term effects. E-cigarettes are 'evolving rapidly with innovative technology' as 'manufacturers seek loopholes in regulatory efforts', making clamping down and examining the longer-term impacts very difficult (Owotomo and Walley, 2022). There are evidence-based concerns, though that vaping negatively affects respiratory health (Owotomo and Walley, 2022). Flavouring chemicals like 'menthol, benzyl alcohol and corylone' are associated with 'respiratory irritation or harm' (Lin, Buu and Su 2022). In addition to flavouring chemicals, e-cigarette aerosol contains 'harmful organic chemicals and metals that are documented to cause respiratory problems' (Lin, Buu and Su, 2022). Finally, metals like 'chromium and nickel' are used to heat the devices and can be 'released into e-liquid and aerosol during use', which can contribute to lung cancer (Lin, Buu and Su, 2022)

While some impacts of using disposable e-cigarettes are unknown, there are some genuine risks involving nicotine addiction and respiratory health. Considering the abundance and accessibility of disposable e-cigarettes in urban areas like London, I believe it can be classed particularly as an urban challenge for communities to tackle.

Urban Health

The risks of e-cigarettes, particularly disposables, extend beyond the impact on individuals who use them. There are broader challenges for communities, their environment and waste management structures. Essentially, disposable e-cigarettes contain harmful substances that when thrown away, are damaging to the environment, and they are damaging in part because they are mostly not disposed of and managed properly.

In 2015, more than 58 million e-cigarettes and refills were sold in the US at grocery and convenience stores alone, 19.2 million of which were designed for single use (Hendlin, 2018). Considering other research regarding the growth of disposables, it is safe to assume that number has risen. This constitutes a new challenge for public health officials and potential communities for how they are disposed of (Lerner et al. 2015).

Waste from e-cigarettes contains 'plastics, nicotine, heavy metals and other chemical toxins' (Mock and Hendlin 2019). These 'highly concentrated nicotine and e-waste residuals' present biohazard risks, while the 'hard plastics, lithium-ion batteries, and electronic circuit boards require disassembly, sorting and further recycling and disposal' (Hendlin 2018). Some of the components found in lithium batteries, for example, are known to have a toxic effect on living organisms (Lerner et al. 2015). When improperly discarded, devices can leach heavy metals, battery acid and nicotine into the local environment and urban landscape which is harmful (Hendlin, 2018). Further, e-cigarette waste poses choking hazards for children and may be eaten by birds or other animals, which is worsened by the fact that this waste can contain harsh and acidic elements (Hendlin, 2018). All these impacts are of particular concern for disposable e-cigarettes; they pose the highest environmental costs due to their predetermined lifetime (Hendlin, 2018).

While these impacts mainly stem from littering, even if disposable e-cigarettes are thrown away, normally there are still challenges. They are technically e-waste and should be disposed of differently (Hendlin, 2018). Most users are unaware of this, though, as 'policy nor product information currently gives consumers guidelines for disposing of e-cigarettes' correctly (Hendlin, 2018).

As such, I believe there is a gap being left by public health officials, governing bodies and e-cigarette companies that can be filled by communities regarding disposal and management of disposable e-cigarettes.

VULNERABLE PEOPLE

While, in general, young people in cities are vulnerable to the aggressive advertising and masking of crucial information, certain demographics are targeted and exploited more. For example, there is a higher vape shop density associated with communities made up of people of colour and also where there are higher levels of poverty (Dai, Hao and Catley 2017). Additionally, studies show that females and LGBTQ+ people are more likely to use disposable vapes (Gaiha, Rao and Halpern-Felsher, 2022).

SUGGESTIONS

Regarding recommendations for how communities can manage these challenges, they are primarily split into two sections; Public Health and Urban Health. These two heavily interlink, which will be pointed out, but they have been separated for clarity and structural purposes.

Communities can make a significant difference, and it is important that they do. Disposable e-cigarette providers, often backed by powerful tobacco companies, are continually innovating to avoid government regulation and action by health officials (Owotomo and Walley, 2022). Additionally, many of the solutions put forward so far have come from or been funded by these companies, which have been largely ineffective (Kostygina et al., 2022). Research shows that 'tobacco-industry funded prevention programmes may work against tobacco control efforts' as they do not 'discourage novices and youth' but often just 'improve the tobacco industry's public image through 'disingenuous CSR efforts to counter negative publicity' (Kostygina et al. 2022). These companies do not have the best interests of communities in mind, showing why action needs to be taken at the community level.

As a precursor to these suggestions, these challenges are suited to community action, and appealing to authorities or the police to enforce would invariably lead to discrimination. In implementing these suggestions, there must be collaboration, engagement and involvement. Nicotine addiction is a serious matter, and it should be handled in a non-judgemental or accusatory way. Communities should strive to create an environment where people don't need to turn to nicotine. The purpose of this action is to help people understand the risks. Ultimately, communities need to make sure young people and adults alike are aware of the potential impacts without just looking to frighten or shock. People will ultimately make their own decisions, but communities can do everything they can to help them make the right ones and limit the damage to the others.

Public Health

The critical areas regarding public health are education and awareness, controlling and tackling advertisements and the media and working with all community members.

Parents and senior community members can influence the 'perceptions and behaviours' of adolescents when it comes to e-cigarette smoking (Choi et al., 2022). This influence can stem from knowledge about the risks and understanding of the challenges involved with a disposable e-cigarette. Education of all community members is important, mainly as disposable e-cigarettes are an emerging problem primarily used and engaged with by young people. To help improve understanding, particularly for older community members and parents, I would recommend seminars, newsletters, and demonstrations. All other action is grounded in this education. Parents being aware of the risks, understanding how young people are targeted by advertising and engaging their children with these risks are all associated with lower levels of disposable e-cigarette use among adolescents (Choi et al., 2022).

This action can also be replicated by school teachers (Milicic, et al. 2018), highlighting the general need for involvement from all community members and stakeholders. Notably, vendors and shop workers have a part to play. As mentioned, part of the issue is how easy and accessible disposable e-cigarettes are for young people in London. This is facilitated by some sellers not requesting ID or refusing to sell to underage people (O'Connell and Kephart, 2022)(Kilcommons et al., 2020). Some studies have shown that '22% of vendors were willing to sell to 15-year-olds, and 28% to 16-year-olds' (Kilcommons et al., 2020). These shop workers are often community members who may not fully understand the risks. Working with them to ensure they apply laws correctly could help reduce the ease with which adolescents can purchase disposable e-cigarettes. Considering some of the urban health challenges that will be covered later, it is essential to demonstrate how it is in the interest of all stakeholders to reduce the usage of disposable e-cigarettes by all community members. This same engagement can also be extended to delivery drivers and postal workers, who may also be community members or at least frequently deliver to the same areas. Research suggests these postal workers do not ask for ID or proof of age when delivering disposable e-cigarettes purchased online (Kilcommons et al., 2020).

While engaging all community members would be challenging, it is well within the capacity of a community with strong leadership and commitment. Other actions are more complex, but still achievable. For example, the implementation of 'smoke-free zones' (O'Connell and Kephart 2022). These were initially brought in to prevent 'second hand exposure to tobacco smoke' (O'Connell and Kephart, 2022), and there is no reason why they shouldn't be extended to e-cigarettes. This can be legislated for on a community level, as well as creating more of these zones, particularly in community spaces. This help to prevent the 'renormalisation of smoking (or vaping) behaviours'. They reduce 'community exposure to smoke and vapour clouds' and 'reduce cues to use among individuals attempting to reduce or quit their use' (O'Connell and Kephart, 2022). Ultimately, their purpose is to reduce the number of visible e-cigarettes and prevent people from using them in shared spaces. There is evidence to suggest that this can help people cut down on their usage altogether (O'Connell and Kephart, 2022).

Community members can also contribute to activism and lobbying regarding flavours and packaging of disposable e-cigarettes, as well as working with government or action groups. As mentioned previously, the packaging of disposable e-cigarettes is directly targeted at young people, and the flavours are more appealing. Campaigning against this also serves the additional purpose of increasing community knowledge of flavoured tobacco products

and how the tobacco industry targets young people (O'Connell and Kephart, 2022).

To summarise, education and increased awareness amongst community members are essential. This can be achieved through campaigns, activism, demonstrations, newsletters, or information sharing on social media. Using this education as a foundation, communities can also push for the further implementation and extension of 'smoke-free zones' in public spaces, as well as engage with and mobilising all community stakeholders in a concerted effort to reduce the accessibility and desirability of disposable e-cigarettes.

Urban Health

The primary suggestion regarding urban health is a community-wide effort to recognise disposable e-cigarettes as e-waste or biohazardous waste and not to put them in regular bins.

It is more of a reactive measure, as while communities should be trying to prevent people from using them, it is essential to acknowledge that some will continue.

Like with public health and this entire issue, education and raising awareness is crucial. As described earlier, there are various complications when disposing of disposable e-cigarettes, and they cannot just be put in regular or recycling bins. All users must be aware of this, and this has to be achieved through flyers, posters and teaching at schools. Not understanding how to dispose of e-cigarettes properly could result in littering or being thrown away normally. In particular, targeting where to spread these messages needs to be focused. For example, there are vape hotspots, shared public spaces, convenience stores, and vape shops. While ideally, this information would be made clear on the packaging, communities need to step up in place of this inaction.

In terms of further action, they are placing special bins or creating disposal points that are clearly labelled, strategically placed and accessible. Additionally, communities can work collaboratively with companies specialising in e-waste disposal. 'Hazardous Waste Management', for example, provides services where they collect and properly dispose of any biohazardous waste from e-cigarettes (Hazardous Waste Experts 2017). Even ensuring e-cigarettes aren't littered or being put in regular bins would benefit the environment. By taking this further, communities can positively affect the environment and their surroundings. Similarly, I would suggest communities work with e-cigarette vendors, and encourage them to have these bins in their stores or operate some recycling scheme. Incentivising the users in some way to recycle and dispose of their e-cigarettes properly could encourage greater uptake.

Essentially, education is key for tackling urban health challenges and ensuring users are aware of how e-cigarettes need to be disposed of.

SUMMARY

Disposable e-cigarette use is growing rapidly in London, particularly amongst young people and vulnerable groups. This in part due to the aggressive advertising aimed at them. Disposable-e cigarettes pose serious risks to public and urban health, and the government

and responsible companies are not taking effective action to tackle these risks. As such, the recommendation of this briefing is that communities can step up and take action. This action could be education and awareness campaigns, 'smoke-free zones' and recycling schemes and special disposal bins for e-cigarettes. Collaboration amongst all community stakeholders, including community leaders, parents, young people, convenience store owners, delivery drivers and e-waste disposal companies is essential to the success of these recommendations.

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Addressing the Challenges of Flooding to Low-Income Communities in Jakarta, Indonesia

Dalian Opstal



THE CHALLENGE

According to the International Disaster Database, flooding is the leading environmental disaster worldwide in regularity and scale (Padiwangi & Douglass, 2015). One of the significant contributors to the amount of flood occurrence each year comes from cities within Southeast Asia, one of them being Jakarta (Padiwangi & Douglass, 2015). Jakarta, the capital of Indonesia, is known for its rich culture and dense population and serves as the heart of political and economic activities in the country. DKI Jakarta is one of the 33 provinces in Indonesia, and the province is divided into five municipalities (North Jakarta, South Jakarta, East Jakarta, and Central Jakarta) (Wilhelm, 2012). The city's geographical location is on an expanding seashore due to sediment coming from nearby rivers that form a bay within small islands, which is located just above sea level (Caljouw et al., 2009). The geographical location and low landscape make it prone to natural causes of flooding from the waterways flowing from rivers (Caljouw et al., 2009). The climate within the city is known to be hot and humid, with temperatures ranging from 25° to 38°C (77°-100°F) and average humidity of 78.4% (Akmalah & Grigg, 2011). The monsoon season comes in the month and in between November and May, with its peak rainfalls occurring in January (Akmalah & Grigg, 2011). The challenges posed by the rivers come during the months of monsoon seasons, as it is when rivers carry high levels of sediments that risk erosion (Caljouw et al., 2009).

One of the significant contributors to the challenge of flooding is the city's urban development over the last century. Jakarta, serving both as a port city and the country's capital city, has seen rapid economic and population growth over the last century (Setiadi et al., 2020). In 1950 the city's total population was less than 1.5 million people, which quadrupled in 1980, sparking the growth in the commercial and industrial industries (Setiadi et al., 2020). The city's urban development disrupts coastal areas and clears forests and land areas. The urban growth of Jakarta has led to smaller cities surrounding the capital to emerge, which include Bogor, Depok, Tangerang, and Bekasi) (Setiadi et.al., 2020). With the rapid increase in population, unrestrained urban development with limited social and environmental planning has resulted in uncontrolled commercial and industrial waste dumped into rivers, inefficient drainage systems, and excessive groundwater use (Caljouw et al., 2009).

Environmental law enforcement is known to be weak, which allows watershed industries to dump their toxic waste into the surrounding rivers, causing river pollution and flooding during rainy seasons (Caljouw et al., 2009). The lack of an efficient drainage system has caused insufficient water flow from the rivers during heavy rainfall, bringing the aftermath of extreme flooding events each year (Caljouw et al., 2009). The lack of access and coverage of surface and piped water systems throughout the city has increased groundwater use (Setiadi et al., 2020). The high use of groundwater has caused land subsidence of 10-15 cm per year, increasing the risks of sea and river water overflowing into the city (Setiadi et al., 2020). The combination of geographical, environmental, and increase in anthropocentric pressures has brought a total of three destructive flooding events in the past twenty years (2002, 2007, 2013), which destroyed homes and disrupted economic and social activity (Padawangi and Douglass, 2015). A study by Philip Ward estimated that Jakarta had suffered a total economic loss of USD 4.4 billion over 100 years, with the number only predicted to increase by 2100 (Setiadi et al., 2020). With a total of three disruptive flooding events happening in the last 20 years, and large amounts of economic and social consequences these events have shows the severity of challenges that flooding presents.

THE COMMUNITY

The impacts of flooding can affect all communities living within Jakarta. However, the effects on the communities living in poor urban areas are disproportionate. The poor communities within the city have suffered three times the burden of other communities as they are significantly more exposed to flooding, carry risks of displacement due to urban expansion, and are known as one of the root causes of flooding (Heise et al., 2017). Flood water carries immediate health hazards to the urban poor, as these waters contain chemicals and diseases (Horman, 2020). The lack of facilities and infrastructure leaves poor urban communities exposed to unwanted diseases and chemicals coming from the water (Horman, 2020).

A large number of these poor urban communities live in the northern part of Jakarta. Jakarta's north coast is the most geographically vulnerable part of the city to live in, as it is exposed to the ocean and has low land levels. The north of Jakarta also faces the challenge of a rise in sea level by an estimated 1-8mm a year, with the total height of the land being only 7 meters high (Padawangi, 2012). A further study by hydrological engineers has forecasted that 80% of northern Jakarta will be under sea level by 2030, increasing the risk of flooding and its challenges (Heise et al., 2017). The projected rise of sea level each year and the forecast done by hydrological engineers strongly indicate that there would be an increased level of floods and natural disasters each year if the communities do not address the challenges.

Furthermore, a total of 3.5 million poor residents in Jakarta live in informal housing and shelters across the rivers within the city that do not have the proper infrastructure to mitigate and adapt to heavy floods (Heise et al., 2017). This number has rapidly increased as techno-managerial solutions to flooding alleviation cause residents within the urban villages across rivers to suffer from eviction (Heise et al., 2017). One notable eviction was in 2015, as the governor at that time, Basuki Tjahaja Purnama, got the go-ahead to order the eviction of the Pulo Urban Village residents (Heise et al., 2017). The eviction happened on



Kampung Pulo After Eviction, August 2015 (Heise et.al., 2017)

the morning of August 20, 2015, with the use of police groups and construction crews with heavy machinery to destroy the houses, which is available in figure 1 (Heise et al., 2017). The eviction was permitted as the governor had claimed that the residents living within the Ciliwung river area were occupying the space illegally and polluting the riverside with waste (Heise et al., 2017).

Although the governor had provided compensation for relocating them, the relocation area was located on the city's outskirts, further challenging the growth and development of these low-income communities. Not only are low-income communities suffering from the consequences of flood adaptation and eviction from the government's flood adaptation and mitigation strategies, but the media have increasingly blamed them as one of the root causes of flooding (Heise et al., 2017). The media and governor have publicly blamed flooding events on low-income communities claiming that their homes surrounding the river are illegally there, causing the surrounding river to have problems absorbing the overflow of water (Heise et al., 2017). The poor urban communities are the source of blame for the floods. At the same time, the lack of water overflow results from more significant factors such as unregulated deforestation, poor water disposal management, and the lack of an efficient waste collection and disposal system (Heise et al., 2017). With the city continuously striving for economic growth and development, the government's focus on extensively working and solving this challenge would take a long and insufficient process that could cost more lives. Therefore, the communities should seek alternative solutions that are accessible and effective in adapting and mitigating the challenges of flooding.

POLICY ANALYSIS

Flood reduction, mitigation, and adaptation strategies have taken place since the Dutch Colonial rule took place centuries ago. As new infrastructure and city planning arise, these policies have transformed over time (Garschagen et al., 2018). In 1965, The public works office initiated a project labeled the "Jakarta Master Plan" (Caljouw et al., 2009). Sethuraman (1976) stated that the main challenges of flooding at the time were drainage, waste management, damaged water construction, and insufficient open ground for water retention

(Caljouw et al., 2009). The project, initiated in 1965, had implemented the excavation of 3.4 million cubic meters of the earth to supply water to reservoirs, the building of canals, and the removal of 750,000 cubic meters of earth within rivers and estuaries (Caljouw et al., 2009). Added to these projects was the establishment of pumps, bridges, and flood control gates that took up a total of 478 hectares, which forced residents from these areas to relocate (Caljouw et al., 2009). These expenditures had decreased the impacts of flooding at the time; the city's expansion had pushed another master plan for 1985-2005, focusing on flood control and drainage improvements (Caljouw et al., 2009). The action plan at this time implemented various strategies: the construction of the Depok Dam, the use of artificial lakes for flood control, and restrictions and regulations on urban, industrial waste and construction within southern parts of the city (Caljouw et al., 2009).

Despite the significant projects, policies, and investments put into flood reduction and control, on February 2, 2007, one of the most tragic flooding events took place causing a total loss of \$565 million, with the residential sector taking up to 74% of the total losses (Sholichin et al., 2019). The 2007 tragic flooding events resulted from heavy precipitation and rainfall that caused water to flow into the city, coming from the rivers and the sea (Sholichin et.al., 2019). This event sparked a turn to focus on the challenge of water flowing into the city from the sea; hence the formation of the Jakarta Coastal Defense Strategy (JCDS) (Garschagen et al., 2018). The JCDS formed a new flood risk reduction strategy with three main focuses. First, the importance of river and canal regulation and the clearance of informal settlers from these riverbanks (Garschagen et al., 2018). Second, the renovation and expansion of the flood reservoirs and, third, the building of a new coastal flood protection wall (Garschagen et al., 2018). The plan to build a coastal flood protection wall is to serve as an adaptation strategy in blocking the bay area of North Jakarta as the sea level rises. The city plans to build a pumping station with 730 cubic meters per second capacity to pump water from the reservoirs to the sea (Garschagen et al., 2018).

The strategies presented by JCDS can potentially limit the consequences of flooding. However, its limitations to lower-income communities lie within the significant space the projects need. Regulations coming from the project pushed over 15,000 people and 4000 households for resettlements in the space of five years (Garschagen et al., 2018). In addition, the project's construction process will increase erosion within existing islands (Salim et al., 2019). An increase in erosion will cost the livelihoods of fishermen, destroy existing coral reefs, and even potentially increase flooding events within the city (Salim et al., 2019). Salim has also argued that putting significant investments into the sea wall project could be an expensive and ineffective adaptation strategy (Salim et.al, 2019). The Sea Wall is an adaptation strategy to protect against the consequences of anthropocentric drivers of climate change, yet there is limited focus on addressing these drivers (Salim et al., 2019). These drivers include ineffective environmental and regional planning, unsustainable extraction of groundwater, and continuous land conversion for economic benefit (Salim et al., 2019). If non-climate drivers of flooding are not regulated, there will be ongoing problems, particularly for low-income communities.

COMMUNITY RECOMMENDATIONS

Flooding is a wicked problem that requires multiple stakeholders, including the government, and public and private sectors, to overcome. However, the complexity of the challenges

presented by flooding does not mean that there is nothing poor urban communities can do to mitigate and adapt to its consequences. The challenges presented show the challenges of flooding to low-income communities, exposing them to diseases and harmful chemicals, economic loss from disruption of homes and infrastructure, disruption in daily practices and work life, and risks of displacement due to flooding adaptation strategies. My recommendations for the low-income urban community as adaptation and mitigation strategies to overcome the consequences of flooding through forming flood awareness and action groups, cleaning and zero waste initiatives, and sustainable practices education for the present and future of these communities.

Forming a Flood Action Group

The first recommendation takes the principles of a Flood Action Group that The Flood Hub provides. Flood Hub is an information center designed to provide knowledge, data, and resources to support households, businesses, and communities throughout the North West of the United Kingdom (The Flood Hub, 2022). The Flood Hub implements the idea of a Flood Action Group, which is a collective of community volunteers who meet regularly to discuss and address ways to reduce the impacts of future flooding events (The Flood Hub, 2022). The group can focus on various aspects that include but are not limited to; emergency planning, identifying local issues, preparing to take action during flooding events, and providing a voice for local community members (The Flood Hub, 2022). The local community must communicate and understand the various responsibilities of the flood action groups. Once the local group is established, three prominent aspects must be covered: setting goals, planning, and funding (The Flood Hub, 2022). Setting goals involves understanding the current situation, evaluating the main drivers of the issues, and the resources needed to overcome the issue (The Flood Hub, 2022). Planning involves dividing tasks among community members, identifying each member's essential skills and resources, and creating an action plan when flooding occurs (The Flood Hub, 2022). Access to funding comes once the flood action group becomes a constituted group with 'governing documents' supporting them to apply for grant funding (The Flood Hub, 2022).

There are various factors to consider in creating a Flood Action Group within low-income communities. The first factor is that they do not have much time as members of low-income communities work labor and low-skilled jobs that take long hours of the day. The second factor is that they do not have a lot of physical resources to donate to the group; therefore, funding is necessary. The Flood Action Group could be built within each urban village, with a core group of members leading the initiative. With the limited time and resources, the flood groups within communities should focus on a set number of goals that are achievable and agreed upon by the community and then divide the tasks amongst all the community members. Easily attainable objectives are aspects such as a flood warning system. A flood warning system is for cases of heavy rainfall and flooding forecasted in the news, where members in charge of the location will go over to the other houses in the neighborhood and provide a warning, followed up by a text message stating all the essential information needed. Funding larger projects that include infrastructural needs for safety can be through registering the flood action groups into one non-profit organization. Forming a non-profit organization will allow them to seek funds from businesses in the surrounding community, which would serve as the businesses' corporate social responsibility to its employees living within these communities. To conclude, forming a Flood Action Group will minimize the risks and consequences of flooding and bring the community a sense of involvement and togetherness, which can provide a feeling of importance amongst each individual and a more positive attitude towards the challenges.

Urban Cleaning and Zero Waste Zone

The second recommendation is to tackle the problem of waste that pollutes the riverbank and causes flooding. One way to do this is to set up a "Clean up the Community Weekend" inspired by the "Clean Up the World" organization (Clean Up the World, 2022). Local communities could set up a monthly program in which they have one weekend of the month to clean up the neighborhoods. One approach to motivating communities to do this is to form online social media pages and post before and after pictures of the events. Monthly cleaning projects will bring communities together, create a sense of unity and teamwork and provide a cleaner and healthier environment to live in.

In addition, to limit waste, an option will be to turn the urban villages into zero-waste zones. The methods and ideas for this initiative take inspiration from Kamikatsu, Japan's zero waste town 'where they not only eliminated the use of non-recyclables, they have found a total of 45 different recycling methods (Crossley-Baxter, 2020). As an incentive, individuals who choose to recycle would be able to sell the recycled products and earn an extra amount of money that would increase their household incomes. The community of Kamikatsu is driven by the concept of "Mottainai", which is the idea of respecting resources and not wasting them in respect for the world's finite amount of resources (Crossley-Baxter, 2020). The understanding of "Mottainai" within the urban villages of Jakarta, could transform the way individuals view materials and the importance of preserving their resources and limiting waste. As discussed in the challenges, these communities risk losing their homes and getting blamed for waste within the riverside. These cleaning and zero waste initiatives will not only help keep a clean community and mitigate flooding events, but they will also provide a positive image to the media and government. Having a clean and waste-free community will further support their case for having the option to stay in their current settlements and prevent them from becoming an easy target to blame for future flooding events.

Education for the Present and Future

The third recommendation is to form voluntary programs for flood and sustainable living education. These volunteer programs will aim to partner with local universities, where the students studying in the area of expertise of flooding or sustainable development-related subjects could come and educate the community about the challenges of flooding and how to adapt and mitigate it. Outsourcing free education from volunteering students will not only benefit the community in the present time but will also build a foundation for the younger generations. Education for the younger communities will give them the knowledge of the mistakes past communities have made to shape a better future. These volunteer programs would benefit the University students themselves, as a partnership with universities will allow them to do it for school credits. If not applicable, the students can use it as a valuable experience they can put in their CV.

CONCLUSION

Jakarta, the capital city of Indonesia, faces various obstacles due to geographical location and environmental and anthropocentric drivers of climate change, with flood being one of the most significant challenges. Over the years, the government has implemented policies and invested in building infrastructures such as a sea wall and improving drainage and piped water systems to try and mitigate and adapt to flooding events. These policies and investments provide added protection to the communities as it serves to limit flooding events and their consequences. However, the policies and investments do not solve all the flooding challenges low-income communities face. Hence, using an approach in the form of community recommendations to adapt and mitigate the challenges of flooding is more accessible. There are three suggestions that the community can use, which are forming a flood group, urban cleaning and zero waste zone, and providing education in focus on sustainable practices for present and future generations. These community recommendations aim to not only mitigate and adapt to the challenges of flooding but also to improve the quality of life for the present and future of these low-income urban communities.

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How Should the Government and Community Address the Issue of Solid Waste Management in Majuro, the Republic of the Marshall Islands?

Hope Nath



INTRODUCTION

I am fortunate enough that my home area does not suffer from issues around environmental injustice at a large scale. I originate from a small village in Hertfordshire, United Kingdom, which may prompt the reader to question why I have chosen Majuro, the capital of the Republic of the Marshall Islands (RMI), as my focal point for this community briefing. For my English Literature undergraduate dissertation, I wrote on the role of eco-poetry in the dialogue of sustainable development. In each chapter, I focused on a new eco-poem, one of which was Kathy Jetnil-Kijiner's 'Dear Matafele Peinam', which was performed at the 2014 UN Climate Summit and focuses on the injustices, including waste dumping, that the RMI faces (Jetnil-Kijiner, 2014). I would urge you to watch the performance, it is more powerful than description alone (YouTube, 2017). Due to my dissertation counting towards an English Literature degree, I did not have the scope to dissect the issue in terms of sustainable development. I was only able to analyse the poem, rather than research into these injustices, but the poem has stuck with me since reading it. I thought this community briefing was the perfect time to explore the mass issue of waste dumping in Majuro, as well as to bring awareness to the issue.

In this community briefing, I will explain the issue of waste dumping in Majuro and the effects it has on the community. I will summarise the Majuro government's past endeavours and present approaches to the issue of waste dumping. Finally, I will present some recommendations for the waste dumping issue in Majuro on how the city may be able to solve some, if not all, of the issues surrounding the waste dumping problem. My target audiences are the central government and community alike, as I believe that this issue will take the collaboration of both parties in order to be rectified.

URBAN ENVIRONMENTAL SUSTAINABILITY

First, it may be useful to zoom out and take the conceptual perspective of urban environmental sustainability when thinking of the waste dumping issue in Majuro. The European Environmental Agency (EEA) states that urban environmental sustainability 'encourages

revitalisation and transition of urban areas and cities to improve liveability, promote innovation and reduce environmental impacts while maximising economic and social co-benefits' (European Environment Agency, 2022). Urbanisation has hit Majuro like a landslide in the last 60 years, with its urban population nearly doubling in this time (World Bank, 2022). But while urbanisation comes with more environmental risks, Broto and Westman note that it also 'open[s] up opportunities for addressing environmental changes and risks' (Broto & Westman, 2019). I thought it appropriate to insert this section standalone to articulate that there is no better time than the present, given Majuro's urban population, to keep urban environmental sustainability in mind while solving the issue of waste dumping in the capital.

THE CHALLENGE

'The challenge' is a key aspect of this briefing as it allows me to explain the issue before looking at current and past initiatives, and proposing new and innovative solutions. It is important to fully comprehend the scale of the issue before delving into any solutions.

Majuro is a large coral atoll in the RMI. Ford notes that the 'atoll islands are widely considered to be among the most vulnerable landforms with respects to the impacts of climate change...Anthropogenic activities can drive atoll shoreline change in a number of ways...' (Ford, 2011). As of 2022, Majuro's population is approximated at 41,569 (World Population Review, 2022). Therefore, much urban anthropogenic activity will inevitably be happening in Majuro and needs to be offset by sustainable practices in order to save the non-human environment.

Waste dumping has been defined as, and for the purpose of this briefing will be referred to as, 'the disposal of solid wastes without environmental controls' (European Environment Agency, 2000). The focus of this briefing will be on the Jable-Batkan dumpsite in Majuro, which scales 17 metres (PacWastePlus, 2021). Due to the limited options in the RMI for waste disposal (because of its size and geographic location), citizens are forced to dispose of waste via landfills. This huge landfill site is not only unappetising to look at, but the community could potentially be at risk of health issues. While there is no data from Majuro on this, it has been noted that 'health issues may occur through the pollution of the underground water and the emissions of gases, leading to carcinogenic and non-carcinogenic effects of the exposed population' (Siddiqua, Hahladakis & Al-Attiya, 2022). Not only could health hazards present themselves, but environmental problems will also arise if nothing is done about Jable-Batkan, especially due to the fact that it rests against a seawall (PacWastePlus, 2021). Siddiqua et al. assert that:

[L]andfilling is associated with various environmental pollution problems, namely, (a) underground water pollution due to the leaching of organic, inorganic, and various other substances of concern (SoC) contained in the waste, (b) air pollution due to suspension of particles, (c) odour pollution from the deposition of municipal solid waste (MSW), and (d) even marine pollution from any potential run-offs. (Siddiqua, Hahladakis & Al-Attiya, 2022).

The astronomical figure of 56,600 cubic meters is how much waste resides at the dumpsite

(Asian Development Bank, 2014). To put that into a bitesize figure, the site 'averages around 38.5 tons of waste...per day' (SPREP, 2019). This prompted the Environmental Protection Agency (EPA) to temporarily close down the dumpsite in 2011 but, as the community had no alternative place to dispose of waste, it was reopened out of necessity (Asian Development Bank, 2014). Finally, in 2020, President Kabua 'issued an Emergency Proclamation of the dumpsite, declaring it a threat to the general public, particularly to employees and neighbouring residents' (PacWastePlus, 2021). This was a big step forward by the President in terms of sustainable development, regardless of whether that was the intention or not. Pledging to aid in fixing the issue was a step in the right direction as, by fixing the issue, the government will also alleviate many environmental and climate concerns.

While this community briefing will focus on the Jable-Batkan dump site, according to a paper by Chunting Xue, there are many more harmful landfills in Majuro, many of which are on the sea wall (Xue, 2001). These include the landfill at the airport terminal, the landfill at the fuel depot, and Majuro Wharf (Xue, 2001). My later recommendations are aimed to solve the issue of Jable-Batkan but can also be considered for other landfill sites in and around Majuro in order to encourage sustainable practices.

So, the issue is abundantly clear. This dumpsite is an eyesore and a threat to both human and non-human species. Majuro needs access to ways of combating this issue which are accessible to the island and are sustainable in their practices.

THE COMMUNITY

This section explores the community of Majuro and the wider RMI as these are the primary victims of Jable-Batkan. The community has a large part to play in the solving of this issue, inasmuch as community awareness and making their voices heard.

It might first be useful to explore a bit of the RMI's global background timeline. In 1946 the US began testing nuclear weapons in the RMI, resulting in islanders having to evacuate certain areas in 1948 (Marshall Islands Guide, 2019). The 1970s saw a return of islanders to their homes, but it was short-lived after radiation exposure and other health complications were discovered (Marshall Islands Guide, 2019). In 1985, the US pledged to denominate the area within a period of 15 years and in 1988 compensation was determined from US to the RMI (Marshall Islands Guide, 2019). This background information is useful as it paints a picture of the RMI's situation globally in the last 70 years, and sheds light on how, in the past, the community has been displaced.

Community is a large part of this briefing as this group are the main victims of the issue in discussion. The RMI became a member of the UN in 1991 and in 2018 pledged to reach net zero by 2050, 'the first island nation to do so' (UNFCCC, 2018). Due to 77.8% of the population in the RMI being urban, reaching net zero is certainly an urban issue (GlobalEDGE, 2021). The citizens of Majuro are, of course, among those most at risk of the landfill site. However, it is important to also consider that, as it is based along a seawall, non-human, marine species are also vulnerable.

A widespread faith in the RMI and more specifically Majuro is Bahá'í. The community

works to 'promote the well-being and progress of society' (Bahai, 2022). This kind of passive, spiritual and ingrained activism makes the RMI unique. But it must be said that the community is already shouting loud. Jetnil-Kijiner founded nonprofit Jo-Jikum (meaning "your home") for issues exactly like the one at hand (Jo-Jikum, 2019). Their mission is as follows:

Our mission is to support the next generation of Marshallese to navigate and develop solutions to environmental issues impacting their islands such as pollution, climate change, and nuclear legacies. (Jo-Jikum, 2019).

It is clear from this that citizens of Majuro are concerned with sustainable development and for the future generations, in line with the Brundtland definition of sustainable development. Community-based initiatives such as these are extremely important for the progression of sustainable development as they engage the community, especially the younger generation which is critical if we are to achieve the UN targets. The younger generation are our future.

PAST POLICY RESPONSES AND WEAKNESSES

Since the Emergency Proclamation in 2020, there have been numerous attempts by the government to alleviate some of the issues around solid waste management (SWM) in Majuro. This section will unpack some of these initiatives and evaluate how successful they were, highlighting any shortcomings.

In 2021, the Solid Waste Management Plan for Majuro 2019-2028 was published. This is a plan which envisions 'a clean and healthy Marshall Islands for today and future generations', in line with the Brundtland definition of sustainable development (SPREP, 2021). The plan was produced by the Majuro Atoll Waste Company (MWAC) and the Japanese Technical Cooperation Project for the Promotion of Regional Initiatives on Solid Waste Management Strategy in Pacific Island Countries (J-PRISM II) (SPREP, 2021). The plan seeks to find a new disposable site which can be made sustainable, reduce waste and promote recycling to extend the life of the incoming disposal site (SPREP, 2021). The Key Strategic Actions are fourfold:

- 1. Proper operation of the final disposal site(s)
- 2. Reduction of final disposal amount by composting and recycling
- 3. Maintenance of Waste Collection Services
- 4. Careful examination of new SWM technologies (SPREP, 2019).

As the plan will be live until 2028, there is no way of evaluating how successful it will be until it is finished, but it is a promising start. Making an effort to construct a sustainable disposal site is a step in the right direction but, in my own opinion, more could be done, with particular regards to the pollution the current dumpsite is currently creating. It is unlikely that simply transferring sites is an appropriate solution, regardless of whether it is a more sustainable site, as the site will likely end up with similar issues of overflowing and improper care.

2021 was a significant year for sustainable development in the RMI, as another initiative

was also put forward. Supported by PacWastePlus, 'a 72-month project [was] funded by the European Union (EU) and implemented by the Secretariat of the Pacific Regional Environment Programme (SPREP) to sustainably and cost effectively improve regional management of waste and pollution' (SPREP, 2021). This initiative seems to be more comprehensive in its objectives, the list of which is extensive but can be found in the PacWastePlus paper (SPREP, 2021). Further to this and in collaboration with PacWastePlus, the Environmental Agency (EPA) are 'inroduc[ing] a programme to divert the largest two components of waste - organics (17%) and paper/cardboard (22%) - from disposal and instead be processed to compose at an organics facility' (SPREP, 2021). This initiative involves such things as using waste and giving it a new lease of life as compost for local farmers (SPREP, 2021). This regenerative thinking is more of what is needed, but arguably still not enough.

COMMUNITY RECOMMENDATIONS

The below recommendations are concerned with urban environmental sustainability. This is because, as the definition stated earlier, urban environmental sustainability promotes innovation, which is exactly what some of my recommendations do. My recommendations range from community-based to suggestions for government implementations as I believe that in order to solve the issue in Majuro, efforts need to be made from both bottom up and top down approaches. Different implementations strategies from all angles are important to tackle the issue. As aforementioned, my recommendations relate directly to Jable-Batkan, but could be adopted for any of the other landfill sites in or around Majuro. Waste dumping is a clear and vast issue in the RMI and these recommendations could aid in lessening the severity of the issue at present.

Before moving to the recommendations, it might be useful to look at which SDGs will be positively impacted by responsible waste management:

Responsible waste management relates directly to several of the UN's sustainable development goals, including sustainable consumption and production (SDG 12), cleaner oceans (SDG 14), and more healthy ecosystems and richer biodiversity (SDG 15) (COWI, 2019).

This is significant as responsible waste management can contribute to three of the seventeen SDGs and move the Marshallese community towards sustainable development.

The first and most straightforward recommendation is elevating community awareness. Community awareness is the bottom-up stage of creating a sustainable environment and reducing the amount of waste produced. I think community awareness in this instance needs not only to be about the dump site itself, but also about the bottom-up activities the community can engage with in order to reduce waste in the first place. It is important to remember here that the community are not the policy makers and therefore cannot implement technological change, but rather practical change. The Marshall Islands Visitors Authority already does this with regards to SWM to the extent of 'distributing educational materials, making radio announcements, and organising cleanups in different areas of Majuro' but, according to Asian Development Bank, these efforts have had 'limited impact'

(Asian Development Bank, 2014). Recycling Bristol suggests things such as 'holding waste workshops,... putting up posters around the workplace,...placing separate recycling bins in convenient locations' to achieve more sustainable practices and reduce waste (ETM, 2021). This sort of immersive implementation, if used in the RMI, could elevate their sustainable practices and endeavours to reduce waste that little bit further. Community activist projects such as Jetnil-Kijiner's nonprofit Jo-Jukim, which educates the next generation on sustainable practice, are also crucial to the creation of ingrained sustainable practices in society (Jo-Jukim, 2019). These such projects could be exacerbated by activities such as viral awareness challenges much like the ASL ice bucket challenge of my childhood (ALS, 2019). Fundraising campaigns and hosting climate awareness events could also aid in creating more community awareness about the ongoing issue.

GOVERNANCE AND COMMUNITY RECOMMENDATIONS

The next two recommendations are more innovative and relate to what the government can do to aid in the crisis. While community awareness is critical to solving the issue from a bottom-up angle, the government need to engage in a top-down approach. Community awareness can aid in changing behaviours towards sustainable waste disposal, but the government need to fix the issue of the actual landfill and come up with more sustainable practices to best benefit the community at risk. The first is the idea of The Great Bubble Barrier. The Bubble Barrier 'catches plastic over the full width and depth of rivers and prevents plastic from ending up in the ocean' (The Great Bubble Barrier, 2016). It is active 24 hours a day, 7 days a week. The technical process behind it is as follows:

The bubble curtain is created by a perforated tube on the bottom of the waterway where air is pumped through. This generates a screen of bubbles that blocks plastics and directs suspended plastics to the surface. The diagonal placement of the bubble curtain in the waterway guides plastic waste to the side and into the catchment system. (The Great Bubble Barrier, 2016).

This innovative solution to plastic pollution could be extremely beneficial to Majuro, if it were possible to do it ocean-wide. This would take some research from the government or associated entities as so far it has only been proven in rivers and canals. Even if just a version of The Great Bubble Barrier could be implemented in the seawall of Majuro's Jable-Batkan, this would significantly alleviate the plastic pollution that this area of the ocean is currently experiencing.

The second innovative recommendation is one that I strongly believe could be a solution to the crisis that is the Jable-Batkan landfill site. I first heard about this innovation on the News in 2020, when a Kenyan woman named Ms Matee was crowned Young Champion of the Earth 2020 Africa at UNEP. Ms Matee created a company called Gjene Makers, which uses landfill plastic and sand, combines the two together, and creates bricks 'stronger than concrete' (Kenya Architecture News, 2021). She originally set out on her mission to solve the homelessness crisis, as these bricks are more cost-efficient than traditional ones, and her company is able to 'produce about 500-1000 bricks per day' (Kenya Architecture News, 2021). In an interview, Ms Matee said 'plastic is not just a Kenya problem, but it's a worldwide problem', closing the interview with 'essentially companies have to pay to

dispose the waste, so we solved their problem' (Kenya Architecture News, 2021). If the government or an NGO were able to band together volunteers from the community to learn the process of this innovative brick-making, this could cut the costs and make this implementation more achievable. This process, if followed in Majuro, could save and recycle a tremendous amount of plastic, while contributing to the infrastructure industry also.

My final recommendation is ambitious but has been proven to be entirely possible. What if Majuro became a zero-waste community? Japan is widely known as one of the biggest producers of plastic globally. However, a village in Japan, Kamikatsu, back in 2003, pledged to go zero-waste and succeeded (zerowaste, 2021). Volunteers filter rubbish into 45 categories before it is sent to be recycled, and through doing this they manage to reuse 80% of their waste (zerowaste, 2021). Now this recommendation is, of course, a recommendation for a community post-Jable-Batkan, in order to maintain sustainable practices once the issue is solved. I argue that once the landfill has been dissolved, with a bit of grit and determination it is possible for this community to pledge to zero-waste. In order to do this, the government would have to set up a large-scale, or a few smaller scale, central recycling plants, in the first instance to make this ambition a realisation.

NEXT STEPS

Through outlining the challenge and sifting through the past and present policies for change, I hope that I have made clear the vastness of this issue. The community needs to come together to tackle this issue through activism, such as Jetnil-Kijiner's Jo-Jikum, and through raising awareness for the issue at hand. I do not think that simply moving the site of the landfill is enough, even if it is a more sustainable site as it will likely result in a similar overflow of waste. My most innovative recommendation would be to adopt the innovative solution of Ms Matee, which could reduce plastic waste astronomically. My most ambitious recommendation, while entirely possible, is Majuro reaching the status of a zero-waste community. This, once the landfill issue has been addressed, could aid in preventing a similar situation from happening in the future. However, in order to make these a realisation, in tandem with government implementations, the community needs to make their voices heard. Activists such as Jetnil-Kijiner have shouted loud, but they need to be shouting louder, until there is no alternative but to fix the problem.

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Bursting the "Bubbly Creek": Addressing the Pollution in the Chicago River

Tom Kennedy



BACKGROUND

The Chicago River (CR) has an extremely complex, unnatural history, with its environmental agency beginning in the early-1800s. As the city began to expand in both population and industry, the river turned out to offer a very convenient, "although problematic, answer" (Hill, 2000, p. 97). The transformation from natural resource to sewer resulted in diseased drinking water, offensive odors, and viral outbreaks. On November 7, 1833, the city responded to a cholera upsurge by enacting an anti-pollution ordinance (Hill, 2000, p. 97). Unfortunately, the newfound policy was enforced irregularly, if at all (Hill, 2000, p. 97). Namely, the adjacent stockyards became consolidated in 1865 into a single entity, the Union Stock Yards, just south of the city limits and were still using the CR as its "ultimate sewer" (Hill, 2000, p. 102). Although the Chicago Board of Health (CBH) re-established in 1867 with a recommended ordinance calling that no person "throw, place, or deposit.... any dung carrion, dead animal, offal of other putrid or unwholesome substance", the economic hierarchy of the stockyards enabled them to carry out their polluting practices with no repercussions (Hill, 2000, p. 102). As a result, the CBH attempted to reverse the damage through various methods such as diverted water pumping, canal widening, and even the construction of underground tunnels to contain the excess waste (Hill, 2000, pp. 105-107). However, these solutions did not address the root of the problem: excess dumping into the city's primary source of drinking water. By the year 1898, the city of Chicago was dumping more than 1,000 cubic yards of waste into the river daily (Hill, 2000, p. 182). By 1939, reports of the offensive odors from the river increased, and the "condition of the river was comparable to that of an open sewer, which in fact the river became" (Hill, 2000, p. 190). Again, the CBH fruitlessly responded with even more treatments to the issue, including filtration processes and the utilization of microorganisms to dilute the festering bacteria (Hill, 2000, p. 218). Although the Union Stock Yards closed in 1971, industries persisted in polluting the freshwater source, such as the Racine Avenue Pumping Station (Hill, 2000, p. 103; Waterman et al., 2010, p. 8).

"Bubbly Creek" - Characteristics & History

The most polluted branch of the CR resides near the South Branch, occupying most of the land between 35th and 47th streets from Halsted to Ashland (Hill, 2000, p. 103). Its name



A Map of the Chicago River, Highlighting the Main Stem, South Branch, and Bubbly Creek (Hill, 2000, p. 4).



Pollution at the Shore of "Bubbly Creek" (Chicago Sun-Times 2022).

"Bubbly Creek" derives from stockyards' offal that settled at the bottom, with grease separating and rising to the surface. Bubbles of methane then formed on the bed of the river and rose to the surface coated in grease, creating a putrid scent after bursting (Hill, 2000, p. 103). The physical flow properties of the creek are described by Motta (2008) as such:

- 1. During dry periods, the water in the creek is basically stagnant.
- 2. During heavy storms, the Racine Avenue Pumping Station discharges combined sewer overflow (CSO) into the creek, so that there is a northward flow in Bubbly Creek.
- 3. For excessively heavy storms, several CSO outfalls located along the channel may discharge to the creek depending on the intensity of the rainfall event.

Perhaps the most explicit description of Bubbly Creek is found within Upton Sinclair's renowned novel The Jungle, where he states:

"Bubbly Creek" is an arm of the Chicago River, and forms the southern boundary of the yards; all the drainage of the square mile of packinghouses empties into it, so that it is really a great open sewer a hundred or two feet wide...Here and there the grease and filth have caked solid, and the creek looks like a bed of lava...The banks of "Bubbly Creek" are plastered thick hairs, and this also the packers gather and clean (97).

Nowadays, the bubbling nature of the creek is a result of the combination of old by-products from the stockyards and the recent organic waste released from the Racine Avenue pumping station (Hill, 2000, p. 104). In fact, in March 1997, Mayor Richard M. Daley was in the talks "sealing off Bubbly Creek to improve water quality in the Chicago River"; however, no recent developments have risen since then to address this problem (Hill, 2000, p. 104

Timeline

348	Construction of the Illinois & Michigan (I&M) Canal is completed.
-1800s 1865	•Slaughterhouses and meatpacking plants are distributed the South Branch and South Fork.
365	•The stock yards are consolidated into a region known as the Union Stock Yards south of the current head of Bubbly Creek.
866	•The Stock Yards Slip is constructed, connecting the South Fork and resulting in the colloquial name "Bubbly Creek".
1800s 1916	•Raw sewage from sewer mains along Damen Avenue and Ashland Avenue discharge directly to the "West Arm" of Bubbly Creek.
000	•The Sanitary and Ship Canal is completed, conveying flow westward at the terminus of Bubbly Creek.
16	•The Sanitary District of Chicago completes the Stockyards Intercepting Sewer, providing a new outlet for city sewers along Damen and Ashland Avenue.
21- 126	•An intercepting sewer is constructed by the City of Chicago, discharging sewage directly into Bubbly Creek at Racine Avenue.
939	•The Racine Avenue Pumping Station (RAPS) is constructed. Raw sewage continues to be discharged to Bubbly Creek.
142	•The RAPS begins pumping sewage to the Stickney Water Reclamation Plant for treatment rather than direct discharge into Bubbly Creek.
42- 85 71	•Bubbly Creek continues to receive raw sewage during combined sewer overflow (CSO) events, which occur ~50 times per year.
	•The Union Stock Yards close.
85- sent	•CSO events from the RAPS are gradually reduced to ~17 per year, reducing the waste load received by Bubbly Creek.

Timeline of the Chicago River's Infrastructure through the Years (Waterman et al., 2010, p. 7-8)

PREVIOUS COMMUNITY ACTION

Early Responses

The earliest record of community action in response to Chicago River pollution dates back to 1965 with the Clean Streams Committee. The volunteering committee detected that the Forest Glen Chicago Transit Authority (CTA) bus terminal was dumping pollutants into floor drains which emptied into a ditch that paralleled the railroad tracks, and the ditch emptied into the CR (Hill, 2000, p. 236). Working alongside authorities and elected officials,

the group was able to make the CTA acknowledge responsibility and begin steps to correct the situation, demonstrating that CR restoration depends upon a concerned, educated citizenry (Hill, 2000, p. 237).

In celebration of the first Earth Day on April 22, 1970, the Chicago Sun-Times published an article titled "Chicago River N. Branch – Mucked Up Trout Stream?" in which citizens were urged to "Adopt-a-Stream", calling for a city-wide community river cleanup (Hill, 2000, p. 237). Various scout troops from all over the city responded to this call, proving that often-untapped children power can do an adult-sized job (Hill, 2000, p. 237). This optimism towards a cleaner Chicago led to a surge of volunteers responding to the Sun-Times's call, showcasing the power of effective marketing campaigns (Hill, 2000, p. 237).

Furthering the notion of successful marketing, canoer Robert Cassidy demonstrated this in his Chicago magazine article titled "Our Friendless River" (Hill, 2000, p. 233). In his statement, Cassidy called for a reclamation of the city's river by urging fellow Chicago natives to assist in the reversing the damage imposed upon the CR (Hill, 2000, p. 233). His methodology "triggered the imaginations of enough Chicago-area residents to raise the consciousness of many others" (Hill, 2000, p. 233). Through the positive reaction from readers, people began to consider the realities and the potential of the CR, raising optimism and considering the potential of community action (Hill, 2000, p. 233).

The Friends of the Chicago River

The most ambitious community response to the CR predicament dates to August 1979 when a Chicago Tribune article stimulated like-minded people to forge a common mission to "revitalize the river and return it as a focal point in Chicago", and, within a year, the Friends of the Chicago River organization became official (Hill, 2000, p. 238). In 1992, Friends teamed with the National Park Service to initiate a comprehensive assessment and planning effort for the CR (Hill, 2000, p. 239). They also wanted to ensure that on-the-ground projects were implemented to provide a holistic, grassroots approach to the challenge (Hill, 2000, p. 239). Today, Friends of the Chicago River continues to implement grassroots solutions throughout the city; however, the river pollution remains a pressing, city-wide issue.

CURRENT POLICIES IN PLACE

Local Policies - The Chicago River Ecology and Governance Task Force

Initiated in 2019 by former Mayor Rahm Emanuel, the River Ecology and Governance Task Force called for the Department of Planning and Development (DPD) to work with the Park District, Forest Preserve District, and the Metropolitan Water Reclamation District to collaboratively support the Chicago River (Bailly and Harris, 2022). The council is made up of two working groups: the Development Review Working Group and the Systems Plans Working Group (Bailly and Harris, 2022). The former focuses on providing a venue for river-focused stakeholder and residents to provide feedback on how development can best comply with the Chicago River Design Guidelines to be more supportive of the CR's natural habitat and ecosystems (Bailly and Harris, 2022). The Systems Plans Working Group seeks to determine how best the task force can work together to create and advance a holistic view of the CR, centering on (1) viewing the rivers as an asset and natural resource and (2) increasing the quality of water to support the health of both citizens and wildlife (Bailly and

Harris, 2022). Lastly, the United States Army Corps of Engineers partnered with the DPD to develop a Chicago Rivers Restoration Framework Plan, "including restoration potential and environmental impacts" (Bailly and Harris, 2022).

Federal Policies - The United States Environmental Protection Agency (EPA)

Beginning in November 2011, the EPA approves the State of Illinois' revised water quality standards for the CR to protect primary contact recreational uses of the waterway (US EPA, 2015). A month later, the EPA, Department of Justice, and the State of Illinois announced a Clean Water Act to "resolve claims that untreated sewer discharges were released into Chicago-area waterways during flood and wet weather events" (US EPA, 2015). Much like in the past, however, their plans ensured "completion of the deep tunnel and reservoir system to control untreated sewage releases into Chicago area rivers" (Rowan and Cannon, 2011). As of June 2013, the U.S. Department of Justice - on behalf of the EPA and the State of Illinois - filed a motion asking the federal district court to approve their December 2011 consent decree with the Metropolitan Water Reclamation District of Greater Chicago (MWRD) to "protect public health and improve water quality by capturing wastewater from the combined sewer system" (US EPA, 2015). The decree required that the MWRD met an "enforceable schedule" to complete a tunnel and reservoir plan, requiring that all remaining work on the project be completed by 2029 (US EPA, 2015).

What Is the Effectiveness?

Although many local and federal approaches towards the CR's pollution problem have been addressed, virtually none of them target the root of the situation: the dumping of sewage and other waste into the waterways. Rather, they focus on altering and upgrading current infrastructure to redirect the waste into an invisible facility, avoiding the reprimanding of high-tax-paying industries within the city limits. Historically, this response reflects the governmental approach towards the residual pollution from the stockyards, as, even though anti-pollution laws are established at a federal level, officials avoid policing these regulations from current waterfront industries for the sake of economic gain. Fortunately, the Friends of the Chicago River has adopted various grassroots approaches towards anti-pollution CR policies; however, the publicity of their mission is lackluster, making their advocacy relatively unknown.

COMMUNITY-BASED SOLUTIONS

As environmental concerns rise, the vitality of community-based movements is at an all-time high, and these approaches must keep activists involved, influence public opinion and hold public attention, create lasting organizations, and devise collective action campaigns that have a "real impact on environmental problems" (Staggenborg, 2016, p. 111). In fact, traditional conservation organizations have also begun to engage more frequently in direct action (Rootes and Brulle, 2013, p. 5). Thus, this section will analyze the three main approaches (community cleanups, environmental education, and public protests) and highlight the works of the Friends of the Chicago River.

Community Cleanups

Community cleanups are arguably the most effective hands-on approach towards a

community-based solution. The term "cleanup" refers to any part of the assessment, containment, removal, and waste disposal of chemical biological, and radiological materials (Maxwell, 2018, p. 1). However, a community approach typically consists of a group of volunteers that extract pollutants from a designated area with an overarching goal to "protect human health and the environment" (Maxwell, 2018, p. 2).

Environmental Education - A Grassroots Approach

Environmental education has recently demonstrated itself as a driving force at a grassroots approach towards environmentalism. The term "grassroots" implies that the leading members of change will be the "community at large" and the aims of environmentalism must be "in line with the needs of the community as a whole" (Gruber, 2021, p. 7). Furthermore, the field of environmental sciences teaches "a holistic perspective that encourages long-terms planning", which can be used as a tool for positive peace because "it can be used to understand, resolve, and reduce the probability of conflict" (Gruber, 2021, p. 3). Environmental peace education furthers this notion, ensuring that its students "become aware of the planet's plight, its social and ecological problems, and has a commitment to do something about them" (Harris, 2004, p. 13). This approach connects students throughout the city, establishing a future of eco-conscious leaders to combat environmental issues with knowledgeable solutions.

Protests & Publicity

Suzanne Staggenborg notes in her text Social Movements: "Media attention is one factor that affects public concern" (2016, p. 115). In response, protests have demonstrated to be effective publicity tactics, changing "the way people think about the environment and human health" and encouraging three types of innovation (Pulos, 2015, p. 15). First, they promote policy change, in which "both successful and unsuccessful" protests have the ability to elicit "changes in governance" (Pulos, 2015, p. 16). They also influence social change by solidifying social networks, empowering marginalized groups, and fostering continued collaboration (Pulos, 2015, p. 16). Lastly, they can usher technological innovation and "challenge environmental policy in ways that stimulate governmental shifts towards more environmentally sustainable technologies" (Pulos, 2015, p. 17).

The Case of the Friends of the Chicago River Today

With a goal of a "healthier, more accessible, and better cared for river", the Friends of the Chicago River have expanded their mission through three program areas: education and outreach, public policy and planning, and on-the-ground projects (Friends of the Chicago River, 2022). Regarding education and outreach, Friends has created four main programs. Firstly, "Inside, Out & About" seeks to teach about the river system through "stories, podcasts, and activities", providing river tour throughout the CR with information about the sites visited (Friends of the Chicago River, 2022). The "Chicago River Schools Network" program provides educational support for teachers and students about the CR with personalized assistance and materials on how to teach units regarding the waterway (Friends of the Chicago River, 2022). The paddling program takes groups and families canoeing to see the CR firsthand, and the McCormick Bridgehouse & Chicago River Museum is a five-story-high exhibit that showcases the CR's history and its significance (Friends of the Chicago River, 2022). The public policy and planning programs seek to improve the function of the river system as a habitat, stormwater management, river-friendly

development, and advocation for improved water quality standards (Friends of the Chicago River, 2022). Lastly, their on-the-ground projects include "Little Free Life", which provides all ways that individuals, their companies, and their communities can work collectively towards a litter-free CR (Friends of the Chicago River, 2022). Likewise, their Wildlife Habitat program works on a variety of projects to benefit at-risk species, and their centennial volunteers entails a group of regular volunteers to help restore adjacent forest preserves (Friends of the Chicago River, 2022).

COMMUNITY ADDRESSED

This report serves as a call to action on behalf of all citizens of Chicago, as well as residents in the Chicagoland area that are affected by the pollution in the Chicago River. This call extends to all demographics regardless of age, race, socioeconomic background, etc. Furthermore, the following recommendations will serve as guidelines to combating the ongoing issue of waste and pollution mismanagement within the CR, highlighting the significance of community cleanups, environmental education, and protests and publicity.

COMMUNITY RECOMMENDATIONS

In reference to the previous section titled "Community-Based Solutions", this section will be divided into three parts: community cleanups, environmental education, and protests and publicity. Here, I will provide various actions to combat the CR pollution situation in accordance with each approach.

Community Cleanups

Community cleanups are an effective and highly community-engaging approach to addressing the CR pollution problem. Cleanup events can be hosted bi-monthly at the Bridgeport boathouse, located at the entry of "Bubbly Creek". Awareness groups on social media can advertise for community cleanup volunteers near Bubbly Creek. As social media has become one of the most prominent marketing platforms, this method has the potential to be highly engaging and widespread. These volunteer groups can be divided by "water purifiers" (those that choose to adopt the role of physically extracting pollution from the waters) and "pollution relocators" (those that volunteer to load the extracted pollution into their vehicles to dispose of in nearby landfills).

In addition, to reduce the cost of boat storage at the boathouse, it can be arranged that the Chicago Park District will provide a discounted price for rowing teams that regularly volunteer to help clean their adjacent waters. Not only will this benefit the teams' health (as long exposure to sewage waters have the capacity to damage the health of the rowers), but it will also serve as a team-bonding experience that can make the teams enthusiastic about a clean CR.

Lastly, community cleanups can be organized through nearby Chicago Public Schools to intertwine hands-on action with environmental education, so students may witness firsthand the grand extent that the city's waterways are polluted. This method can provide an alternative method to a standard classroom setting, bolstering engagement and interest

in the topic of resource conservation and protection.

Environmental Education

While environmental education primarily stems within school systems, it is possible to extend it beyond classroom perimeters to make it more accessible and engaging. This can be done through volunteer initiatives stationed throughout the city to solicit awareness regarding the CR's pollution and the city's lackluster response to the problem. Even though it is possible that few may engage with volunteers conversationally, the station itself is enough to advertise the initiative's cause.

Volunteers may also collaborate to design and erect posters throughout the city to educate citizens on this matter. The addition of QR codes to the initiative's website on these posters and flyers can allow people to easily access information through their mobile devices, diminishing the possibility of a lost volunteer from a misplaced paper. All of these would be done through the approval of the city to avoid any legal troubles and negative publicity.

School administrators can also be encouraged to volunteer and collaborate on establishing an annual environmental education unit throughout Chicago schools regardless of public or private institutions. This uniform approach can unify likeminded individuals to effectively develop an educated future of leaders with a focus on environmental sustainability.

Protests and Publicity

The volunteer initiative can also bolster publicity through various protests. Most importantly, it will be its core to avoid marketing gimmicks and controversial tactics, much like PETA's highly offensive and insensitive "Got Autism?" ad that aimed to eliminate dairy milk consumption (Kluger, 2014). These protests can be conducted in three ways: in-person, online, and in collaboration with the existing climate protests.

In-person protests can be held throughout Chicago's heavily trafficked regions: Grant Park, Millennium Park, Navy Pier, and the Financial District. Rather than an aggressive and boisterous approach, these protests will be encouraged to remain peaceful and informative to passersby, demonstrating a sophisticated and educated public image. By maintaining this reputation, the initiative will be publicly perceived with respect and higher engagement.

Online protests can be conducted through various methods on social media. Firstly, volunteers can address misinformation on heavily polluting industries with neutral, educated comments on their posts. Likewise, they can develop infographics exposing the environmental impacts of certain companies, scheduling them to be posted at a specific time on a specific date to mass-post as a noninvasive tactic to infiltrate user timelines and counterargue these detrimental businesses.

Annually, global climate protests are held in response to the Earth's growing environmental concerns. The volunteer initiative can respond to Chicago marches by grouping all its volunteers into one large assembly. To further advertise, they can attach a logo or slogan to each of their signs or outfits to market their solidarity with other organizations, potentially establishing future collaborations. In addition, the turnout of volunteers emphasizes the

passion that underlies the project, bolstering a positive image.

FUTURE ACTION

Considering the historical treatment of the Chicago River combined with the lackluster conservation methods, it is essential that action is enacted upon as soon as possible. As mentioned previously, the notion of change stems from community action and grassroots approaches. This can be addressed through community cleanups, environmental education, and protests and publicity. Most importantly, citizen morale and aspirations must be uplifted to bolster enthusiasm and optimism, reminding them of their immense impact on the city.

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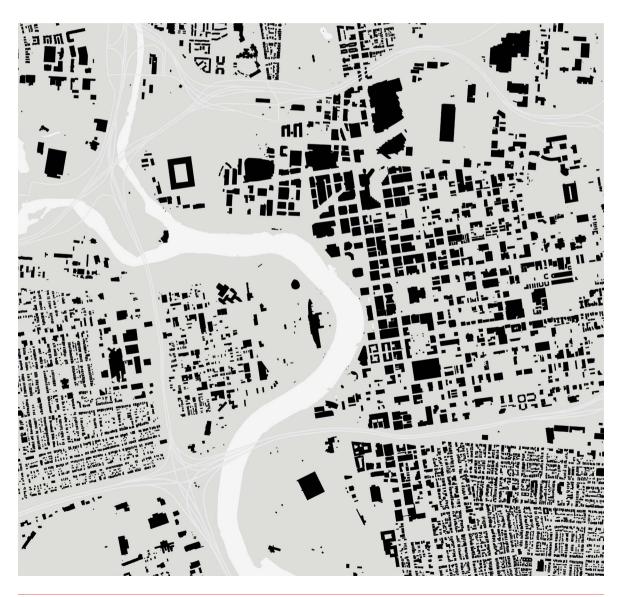
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Broken Dialogues, Unbroken Community: Homelessness in Columbus, Ohio

Ellie Bouton



INTRODUCTION

On any single night in January 2022, 1,912 people in Columbus, Ohio experienced homelessness, with 342 of those residents without shelter (Columbus Shelter Board, 2022). Whilst the cost of living and housing crises remain intertwined across the United States, local communities are striving from the ground up to secure space for themselves and establish survival networks. FIRST Collective and Camp Shameless are utilising grassroots efforts to change the tangible reality of unhoused residents, emphasising lived experiences, and autonomous advocacy – working to build community and improve the quality of life of real people, in real time.

This community briefing focuses on homelessness in Columbus, Ohio, and explores the challenges met by a community group who employ grassroots endeavours to meet housing needs, as well as how community care and mutual aid can ground grassroots abilities in a sustainable way. Unlike other urban housing security projects, the present case study of Camp Shameless offers a readily implementable solution – transitional housing security and city support programmes. However, as proposed and implemented by the City of Columbus, this solution denies Camp Shameless residents' autonomy over their own futures by rejecting the group's own proposal. Nonetheless, this community briefing serves as an analysis of the context surrounding the radical mutual aid programme that created Camp Shameless, how similar actions may serve to alleviate the homelessness crisis in Columbus, and ways to create a future in the hands of city residents and communities, as opposed to a selected few. It recommends a continuation of mutual aid initiatives and survival networks built in the time residents spent occupying Camp Shameless, paying special attention to the community building abilities of 'space' in the resident's future housing opportunities, and an alternative re-envisioning of temporary shelters.

GROUNDING POSITIONALITY

I grew up in a suburb of the Columbus Metropolitan Area, watching both of my parents go to work in downtown Columbus – regularly visiting their workplaces and surrounding

parks. However, Columbus did not become a place that I considered as part of my community until I was able to transport myself and explore it on my own, taking part in the city's university district, or seeking out experiences of collective action advocating for national and local issues alike. Upon this newly discovered escape from suburbia, the local conflicts of Columbus's urban residencies piqued my interest in the mid-2010s, as stereotypically 'urban issues' seeped from high-density spaces to my rapidly growing suburb – (un)affordable housing, gentrification, displacement, and uneven returns on funding for social services.

Living and building community in the capital city of an incredibly gerrymandered state (Gresham, 2022) is a formidable challenge at best and alienating at worst. When votes and legislation continue to be geographically obstructed by those in power, residents turn towards more radical efforts to make their voices heard, shape their own neighbourhoods, and cater for their own needs. This experience of 'bottom-up' endeavours – mutual aid, protests, and non-state organised ways to meet people's needs – is slowly but surely making its way into suburban life as Westerville, the smaller town I grew up in, becomes increasingly similar to its urban neighbour. Nonetheless, the city of Columbus is where I first witnessed, sought out, and experienced grassroots community aid filling the holes that the state had overlooked.

Now, as a final year student at the University of St Andrews, these experiences of radical care ground my work in sustainable development and geography – advocating for an emphasis of social sustainability, the value of lived experience, and the agency of communities to determine their own needs. Rooted in feminist epistemologies that seek to emphasise the right to agency, it is my intent that this community briefing pursue solidarity with those experiencing challenges. Ultimately, this culminates into an echo of critical urban theory that endorses the 'right to the city' (Lefebvre, 1968), and even more so the right to a city, which meets all of its citizens' needs, as defined on their own terms.

THE COMMUNITY

As the COVID-19 pandemic exacerbated the struggles of low-income communities and a myriad of social justice protesters took to the streets in 2020, mutual aid and community solidarity have been on the rise in the urban spaces of Columbus. Concepts of mutual aid rest on the tenet of 'solidarity not charity,' operating on the value of collective community struggle, forging new survival networks to support one's neighbours (Spade, 2020) tangibly and intangibly. Justice-oriented organisations have sprung up to meet the community's needs, extending beyond the neoliberal charity model that took precedence prior in Columbus. This is unique for the capital city of Ohio – unlike more progressive cities with rich histories of social issues and grassroots activism (Capitol Hill Autonomous Zone in Seattle, Dignity Village in Portland, George Floyd protests in Minneapolis), Columbus is neither considered the epicentre of urban academic focus, nor the typical environment for radical action as it remains nestled in the heart of a conservative state (Gresham, 2022). Thus, newer forms of radical care in Columbus are not as documented within academia as those of other urban environments. This briefing hopes to make visible the collective struggle and grassroots organisation that harness the power of community.

FIRST Collective, a non-profit organisation, is one example of mutual aid and community activism organised recently in Columbus. FIRST describes itself as a 'group of organisers, activists, and local residents interested in making art, creating social infrastructure, and fostering community through mutual aid' (FIRST Collective, 2022b). In January 2022, FIRST hosted nightly warming spaces for unhoused residents, operating out of a church in East Columbus (FIRST Collective, 2022a). From January 27th to March 29th of 2022, the warming centre hosted up to 30 people nightly, providing bathrooms, hot meals, and transportation to those visiting (FIRST Collective, 2022a). The warming centre closed following a series of unwarranted conflicts with the building manager, who, on March 29th, forced residents out with armed guards (FIRST Collective, 2022a). During this conflict, the pastor of the church quit in solidarity with the volunteers of the warming centre. Faced with the need to continue providing for those experiencing homelessness in Columbus, collective members turned towards securing a new space for unhoused community members, establishing an encampment a few blocks away from the former warming centre (FIRST Collective, 2022a). From the end of March to mid-September of 2022, the encampment – designated Camp Shameless as a nod to the dignity and self-determination of its residents – operated as a home to up to twenty community members (FIRST Collective, 2022a). Residents of the camp have access to shelter (in the form of tents), meals, transportation to and from work, assistance in paying phone bills, medical services, harm reduction, and assistance with paying for prescriptions (FIRST Collective, 2022b).

Differing from other structures in place to aid those experiencing housing insecurity in Columbus, such as emergency shelters and transitional housing, Camp Shameless provides its residents with resources and shelter without state or other institutional aid, allowing them to operate on a democratic and collective basis. Funding for the encampment stems from the liquidated retirement saving of one camp resident, combined with community donations and crowdfunding (Lagatta, 2022b). The individualised nature of these sources allows the camp to operate with full democracy and autonomy – complete with a set community agreement among others – ensuring responsibility for themselves, their space (Lagatta, 2022b). These notions of common goals and collective struggle, made possible in part by insourced funding, are what make Camp Shameless a community.

FIRST Collective describes that 'by building trust and relationships with our residents, we are able to break down survival mode barriers to better meet their need and help get them where they need to go' (FIRST Collective, 2022b). These tenets of connection and trust also contribute to the feeling of community among residents, with one member stating that living at Camp Shameless 'makes me feel good where I'm finally at a point in my life where I'm part of something. I'm scared to leave because I'm scared, I'll relapse, so this is a safe haven for me' (Lagatta, 2022b). Notions of acceptance, support, and mutual understanding can be detected in these statements, setting a foundation for collective betterment. The use of place and space for the camp is also integral to its mission: 'It was our goal here to keep people visible but also safe. There's no NIMBY-ism here, we've been welcomed warmly,' states the encampment founder, Elizabeth Blackburn (Lagatta, 2022a). Visibility of the camp to the street and surrounding homes lends itself to the ability of residents to find community among the neighbourhood, and to create broader survival networks. Solidarity is uncommon in spaces of traditional shelter systems and transitional housing, as a culture of consistent movement within the Columbus shelter system makes it difficult for residents to stay long enough to build relationships and support with their community. The placement of Camp

Shameless within a neighbourhood, and the intentionally cultivated space of mutual understanding and solidarity in struggle are what set the encampment apart as an alternative to more formal options.

THE CHALLENGE

Housing (In)Security

To understand the challenges facing Camp Shameless, and why they chose a path of alternative action, it is important to explore the relationship between state structures of support and homelessness, before delving into the specific of issues facing Camp Shameless, FIRST Collective, and their support network. While homelessness is an intersectional issue — related to rental and housing markets, social services, public health, mental health, and medical care, this briefing critically engages with the specific structures and systems set in place to alleviate the material realties of homelessness in Columbus – providing shelter for those chronically unsheltered.

There is no question that homelessness is a pervasive issue in Columbus. The Community Shelter Board (CSB) served 51 more families in 2021 than the year prior, meaning that an entire shelter more of people were experiencing homelessness (Walker, 2022). The city boasts a myriad of programs to alleviate housing insecurity and instability before home loss occurs. Some of them are newly constructed, such as recently passed legislative package of 'Housing for All' in 2021, which includes security deposit payment plans, protection from income discrimination, rental receipts, and rental complaint reporting systems (City of Columbus, 2022). In addition, the mayor of Columbus has recently called for public and private sectors to come together to invest \$1 billion in affordable housing across the city (Williams, 2022). The most instrumental network for housing security in Columbus is the CSB, founded in 1986 as a coalition of private citizens, state agencies, non-profit social service providers, and faith-based organisations to connect partner agencies working to fund and operate Columbus's housing support system (Lobao and Murray, 2005). From June 2020 to July 2021, CSB served 13,000 people with homelessness prevention, shelter, street outreach, rapid re-housing, and permanent housing (Community Shelter Board, 2021). The board also provides a pilot outreach program to families at severe risk for housing insecurity, by connecting them to social service providers and offering monetary aid (Community Shelter Board, 2021). In its first year, the program served 770 families, with only 36 entering the shelter system, boasting a success rate of 95% (Community Shelter Board, 2021).

Central Ohio's housing support system has been successful in preventing homelessness – but what happens to those whom the system does not catch, or those experiencing homelessness prior to creating the prevention network? Most often, residents enter the shelter system operated by CSB. As opposed to the prevention network system, the Columbus shelter system has a success rate for July to October 2022 of 19%, with 287 residents entering permanent homes, while 991 remain 'literally homeless' when exiting the shelter system (Community Shelter Board, 2022). In the ZIP code where Camp Shameless is located, of the 135 individuals that exited emergency housing this year, the success count was 7% - 63% less than the current city average (Community Shelter Board, 2022; FIRST Collective, 2022a). Low success rates suggest that the shelter system is not effective in

providing housing security once it is lost. There are many reasons someone may choose not to engage with the shelter system in an urban community – fears of violence, large crowds, abstinence, and rumours of uncleanliness (Shapiro, 2012). The stigma accompanying homeless shelters, whether realised or not, combined with the measured rates of people leaving shelters in Columbus without a solution, proves a pervasive systemic issue and the need for alternatives.

Camp Shameless

For five months, Camp Shameless operated on two lots in Eastern Columbus, one owned privately whose owner allowed the encampment on the condition that residents kept it tidy (Bliss, 2022). The other lot is owned by the City of Columbus, where the city government is required to build affordable housing by the United States Department of Housing and Urban Development – but has failed to do so for the last 15 years (Bliss, 2022). The irony of this situation, where community members without housing are occupying the very land contractually obligated to provide that affordable housing, is not lost.

Since its beginning in March of 2022, Camp Shameless has been in continuous contact with City of Columbus representatives. Although regular visits from CSB outreach, liaising police officers, and housing department officials remained amicable, tensions escalated with city officials when the camp was served an eviction letter in late July (Lagatta, 2022a). Citing illicit drug use, sanitary concerns, and the building of an immovable structure on the land, the city handed over a trespassing notice and stop work order, demanding that residents leave by August (Lagatta, 2022a). Meanwhile, FIRST Collective representatives had been negotiating with the city government since early June, discussing FIRST's grant proposal to fund purchasing the city-owned lot and procure \$181,500 of emergency funding to support the camp for six months (FIRST Collective, 2022a). The grant proposes building a village of micro-homes for those unsheltered, providing safety, stability, and, most importantly, community while they get back on their feet (Bliss, 2022). In response, city representatives immediately issued a statement that the city does not support tent cities, despite further explanations of the model's validity (Bliss, 2022).

The eviction procedure of the camp escalated in July after camp residents decided to build a lean-to structure after storms had damaged the tent used to store food and other resources (Lagatta, 2022a). Citing the lean-to as a permanent structure, and therefore illegal, the government issued a stop work order. After receiving the order, Camp Shameless residents made the structure moveable and non-permanent, complying with the demand (Lagatta, 2022a). Despite this, the city continued to pursue eviction, with no housing opportunities in place for future residents at the time, potentially forcing them onto the street, or into the systemically dysfunctional the shelter system. Negotiations allowed the eviction date to be pushed back to mid-September. In addition, six days before eviction, the city government and CSB publicly shared that residents would have the opportunity to relocate to a motel as part of a transitional housing pilot program, inclusive of meals, transportation, and social services (Bliss, 2022). Twelve out of thirteen long-term residents joined the program. While the residents of Camp Shameless will have shelter security for the foreseeable future, the scale of the housing crisis extends beyond Camp Shameless. In June 2022, the city called in police, bulldozers, and excavators to evict housing encampments in other city neighbourhoods (NBC4i, 2022). With no housing alternative in place, destroying encampments is denying residents the right to live.

As of 2021, Columbus has a deficit of 50,000 affordable homes for its extremely low-income residents (National Low Income Housing Coalition, 2022). When it seems that there are simply no affordable homes available, more radical solutions may be appropriate to secure safety and stability for all residents. Despite similar core beliefs between city representatives, FIRST Collective, and Camp Shameless – endorsing housing for all and recognition of the housing crisis – the city refuses to consider alternative solutions. Such solutions, as those put forth by FIRST Collective, destabilise existing structures of support and emphasise self-determination, allowing unhoused residents the agency and ownership over their own future, instead of a continuous cycle through the shelter system.

RECOMMENDATIONS - THE FUTURE

Grounded in critical urban theory, the following recommendations focus on how to attain housing security for residents while retaining agency and found community. These foundations reject market-oriented urban knowledge under the belief that housing is a right, not a commodity (Brenner, Marcuse and Mayer, 2012). Central to this is Lefebvre's 'right to the city,' emphasising the power of individual agency to take back the city from capitalist accumulation (Lefebvre, 1968). This community briefing recommends a continuity of Camp Shameless sentiments: attention to space in rehoming residents, continuation of 'care-in-practice', and a campaign for the 'tiny-village' model of transitional housing.

ATTENTION TO SPACE

'It's our goal to keep people together and to keep them in the community they've been a part of for all this time' (Lagatta, 2022a). This sentiment, expressed by the founder of FIRST Collective and Camp Shameless, highlights the integral nature of space in the ecosystem of Camp Shameless. As told by residents, a place of belonging and community has been essential to the functioning of the camp and resident well-being. Proximity to a neighbourhood, fellow camp residents, and solidarity all rely on the physical parameters of space, or the lack thereof, to exist. Space acts as a catalyst for community building to exist and for the continuity of valuable community for Camp Shameless residents to support each other through the transitional housing process. This briefing recommends emphasising space in future housing opportunities for camp residents. FIRST Collective should advocate for the city to secure affordable permanent housing in the same neighbourhood, so that members experiencing vulnerabilities can rely on the existing survival networks built within the camp. In practice, this could be accomplished by contracting a third party to conduct a geographic survey of available housing opportunities to support cohesive living space for camp residents and strengthen negotiations with the city.

CARE-IN-PRACTICE

Securing housing with spatial proximity to other residents also supports the continuation of 'care-in-practice' for camp members, described as mutual support, use of common space, shared resources, and democratic processes (The Care Collective, 2020). Camp Shameless and FIRST Collective made an intentional commitment to mutual support around the collective

struggle of homelessness by utilising shared kitchen space, food, bathrooms, and power, and came to decisions regarding the encampment democratically. Grassroots, intentional communities, enable connection and support emotional, economic, and collective needs amidst mutual dependencies (The Care Collective, 2020). Exhibitions of 'care-in-practice' encompass those of mutual aid, as Spade (2020) emphasises the foundational role of mutual aid in creating survival networks for a sustainable future. With valuable connections already in place for Camp Shameless residents, the importance of continued cultivation is vital as the community transitions.

TINY-VILLAGE MODEL

This briefing also recommends a campaign for the 'tiny village' model, as seen in Dignity Village, Portland, for instance. Dignity Village is a collection of small homes in a parking lot, housing up to 60 people a night (Dignity Village, 2019). Dignity Village is founded on ideas of destabilisation, 'to renounce charity models for responding to poverty, to be selfgoverning, and to demonstrate the practical wisdom behind the creation of a city-sanctioned campground for homeless people' (Finley, 2003, p. 509). While Dignity Village allows residents to be as transient as they desire, with possible stays as short as one night, in Columbus, this model could extend to more permanent residency, with members agreeing to a certain length of tenancy. Longer tenancies would provide more space for community building and collective support. As suggested in FIRST Collective's grant proposal to the City of Columbus, a similar collective would be advantageous in Columbus, as an inefficient shelter system and severe lack of affordable homes leave residents with no option but the street. The need for autonomy and ownership is articulated by FIRST and a co-owned village model would allow for this. To realise this, possibilities include a public campaign including crowdfunding, raising awareness, and negotiation with city stakeholders, or pursuing outside grant sources for funding. While Columbus does not share Portland's political makeup and history of alternative action, we have seen with the rise of mutual aid and radical care in the city that alternatives are indeed possible and even thriving.

CONCLUSION

Affordable housing remains a pervasive issue in Columbus, Ohio. With only 43 affordable beds for every 100 needed to house extremely low-income residents, there simply is not enough housing to support residents' needs. The city boasts of a successful homelessness prevention pilot program, although its shelter system paints the opposite picture with only 19% of individuals securing housing opportunities after exiting shelters. In a city with budgeted resources for unhoused residents, and a public commitment to resolving these issues by the city government, an extremely inefficient system for those already without homes is not acceptable. In dialogue with FIRST Collective, the City of Columbus refuses to consider more radical alternatives, even when successfully in place elsewhere. Although the pilot program for housing Camp Shameless residents in a motel proves promising, the city must reckon with its history of forcibly evicting encampment residents while providing no other housing opportunities. Grounded in progressive tenets of critical urban theory and 'right to the city', this briefing recommends a continuation of radical care and mutual aid among prior residents, campaigning for a cooperative village housing model, and advocacy for spatial proximity when securing permanent housing.

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Exploring Shortages of Housing and Public Transport Infrastructure in Dublin, Ireland

Jack McGee



INTRODUCTION

The motto of Dublin is: 'The Obedience of the Citizens makes a Happy City,' and this relationship between civilian obedience towards authority and its consequences on social wellbeing are the inspiration behind this community briefing. This community briefing will use data from state resources such as the 2022 Census to highlight issues such as housing shortages, limited public transport infrastructure and the rise of commuting from neighbouring counties. Finally, the briefing will examine community-based solutions. The briefing will close with an evaluation of the state of Dublin's social contract and provide a series of comments and recommendations based on ongoing strategies – both in the city and worldwide.

The choice of this briefing to explore Dublin's urban challenges has been motivated by my childhood in rural Ireland. Growing up in Puckaun, Co. Tipperary, a tiny village on the banks of Lough Derg and surrounded by verdant countryside, the national attention that Dublin – our capital and social hotspot – was captivating, and there was a sense of magnetic attraction towards the city. As I have grown and had the opportunity to visit and explore Dublin, I have been able to see the two sides of Ireland, the traditional rural and the innovative modernity of the city. This briefing, therefore, is motivated by my experiences of Dublin's challenges and its potential blueprint for future conversations about sustainability in Ireland as a nation.

OVERVIEW

The 2022 Census (CSO, 2022) revealed that, for the first time since circa 1851, the population of the territory comprising (the Republic of) Ireland had exceeded 5.1m. This figure emphasises the unprecedented population growth in Dublin and nationally. The population growth represents an 8% increase since 2016 (Irish Times, 2022), of which 52% was due to immigration. Immediately it is suggestable that Dublin will experience issues related to urban sustainability in a much more acute way than most cities, given its population accounts for 27% of Ireland's people. Census data (2016) revealed that the average age of

Dubliners is 35.6 and that 22% of Dublin-based workers were immigrants. It is likely that Dublin's role as Ireland's multicultural hub will continue, as projections by the Dublin Chamber (2021) showed the population of the city exceeding 2.2m by 2031 and is therefore especially sensitive to government policies.

The 2020 General Election would suggest that the city's population is more liberal than the rest of the country. Of the 46 TDs1 elected to Dáil Éireann2 from Co. Dublin, 28 belonged to the left-wing parties in comparison to 17 TDs from the governing centre-right (Oireachtas, 2020). This would imply that Dublin is governed by a State without its consent, with the majority of the centre-right Coalition's support coming from rural areas. The factor of representation in Dáil Éireann is further underlined by the distribution of people within constituencies. Two of Dublin's wards, Fingal and Rathdown, contain the highest number of people per TD, at 34,138 and 33,718 people per TD, respectively. Consequently, it could be suggested that the city is underrepresented in Dáil Éireann.

Politically, the issues facing Dublin have been approached in diverse ways across the political spectrum. In their 2020 General Election manifestos, the two largest parties – Sinn Féin on the left and Fianna Fáil on the right – gave varying degrees of importance to the urban issues. Sinn Féin dedicated an entire section of their manifesto towards outlining reforms to housing, urban planning, and devolving powers to the local councils. Furthermore, Sinn Féin also proposed a referendum to enshrine housing as a protected right within the Constitution, as well as increased regulation on renting and greater rights to tenants regarding rent prices and tenancy periods (Sinn Féin, 2020).

Conversely, Fianna Fáil placed much greater importance on deregulation of the construction industry, making it easier for individuals to fund/build their own homes and penalising supposed underusage of buildings. Their manifesto (2020) also gave much more detail towards rural communities and agriculture, pledging to remove barriers that limit planning permission in local councils and to invest in the regeneration of town centres. However, the party did propose establishing an Office of Mayor for Dublin, not dissimilar to London's system where the office coexists with the symbolic Lord Mayoral position. This role would be publicly elected and responsible for governance of the city, although as of February 2023, this position has not yet been established and is under consultation via the creation of Dublin's Citizens' Assembly.

ISSUES IN DUBLIN

Without a residential address, it is near impossible to apply for welfare benefits, job openings, or enjoy leisure time. Resultantly, this briefing argues that Dublin's salient issue is its housing shortage, which has led to increased emigration, both internally and internationally. Internal migration to the periphery areas of Co. Dublin has adversely impacted housing availability and prices in the neighbouring counties of Kildare, Meath, and Wicklow.

Housing vacancies in Dublin were consistently amongst the lowest on average. South Dublin (Census 2022) had the lowest vacancy rate in the country at 4%, well below the average of 7.8%. Nationally, this figure represents a 9% reduction in vacancies since the

2016 Census, emphasising the major pressure the housing market has been under in such a short amount of time. The vacancy rates in Dublin are possibly reflected in population trends in neighbouring counties. Between 2016-2022, the populations of Meath and Kildare grew by 13% and 11% respectively, the 2nd and 3rd highest rates of growth in the country. Fingal, a Dublin subsection, grew by 11%, reflecting that the counties on Dublin's periphery and suburbs are experiencing a faster rate of growth than the city centre. Again, this underlines the unsustainable rate of growth in the population, especially when compared to the availability of housing stock and the rate at which it is produced.

Immigration has increased significantly in recent years, and since 2015 has consistently exceeded emigration (EMN, 2021). Historically, Ireland has a reputation for major emigration rates. Economic downturns throughout the 1980s caused major emigration from the country, primarily from urban environments and among the educated youth. This underpins that the recent trend of net immigration represents a meaningful change for the country, and therefore it is arguable that the lack of infrastructure is justifiable due to its lack of precedence. Additionally, there is a correlation between the 2015 refugee crisis in Europe and its influence on Ireland's migration policy. With the introduction of the Irish Refugee Protection Programme in 2015 and the obligation of the country to house 4,000 refugees over two years (Gov.ie, 2022), there would be a natural reduction in the availability of social housing. The 2022 Russo-Ukrainian War has further shifted Ireland's approach, and after providing shelter to over 43,000 refugees, such housing shortages have led to increased rough sleeping and the repealing of visa-free travel from Ukraine (Politico, 2022). These strains have been most pronounced in Dublin, given its position as Ireland's international hub and the location of the asylum centre where refugees are initially resettled (UNHCR, 2022).

The ability to buy or rent a house in Dublin is limited because of the increase in demand. In 2022, house prices in Dublin rose by 14.1% from their average, matching the prices of housing during the Celtic Tiger (Irish Times, 2022). The average Dublin house price exceeds €420,000, higher than the national average of €275,000 by around 35% (MyHome.ie, 2022). This data also reveals the rise in prices in the counties bordering Dublin – Co. Wicklow's average house price is €385,000, behind only Dublin in cost. Co. Meath and Co. Kildare prices are €285,000 and €265,000 respectively, the 3rd and 5th highest in the country, only interrupted by prices in Cork, Ireland's second city. These prices in Dublin and its neighbouring counties highlight the trend of Dublin's increasingly alienating costs, which has led to a rise in the level of commuters living outside of the capital and driving to work. For an individual, the average cost of living in Dublin is only 2% higher than that of London - a city with a population of more than 8m (Numbeo, 2022). This has been caused largely by the relocation of technological and financial businesses to the city, such as Apple and Facebook (Irish Times, 2016). These businesses contribute higher incomes, but also demand higher educational experiences from their employees – leading to a concentration of highlyeducated, high-income workers in Dublin and therefore the increased prevalence of gentrification and rising house prices.

COMMUNITY STRATEGIES; DETAILS, EXAMPLES, AND EVALUATION

Although there are governmental initiatives, the immediate relief to housing and public infrastructure shortages has come from communities themselves, both residential and business. These strategies will be described with examples and evaluated to determine their long-term value and link to urban sustainability aims.

One method is protesting to send a message to the governing institutions. For example, Trinity College students protested in collaboration with People Before Profit. This protest garnered national attention, with interviews conducted by the national broadcaster, RTE, and was held at the entrance to Trinity College's Old Library, a prominent tourist attraction in Dublin. Demands included the abolition of tuition fees as well as major reforms to the Irish public transport system – making it free to use and much more frequent. Additionally, this community protested for the Government to introduce mandatory rent reductions, limiting rent to a quarter of household income (Oireachtas, 2022). These protests are a key example of the community's responses towards Dublin's urban sustainability issues. Protesting can be significant because of the disruption it can cause and the publicity it generates - the protests in Dublin have raised the profile for future community activism efforts, such as a repeat of the walkouts on a national scale. However, these specific protests related to the People Before Profit movement; their logos and slogans are visible in the campaign literature. Given the political nature of the movement, with numerous TDs in Dáil Éireann being People Before Profit members, it may be easier for the Government to dismiss these protests as a party-political stunt without delivering meaningful actions and solutions.



Photo taken by author whilst attending the student housing protest at Trinity College – note the presence of cameras and the conduction of interviews to the left of the image.)

Homelessness has also led to the development of relationships between local businesses and charities, which is important in tackling urban sustainability issues as they increase the level of interaction between organisations and enable these companies to volunteer towards community issues in a field, they specialise in. A prominent example is the Shine a Light Night, which is held annually by Focus Ireland (Focus Ireland, 2022). Running since 2012, prominent business figures spend a night sleeping rough. The inaugural event was supported by 55 business leaders, growing to over 100 leaders and 700 volunteers, and

raising over €1m in donations in 2022. Activism through charity is a major strategy to tackle urban sustainability issues because it encourages members of the public to take charge of their own efforts. The level of engagement within the Dublin business community has been demonstrated by this method, with participation from sectors ranging from construction, security, law, and fashion. OECD data proves that Irish citizens contribute more private donations in aid than any other country, averaging \$112 per person, per annum (Henry, 2021). This demonstrates that the strategy of using relationships within a community to fundraise has the environment to thrive due to the statistical evidence of the tendencies of Irish people to donate. However, this strategy can be refuted regarding its long-term sustainability. This method is vulnerable to external factors such as economic conditions, and it is likely that fundraising would be adversely influenced by a recession or inflation. Resultantly, whilst the community efforts have been successful in raising awareness and funds, it is fair to consider this methodology an unsustainable solution given its reliance on personal motivation and economic stability.

Another example is the participation of households in the scheme to house refugees. Over 2,800 households are housing around 6,200 refugees, often families with young children (RTE, 2022). Although these households receive €400 per month under the Accommodation Recognition Payment policy (Citizens Information, 2022), the significance of this community participation in seeking to alleviate homelessness and housing shortages in Dublin demonstrates the efforts of local communities to recognise and act on social issues. However, this effort can be criticised for the inequality in efforts between parts of Ireland – Dublin, along with Co. Donegal and Co. Kerry, houses 40% of Ireland's Ukrainian refugees (Irish Times, 2022), and the strain on services emphasises the need for a greater dispersal of the refugees. Additionally, as with the fundraising strategy, this solution depends on individuals' ability to host refugees and is therefore vulnerable to changing personal circumstances. The Guardian (2022) reported that in the UK, many refugees were asked to leave because of financial issues faced by the hosts or social differences caused by difficulty communicating or unfamiliar cultural habits. This is reinforced by the European Central Bank's research (2022), proving that linguistic barriers and the lack of available employment or childcare within a community have led to increased social tensions. Therefore, this strategy's social sustainability can be refuted, and whilst based on a sense of moral responsibility and empathy, the urban sustainability issues regarding housing and services in Dublin are placed under further strain by this community strategy, not alleviated.

To encourage physical well-being and reduce the usage of cars, community strategies promote public bike hire areas and businesses subsidising the bikes bought by their employees. With State investment of €300m into improvements to pedestrian safety and cycling paths (Irish Times, 2022), the Dublin Cycling Campaign (DCC) seeks to lobby for greater regulations around car usage in the city, with the joint aim of both passively reducing pollution and promoting more cycling in Dublin (DCC, 2022). This community strategy is incredibly successful due to its local participation and international outreach – the campaign sends representatives worldwide, promoting the merits of community organising. The DCC represents a multi-faceted community effort to tackle urban sustainability issues. With the many stakeholders interacting with one another through the DCC, and the organisation empowering local residents, this strategy of unionising to raise awareness through lobbying, event-hosting, and protesting demonstrates the sustainability behind the movement. The creation of a large network of public bike stations further emphasises the

campaign's successes. Local businesses have also supported the effort to reduce pollution in Dublin through greater consideration of their practices and encouraging employees to commute via bicycle. An example of this is Sisk's Zero Avoidable Waste Scheme, through which the company intends to completely eliminate avoidable waste in their supply chains and construction sites by 2028 (Sisk, 2020). Dublin businesses have also subsidised e-bikes for employees. Bleeper (2022) offers a long-term hire scheme for businesses and individuals, allowing remote management of their bikes on a subscription service, making it easier and cheaper to use a bike in the city. This not only encourages businesses to advocate for their employees to commit to these schemes, but it also allows greater accessibility of the service.

Another prominent example of communities contributing to efforts to reduce the strain on housing in Dublin – and nationwide – is the widespread participation of households to the scheme to privately house Ukrainian refugees. 2022 marked the largest humanitarian resettling in Ireland's history within a year, estimated to grow to 60,000 refugees by the end of the year (New York Times, 2022). To accommodate these numbers, thousands of Irish households have personally volunteered to house Ukrainians, contributing to the creation of an EU Temporary Protection Directive. Over 2,800 households are housing around 6,200 refugees, often families with young children (RTE, 2022). Although these households receive €400 per month under the Accommodation Recognition Payment policy (Citizens Information, 2022), this does not detract from the significance of this community participation in seeking to alleviate homelessness and housing shortages in Dublin and demonstrates the efforts of local communities and individuals to recognise and act on the suffering of vulnerable demographics in their areas. However, this effort can be criticised for the inequality in efforts between parts of Ireland - Dublin, along with Co. Donegal and Co. Kerry, houses 40% of Ireland's Ukrainian refugees (Irish Times, 2022), and so, despite the swell of generosity displayed by local communities and households, the strain on services amidst ongoing housing and infrastructure shortages emphasises the need for greater dispersal of the refugees across the country. Additionally, as with the strategy of fundraising, this solution is largely dependent on the ability of individuals to host refugees and is therefore vulnerable to personal circumstances changing. The Guardian (2022) reported that in the UK, many Ukrainian refugees were asked to leave – and thus, become homeless - because of financial issues faced by the hosts with larger utility bills, or because of social differences caused by difficulty communicating or unfamiliar cultural habits. This is reinforced by the European Central Bank (2022), their research proving that linguistic barriers, lack of available employment or childcare and unsustainable population growth within a community so suddenly has led to increased social tensions and difficulties for the host communities to remain accommodating of the refugees. Combined with the concentration of Ukrainian refugees in certain areas – such as Dublin – the social sustainability of this strategy can be refuted, and whilst based on a sense of moral responsibility and empathy, ultimately the urban sustainability issues regarding housing and services in Dublin are placed under further strain by this community strategy, not alleviated.

Businesses have also sought to alleviate pressure on housing and services by investing in developing new suburbs, such as Cherrywood. Given planning consent in 2010, Cherrywood has been driven by Dublin's private industry, regenerating industrial ground to the south of the city, and incorporating tenets of urban sustainability in a modern, experimental setting. The suburb has been developed with pedestrianisation and public transport infrastructure at its heart. The development highlights an attempt to integrate socially,

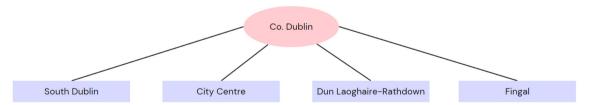
environmentally, and economically sustainability practices in the modus operandi of businesses within the Dublin community (Hines, 2022). The use of WELL metrics regarding building features, ranging from insulation quality, air recycling and water usage monitoring, demonstrates how investors have considered Dublin's sustainability credentials. Private property developers have also incorporated green space and urban greening practices throughout Cherrywood's development, with over 34 hectares of parks and active spaces in the area and more than 3,000 trees planted throughout the suburbs' main roads and estates. The development also saw considerable community participation, aimed at identifying key issues facing existing and potential residents of the area and possible management strategies. The area has seen the construction of four LUAS stops, which have connected the suburb to the rest of Dublin via the tram network.

RECOMMENDATIONS

The first recommendation would be to encourage community movements and small businesses, particularly cafes, to advocate for pedestrianisation. This could follow the work of Gehl (Gemzoe, L., 2013), with the pedestrianisation of major thoroughfares in Copenhagen having seen the number of visitors increase threefold (Montgomery, C., 2013). This demonstrates how the pedestrianisation of a city will improve the performances of many businesses and improve the well-being of Dublin due to the link between human interaction and happiness (Penalosa, G., 2013). Furthermore, this also aids the DCC and the Government in developing a better public transport network. With more people choosing to cycle or walk through the city, the presence of cars will decrease, leading to less pollution and reducing housing strains, because enabling the development of housing units without space to accommodate cars would be much easier. The pedestrianisation could be the result of lobbying, currently being done by the DCC for example, or perhaps protesting and civil disobedience as has been demonstrated by students and People before Profit. Regarding sustainability, the removal of cars from much of the city centre will lead to reduced pollution, more social interaction, and economic activity in the city centre businesses. Resultantly, this recommendation has a multi-faceted impact and appeals to a range of stakeholders, proving why it should be taken forwards.

Secondly, this report would recommend the encouragement of co-living as a solution to the housing strains caused in Dublin by young, high-skilled workers associated with technology companies. Not only has co-living been successfully used amongst older people to reduce loneliness, but the promotion of communal spaces also enhances relationships and exposure to other demographics (Quinio & Burgess, 2019). This will not only improve their social understanding, but also their well-being. Additionally, using communal spaces such as kitchens and living rooms will be more cost-effective and space efficient, enabling these buildings to be more accessible to those looking for affordable housing and the developers who own the properties. In Ireland, an example of the sustainability credentials of co-living can be observed in Cloughjordan Eco-Village, Co. Tipperary. The town hosts a co-living business, which has 11 rooms and is served by the town's central carbon-neutral heating system, a green enterprise centre and a plant-based waste treatment facility. Such a building could be utilised throughout Dublin – efficient with space, cost-effective to construct, centrally managed and, from a social perspective, good for well-being. Resultantly, the co-living method to reduce housing stress meets sustainability goals socially, economically, and environmentally. By being centrally managed, the long-term outputs of the residents could be collected very simply and could be

offset by ensuring these co-living spaces are built to standards such as WELL or PassivHaus. Furthermore, the role of voluntary efforts and charities must not be understated, and this report recommends their increased promotion - albeit with structural reform. Given Ireland's per capita donations are the world's highest, the environment for community activism is perfect in Dublin and should be utilised in the short term to provide accommodation for vulnerable communities, such as the refugees. However, this report believes that the efforts of charity should be concentrated within a small space. Psychology demonstrates that primarily, donations are provided from a sense of moral duty, but also a desire to see the improvements (Nilsson, et al., 2020). This is supported by statistical data regarding donation destinations, which found that regardless of the charitable issue, donators were more likely to donate locally due to a stake held in that community or service (Robson & Hart, 2020). Consequently, this report would recommend the creation of individual charities for individual communities, held together by a centralised office which coordinates efforts and spending but does not take a leading role in actual community fundraising. Instead, this is delivered by the charities local to the areas of Dublin themselves, allowing the public to donate towards local causes of concern and also allowing the organisation to take advantage of the psychological profile of donators. Importantly, this is not a recommendation that all international charity should be stopped - in the case of Ukrainian refugees in Dublin, for example, the donations would be better spent on rebuilding infrastructure in Ukraine to allow them to return, indirectly leading to more social housing in Dublin. However, this report would recommend that in the future, charities such as Focus Ireland take advantage of the psychology behind local fundraising, and this will also contribute to building a sense of community spirit as those who have donated will get to witness firsthand the result of their charity every day in their home environments.



(Basic diagram of the proposed structure of these charities – whilst an umbrella name unifies all the individual charities for the purposes of public relations and corporate fundraising, the organisations are run with significant independence.)

CONCLUSION

To conclude, it is arguable that Dublin's motto has been dismissed by the actions of both the Government and by Dublin's citizens themselves. Reflecting on the infrastructure shortages currently in Dublin, it must be stated that any community strategies to alleviate these issues can only be considered short-term and limited in their success from a sustainability perspective. The annual occurrence of charity events like Shine a Light Night has strengthened the relationships of different organisms within Dublin communities, but it has also underlined the bubbling discontent with the State's failure to act upon issues – such as homelessness – in a significant manner. Furthermore, the protesting within Dublin's student communities is another indictment of the failings of the Government, an incredibly public and disruptive symbol of civil disobedience to raise awareness of the housing shortages, the Government's inactive response and the resultant anger within communities

and the movement of change. Although much of truly sustainable development must be built from the ground upward, it is clear that the most effective and immediate solutions have originated from larger corporations with financial motivations, making their buildings more sustainable in their utility management to enhance their marketability. However incompatible this may be to many within sustainable development discourse, it is evident that strategies must reflect an area's economic and political backdrop before attitudes can soften to allow greater reform. The failure of the State to introduce a mayoral position in the city has been the latest example of the divergence of the interests of Dubliners and the Government, which is ultimately responsible for ensuring the happiness of all its citizens through the security of safe housing and the associated health benefits and social opportunities which arise from this stability. Conclusively, the sustainable development of Dublin and the ability to manage its urban issues sustainably will be dependent on Governmental reform, but as the briefing has explored, Dublin's communities have not gone unheard and therefore, it is critical that community activism continues as vigorously as before to facilitate long-term, sustainable change in Dublin.

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Alleviating Issues of Homelessness in the Tenderloin, San Francisco

Lucy Hunter



INTRODUCTION

This community briefing will explore community solutions to the consequences of homelessness in San Francisco, and more specifically the Tenderloin (TL) neighbourhood. The aim of this paper is to provide recommendations for community action to both reduce the causes of homelessness and minimise the subsequent issues that the homeless community in San Francisco and the TL face. This paper will outline the systemic patterns causing such high rates of homelessness in this community, as well as examining the individual and community-wide issues facing the homeless population in the area. To tackle this overwhelming social issue and offer community-based recommendations, this paper has been organized in a specific format. First, I will contextualise my positionality to the issue to identify my connection to the community. Then, I will describe the community in question and outline the challenges facing them, including the historical and social contexts, as well as the current issues that the homeless community faces in the TL. Following this, I will highlight the ongoing tactics employed at the grassroots and municipal levels to combat homelessness in the city and offer recommendations for community-based action that shift the focus from policy to local support networks. These recommendations centre around the primary issues associated with homelessness in the TL, including substance use, mental and physical health, and food access. This paper does not address the issue of housing, as the security and exploitative risks of the subject are too complex for community solutions and go beyond the scope of this paper. This paper puts the idea of community at the forefront of these recommendations as a way for collective local power to provide immediate solutions to the issues that arise out of homelessness.

POSITIONALITY

It is important to state my own positionality within the context of the present issue. In general, I am an outsider to the homeless community in the TL and in San Francisco and do not have lived experiences of homelessness or housing insecurity. Most of my findings and information come from second-hand sources and academic journals on both the broader issue of homelessness and the TL specifically. I have lived in San Francisco since 2014 and

have been securely housed all along. Although I have spoken with people who are homeless or face housing insecurity about their experiences, I do not have a connection to the unhoused community that would allow me an ongoing first-hand account of what their experience is like. Therefore, I must rely upon said academic sources, articles, and second-hand practical knowledge to offer recommendations. There is an immediate issue that arises with someone from outside a community offering solutions for the community to undertake to solve the issues present – this paper aims to take that into account. Instead of dictating what members of the homeless and housing insecure community in the TL should do to change their situation, I will focus on acts of solidarity and mutual aid which stem from collective power and activism. I intend to outline actions that can be undertaken by people with secure housing to strengthen local communities in San Francisco for both the housed and unhoused. These recommendations focus mostly on actions that general community members can partake in, but I will also incorporate certain steps that members of the homeless community can do to engage in these actions themselves.

DEFINING THE COMMUNITY

To properly investigate this issue and its potential solutions, it's important to define homelessness and the community being addressed in this context. While homelessness refers to those without a home or permission to inhabit the home according to U.S. legal code (Cornell Law School, n.d.), this paper will also include the housing insecure and those going in and out of temporary housing. Food insecurity, substance use, as well as mental and physical health complications are all complex and systematically related issues, which will be addressed in this paper. Racial demographics, income, and volume of renters are significant factors of the TL which facilitate its high rate of homelessness, as this paper will explore later. The TL community has an exceptionally high rate of extreme low-income households (57%) compared to the city-wide average (22.3%) according to a study on neighbourhood socioeconomic statistics (Nouri et al., 2020), and is comprised of majority Black and Latinx residents (Esagoff, 2020, pp. 5). While the homeless community of San Francisco and the TL is the specific focus of the issues that are being addressed in this paper, the intended audience for the proposed community action are the housed neighbours in the city. This means that the majority of recommendations to address these issues will be intended for those with secure housing to undertake. This is to build community and mutually beneficial relationships between the housed and unhoused communities in the city. Naturally, there is a power dynamic that can arise from charitable relationships. Considering this, these recommendations are intended to forge open, respectful, and beneficial relationships that promote the agency of unhoused individuals rather than limiting them.

ROOT CAUSES

The causes of homelessness in San Francisco's TL neighbourhood are rooted in systemic racism, poverty cycles, and gentrification patterns as well as an overarching ignorance towards mental health and substance use. Tackling poverty, gentrification, and racism at their root is an issue that this paper does not claim to be capable of solving solely through community action. While the community recommendations offered in this paper can help

to raise awareness and facilitate open discussion about these issues, they will not resolve the root causes of homelessness. Nonetheless, it is important to discuss these causes to contextualise homelessness in the TL and the greater San Francisco area. A relationship between race and income inequality is highlighted in Joya Esagoff's article on the cycle of poverty and neglect of health needs in the TL. The article remarks that the 'de facto racial and economic segregation of the TL is contributing further to the vicious cycle of poverty', with a poverty rate of 50.6% in 2015 and a predominantly Black and Latinx population (Esagoff, 2020, pp. 5). This is also reflected in the 2017 U.S. poverty rate statistics amounting to only 12.3% compared to the respective 20.8% and 17.6% rates for Black and Latinx populations (Esagoff, 2020). In the case of the TL, cyclical poverty has been exacerbated through practices of underinvestment and the treatment of the TL as a containment zone of crime, poverty, and drug use (Esagoff, 2020). As a result of the lack of municipal funds and the discursive 'ghettoisation' of the neighbourhood, the TL has suffered economically. Socioeconomic disadvantages minimise employment opportunities and increases the likelihood of housing insecurity. As cycles of poverty can be self-perpetuating, issues such as food access, medical costs, and housing costs register and further exacerbate economic instability to the point of homelessness.

In tandem with cyclical poverty, the rampant acceleration of gentrification spurred by the growth in the tech industry has driven up the cost-of-living and housing prices (Mujahid et al., 2019). While the TL itself has largely avoided gentrification in the immediate neighbourhood, the process of gentrification across San Francisco still has effects on the affordability of housing and healthy food (Ryan, 2017). As a result, the TL was comprised of approximately 60% of the city's homeless population in 2019 (Esagoff, 2020, pp. 16). A walking tally through the neighbourhood in February of 2022 by members of the Code Tenderloin nonprofit aid organization found 287 unhoused individuals and half a dozen tents, which was a fortunate decline from previous years. However, members of the department of Public Health claim that the entire city is more likely home to 18,000 unhoused individuals on a yearly basis (Fagan, 2022). While this shows a decline in homelessness, the issue is still prevalent. Therefore, community-action is a necessary step in alleviating some of the most detrimental symptoms and causes of homelessness.

CURRENT ISSUES AND RECOMMENDATIONS

This section looks at some of the most significant issues associated with homelessness and how they are currently being addressed in San Francisco. Each issue will be followed by various recommendations that build on existing plans and pull from global examples of resolving homelessness to suggest locally based approaches that centre around community input. The following outlined steps are intended to be undertaken at a grassroots level by community members collectively. These steps are small, relatively low-cost, and are not aimed at solving the systemic issues that lead to homelessness. Rather, their aim is to highlight community action that promotes participation and collectivism. Through this collective action and mutual aid within communities, there is the hope that a foundation of trust and respect will continue to be fostered at the local level. The reason that this article focuses on nurturing this foundation of community – rather than promoting policy changes and regulations from top-down government – is to emphasise grassroots-level changes which can be implemented on a more immediate basis.

Substance Use

Substance use – notably natural and synthetic opioids – is a prevalent issue among the TL community (Esagoff, 2020, pp. 16). While this can be both a (partial) cause and a symptom of homelessness, it is an issue often used to criminalise and dehumanise unhoused individuals. Many instances of tackling substance use around the world have found success in treating the epidemic as a health issue rather than a criminal one. However, current solutions to minimise overdoses, selling, and use in the TL are still limited to policing tactics (City Planning Department, 2022). This shows that substance use is still treated as a criminal rather than a health issue, which can further exacerbate the cycle of poverty through fines and employment difficulties. One potential alternative to this approach is to set up safe consumption sites in areas with high substance use to have medical staff nearby in the event of an overdose, as well as protecting substance users from diseases that can be transmitted through shared needles (such as HIV/AIDS). While the Tenderloin Center has recently been recognised as a potential site for assisted substance use, this type of facility is still illegal under federal law (Sjostedt, 2021). This means that although safe consumption practices may be technically available, they are not being promoted by officials because of their complicated legal implications.

Although the type of community action that can be undertaken to address this crisis of substance use is rudimentary, it can still be meaningful in preventing overdoses and providing assistance to those experiencing addiction on a community scale. This paper recommends the promotion of informal spaces of education on substance use, harm prevention, and provisions of opioid-effect reversing drugs such as naloxone. Public training to educate community members on substance use and the use of naloxone can help to minimise overdoses as well as affirming the sense of community between housed and unhoused members of the TL and the greater San Francisco area. This practice is already promoted by the Dope Project, which aims at training individuals in the use of naloxone to prevent overdoses (National Harm Reduction Coalition, 2020). If this practice is adopted at a community level and the distribution of this potentially life-saving medicine is normalised, there is a greater chance at reducing the number of overdoses for those experiencing homelessness without support networks. Harm reduction is also an important method of approach to substance use with unhoused individuals and those in unstable housing situations. The core concept of harm reduction is agency as it prioritises choice, which is an essential part of the community-centred aspect of these recommendations. Harm reduction emphasises the need for creating safe and educational situations for the inevitable use of substances. In the context of the Tenderloin, it can confront the reality of substance use among unhoused individuals and promote a sense of control and safety by educating on safe practices and providing clean equipment, as well as offering safe spaces for use (Harm Reduction, n.d.). With these tactics, practices of overdose reversion can encourage community-wide care and stigmas around substance use disappear through increased awareness of addiction.

Mental and Physical Health

Poor mental and physical health is another serious issue which affects unhoused individuals and can exacerbate already negative circumstances. An umbrella review of homelessness and its associated health outcomes suggest that health effects in homeless control studies are 'serious, longstanding, and involve all parts of the health system' (Fornaro et al., 2022, pp. 13) Evidence suggesting a clear link between homelessness and increased health effects

is limited, but the study notes that while causes are unclear there is an undoubtable prevalence of health issues amongst homeless populations (Fornaro et al., 2022). Although the country is experiencing a lack of healthcare workers available for free clinics due to the rising cost-of-living, there are free clinics still found all around the city (Thadani, 2019). These clinics are essential to providing care to those who cannot afford to pay for it and must be maintained. Consequently, there need to be alternatives created for those who cannot get to clinics, or who may endanger themselves or others in the event of an escalated encounter with first responders. One excellent example of this is a medical van – provided by the nonprofit HealthRight 360 and funded by donations – that aims to reduce ambulance calls and hospital visits. Although the van only offers aid for minor injuries and illnesses, it can be an inspiration for similar mobile projects that can reduce potentially volatile contact between first responders untrained in de-escalation tactics, while offering more complicated services (Thadani, 2019). In addition, existing facilities, such as the Tenderloin Center, offer social and mental health services that are available to unhoused individuals or those with unstable housing situations. These services are essential to the community and the suggestions offered below are intentionally similar, although they emphasise a wider range of services and availability.

While physical and mental health services can be provided through clinics and centres such as the Tenderloin Center, places for community connection and support can be invaluable to improving the conditions of unhoused individuals. A report by Yale researchers on the impacts of community activism in curtailing homelessness among those experiencing mental illness claims that increased community activism and participation promotes trusting relationships (Pantani, 2001). By creating networks of support, such as meetings in religious or agnostic spaces, establishing awareness of the prevalence of these issues in homeless communities, and through petitioning local governments to fund and establish free clinics, communities can facilitate the improving of the health of unhoused individuals. Community gathering spaces can strengthen the bonds within a community, which offer respite from feelings of isolation or abandonment that many unhoused individuals experience. The aforementioned study notes that cities with higher social capital and community participation saw greater rates of recovery from homelessness, as well as improving the relationships of mental health and housing agencies with the community (Pantani, 2001). With this logic, improving the connection between members of the community can help to increase trust between unhoused individuals and their neighbours, and lead to more effective mental and physical health treatment. Additionally, raising awareness of mental health is especially important in protecting the physical safety of unhoused individuals from excessive police force. Distributing educational resources to the community on the realities and potential ways of assisting with mental health issues can increase understanding, as well as the agency of unhoused individuals to seek help for themselves (Watts and Blenkinsopp, 2021). Raising awareness can also reduce escalations of violence and potentially make services and support more accessible to unhoused individuals trying to find employment. Essentially, the increased awareness of mental health issues, petitioning for more free clinics and mobile clinics, and creating networks of support can help strengthen the foundations of a community to and minimise the consequences of homelessness on health.

Food Access

Lack of access to affordable and healthy food is commonly understood as a symptom of

homelessness and poverty more generally. There have been various efforts in San Francisco to tackle food insecurity through food programs, expense assistance, and free meals which are detailed in a public database on the SF government website (City and County of San Francisco, n.d.). These efforts are crucially important city-wide, however the TL neighbourhood still lacks stores with affordable healthy food options and many rely upon corner stores for shopping (TNDC, n.d.). Criticisms have been made against projects that focus on the advertisement of generosity and exploitation of poverty to promote brands or businesses that donate resources (Carlos, 2021). To avoid this, discrete and community-run free pantries and fridges can ensure agency of those participating, avoid performative projects, and provide nutritious food for those unable to afford it.

Taking from themes of mutual aid, community fridges, pantries, and kitchens can provide free or ingredients with drastically reduced costs while promoting the agency of unhoused individuals to feed themselves. As unhoused individuals may not have access to kitchens, the cost of food is significantly increased through buying ready-made meals and unhealthy fast food as opposed to cheaper ingredients that can be assembled. Providing community pantries and fridges – much like community libraries – can offer a place for those experiencing homelessness or housing insecurity to source affordable or free ingredients (Carlos, 2021). Cooking is notoriously an activity that promotes a sense of control and community, through the ability to choose what ingredients ones uses and the acts of cooking for and sharing with others (Morrow and Parker, 2020). An article on the corroding effects that homelessness responses have on capabilities notes that this sense of agency is linked to increased wellbeing amongst unhoused individuals as explored in (Watts and Blenkinsopp, 2021). In addition, community kitchens and spaces for communal eating can foster stronger support networks and improve wellbeing through connection (Morrow and Parker, 2020). The creation of these kitchens and dining spaces should follow similar grassroots frameworks to the community fridges and pantries in order to maintain the focus of community support and avoid exploitation or performativity. These methods of providing spaces and resources for food both increase the availability of nutritious food for unhoused individuals and strengthen connections within communities to minimize the consequences and rates of homelessness more generally.

CONCLUSION

This paper has examined some of the most significant causes and consequences of homelessness both generally and in the Tenderloin community of San Francisco. The main recommendations of this paper focus on the commonly witnessed issues of substance use, insufficient support for mental and physical health, and limited access to affordable and nutritious food. The theme of these recommendations is an emphasis on community participation and grassroots support networks to improve access to services, increase understanding of challenges, and provide material goods in autonomy-facilitating methods. The choice to steer away from methods of providing temporary housing in this paper is intentional, to avoid impeding autonomy-promotion for unhoused individuals through accessory dwelling units which can be a guise for the profit of wealthier neighbours or can pose safety and legality risks that require top-down regulations. These recommendations are intended only as a guiding framework, as realistic and feasible change must include input and collaboration with members of the community in question.

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Whose Benefit? Columbia University versus the Manhattanville Community

Agoston Horanyi



DISCLAIMER

As a white, non-American person of middle-class background with close to no experience of living in West Harlem, I am in no position to speak for the community of Manhattanville. My understanding of the topic is limited to the research I have been conducting in preparation for this paper. Consequently, any recommendation put forward below must come second to the ideas and solutions of the community and should be taken as well-intentioned contribution to the discourse around the present topic.

INTRODUCTION

I grew up in an affluent neighbourhood of Budapest, Hungary. For a long time, I regarded gentrification as a process whereby abandoned or disinvested neighbourhoods are brought back to life. I witnessed the notorious 8th district of Budapest slowly turning into a neighbourhood of voguish underground culture; diversity increased as people of different backgrounds moved to the area; cafes, pubs, restaurants, galleries, concert venues, and small shops started popping up. The absence of large-scale development plans and 'big money' behind these incremental changes allowed for creativity and a flourishing cultural and social life. Later I saw episodes of Montreuil becoming the quasi-21st district of Paris (Collet, 2012). More and more of my friends moved to the area; it was cheap, it was hip, it was diverse, and it was full of life.

Only later did I discover the other — or as Tom Slater (2012) argues, true — face of gentrification: the result of forced, top-down planning, where authorities lift the desolate out of its rags and transform their home to a place of decency — for the gentlefolk to move in and take the place of those to whom a better life had been promised.

In the summer of 2022, for the first time, I had the chance to visit New York City (hereafter NYC) to attend a summer scholarship at Columbia University. I was lodged at the border of Morningside Hights and Manhattanville. Originally, the programme was to be run in the newly opened building of the Columbia Business School in Manhattanville. Our professor

dismissed our queries as to why the change of plans, suggesting that the campus was still under development and without much life to it. It struck me somewhat odd, since Manhattanville looked much more alive to me than the Morningside campus and its immediate vicinity.

I soon came to realise that the picture I had first been offered was deeply flawed and subjective. As I continued exploring the area, I chanced upon several jazz gigs on West Harlem Piers — the place was hardly devoid of life. People were coming and going; they brought their children, dogs, and bicycles; they were singing and dancing, playing cards and chess; urban life was pulsing with undying force. After one of the concerts, I was chatting with a saxophone player about local jazz life. He was reminiscing about the bygone days and how his 'Pops' used to sell food around the corner in a kiosk for the concertgoers. Since the campus project, however, rents have skyrocketed and now he was out of business. He said people would still come together, but the area around them was fast changing — and many kept disappearing as they moved further uptown or to the Bronx and the distance keeps them from joining.







The present briefing seeks to explore the conundrum facing the community of Manhattanville in the wake of Columbia's campus expansion into the neighbourhood and proposes a set of solutions for the community to equip them for the fight against development-induced gentrification and displacement. I am hopeful that the people of Manhattanville will emerge from this challenge with a strengthened sense of togetherness and the necessary tools and experience to govern their neighbourhood and shape its future according to their likes and needs. With this in mind, I recommend the exploration of top-down solutions that the community could petition the government to adopt, as well as potential bottom-up partnerships with organisations who could support the community's quest for self-governance and affordable housing.

CONTEXT & THE COMMUNITY

Manhattanville is located on the bank of the Hudson River in West Harlem, New York City. The neighbourhood is adjacent to Morningside Heights, where Columbia's primary campus is located. Originally, Harlem was created as a mixed middle- and working-class neighbourhood with a large proportion of its residents being of Italian and Jewish descent. With the white middle-class gradually moving into the suburbs after World War I, and a continued migration of African Americans fleeing from Jim Crow's South, the population underwent drastic changes. By the 1920's, Harlem's population was predominantly Black and Puerto Rican and, with the Harlem Renaissance (known as New Negro Movement at the time), it came to be known for its rich Black culture (Smith, 1996). However, such



Map of Manhattan, NYC



Map showing Columbia University's expansion plan into Manhattanville, NYC

changes led to gradual disinvestments and the abandoning of construction projects. By the 1930's, this situation deteriorated further with the Great Depression and 'by the time that Harlem again made international headlines in the 1960s, it had been transformed into a slum and quickly became the most notorious symbol of Black deprivation in America' (Schaffer and Smith, 1986, p. 351).

Short of Manhattanville-specific data, that of Community Board 9 (CB9)¹ will be used as closest approximation available. Today, the community of CB9 is diverse by all accounts and, as it often happens in more deprived neighbourhoods, underprivileged populations are drastically overrepresented. The 3 largest ethnic groups are Latinx (34.3%), White (28.1%), Black (22%), with 48.5% of the households reported speaking a non-English language at home as their primary shared language, 27% higher than the national average. In 2020, the most common non-English language spoken in households was Spanish (32.8%) (the Census Bureau, 2019a).

As of 2020, CB9's total population is 129,848, with only 60,851 (46.9%) thereof being in employment. With a median household income of \$56,904, the poverty rate is 23.3%. Well below the national average of 64.4%, only 15.7% of tenants owned the property they occupied (the Census Bureau, 2019b). Although Manhattanville continues to experience slow but steady wage growth (4.5% per annum), it lags far behind the exorbitant growth of 21% in rental prices, making housing increasingly unaffordable (Miller Samuel Real Estate Appraisers & Consultants, 2022). This is further exacerbated by the competitive housing market in Manhattan with a vacancy rate below 1.8% entailing an ever-growing demand for housing (Corcoran Group, 2022).

THE CHALLENGE

'The cultural richness of Harlem, Washington Heights, and surrounding neighbourhoods is an essential part of what makes Columbia a great place to work and study', reads boldly the university's development-focused website (Columbia University, no date b). Considering that Columbia is a predominantly White university with only 14% of its student body being Black or Latinx (IPEDS, 2019), the University's campus expansion into Manhattanville, a neighbourhood where the majority of residents are people of colour, feels almost voyeuristic.

Columbia's goal in undertaking this monumental development project is twofold. First, the University claims that expansion and modernisation is indispensable, because it 'has less than half the square feet per student of its peer institutions', which limits its ability to 'offer the highest level of educational training' (Campus Planning Task Force, University Senate, 2010, p. 3). Second, with the development, the University seeks to 'facilitate the revitalization, improvement, and redevelopment of a portion of Manhattanville' (Department of City Planning, 2007). The first of these has certainly been met; as for the latter, the question 'but for whom?' is conveniently left open for further musings.

In the face of the Columbia's expansion, the challenge of Manhattanville communities in

¹ CB9 is an appointed advisory group of the community districts of Hamilton Heights, Manhattanville, and Morningside Heights in the borough of Manhattan; it also serves as a collective denominator for said neighbourhoods.

one word is: gentrification. Gentrification is a complex issue of housing and economics, affecting community's composition, culture, social capital, and, in the long term, history. It is the process whereby the characteristics (e.g., racial/ethnic composition, household income. etc.) of low-income urban neighbourhoods are transformed by the influx of affluent residents and capital, improving infrastructure and attracting new businesses. This often results in the extreme and, as Mitchell & Franco (2019) argue, unnecessary displacement of former tenants and local businesses. In addition, it has also been found to correlate with an increase in health issues, posing an especially significant threat to lower-income residents (Smith et al., 2020). As such, gentrification is nothing less than the spatial expression of inequality (Slater, 2002).

The Student Coalition on Expansion and Gentrification highlights that;

'in the US, gentrification is most often associated with the displacement of people of colour and the rupture of their communities [...]. Many see gentrification as the continuation of this country's long history of uprooting people of colour in the interest of economic or political gain' (2014, p. 2).

Eviction from one's own community can be just as socially disruptive as the loss of a crucial relationship, argues Marris, for 'dispossession threatens the whole structure of attachments through which purposes are embodied [and they] cannot readily be re-established in an alien setting' (2015, p. 57).

The issues that Manhattanville residents are facing are threefold. There are a) existing housing issues that make an already vulnerable community even more prone to negative changes associated with gentrification; b) development-induced rise in property values and rental prices that further exacerbate housing-related problems; and c) a rise in non-housing-related costs that render living in the area less affordable, irrespective of residents' ownership status. All these lead to the eventual displacement of the local community.

The current housing crisis is not specific to NYC. A 2021 report shows that there is no state, county, or city across the US where a minimum-wage employee working 40 hours a week could afford renting a two-bedroom property (Out of Reach, the High Cost of Housing, 2021). In the country's largest and most expensive city the situation is even worse. Almost one-third of New Yorkers paid 50% of their income on rent in 2017 and the average monthly rent in Manhattan broke the \$5000 record in 2022 (Schwartz, 2019; Miller Samuel Real Estate Appraisers & Consultants, 2022).

Against such backdrop hits the current wave of gentrification in Manhattanville, triggered by Columbia's campus expansion. The development comes with two exceedingly controversial outcomes: the re-zoning of the area and the demolition of housing units, entailing increased property value and retail prices, and, ultimately, the displacement of former residents.

Columbia emphasises that, in addition to creating profit for the university, the campus expansion will also benefit Manhattanville's wider community. They point out that a more desirable neighbourhood increases property values and creates better opportunities for businesses, the effects of which also percolate to the locals' level. In addition to better

infrastructure, residents will also enjoy a comprehensive community benefit scheme, including close to 7000 new jobs, an affordable housing fund of \$20 million, and 40 undergraduate scholarships for CB9 residents (Campus Planning Task Force, University Senate, 2010; Columbia University, no date a).

Generous though this may sound, at a closer inspection it becomes evident that the above 'benefits' are insufficient and highly problematic. First, many of the jobs offered will only become available once the development process is completed and there is no mention of any help being offered to struggling residents in the interim. In addition, according to the SCEG report (2014), the number of jobs created and accessible for local residents does not amount to the number of jobs that were lost to the development project — on paper it looks convincing, but in reality, all it does is take away local job opportunities. Second, although the promised Affordable Housing Fund might seem liberal, with ever-rising land and construction costs it is more than questionable in its de facto efficacy. The original pledge was made in 2009, yet, as of 2018, only 0.5% of the Fund was spent, while prices rose significantly due to re-zoning and infrastructure development. The parking lot in front of the West Harlem Development Corporation's office, a potential location for a housing development, would have cost \$36 million to secure, close to double the \$20 million budget (Kim, 2018). Third, compared to the number of Columbia students and CB9 residents, the number of scholarships offered represent approximately 0.03% and 0.5% of those populations respectively, making Columbia's benefit pledge feel yet more tokenistic (the Census Bureau, 2019a; Columbia University, 2022).

Worse still has been the actual execution of this 'plan of public good'. Looking at the way the development is carried out, the University's commitment to respect the needs of the Manhattanville community is somewhat dubious. Protesters and opponents of the project continue to voice strong criticism regarding the university's conduct, particularly forced dislodgements (Banerjee, 2022). In addition to resident relocations — approx. 150 households, in total —, the development project included the eviction of Red Balloon Learning Centre, a preschool that operated in West Harlem for over 50 years (Sun, 2022). This is especially problematic, since Columbia obtained the land for its new campus through the use of eminent domain² after the state-run Empire Development Corporation labelled the area as 'blighted', making any claim for partnership with the local community a simple sham (Bagli, 2010).

This leaves the residents in a woeful situation: the extent to which they would benefit from the development in the long run is questionable, to say the least, and the benefits they were promised as part of the 'deal' are less than satisfactory. And so the old fear that outcomes would not be distributed in a just fashion and that negative effects on low-income residents would be disproportionately severe has once again become reality.

PAST POLICY RESPONSES

As the most densely populated city in the US, NYC has its history inextricably linked with gentrification. The City's quest for affordable housing policies started with the Ten-Year

²The right of a government to expropriate private property for 'public use' in exchange for 'just compensation'. To what extent an elite private university's campus is for 'public use' is debatable.

Plan proposed by Mayor Edward Koch in 1986 (De Blasio and Glen, 2014). In contrast with the common practice of cities across the US, it was decided that NYC would rely on refurbishments instead of building projects. By focusing on rebuilding the existing housing stock, the City managed to save millions of dollars while also avoiding further disrupting communities in development areas. Its emphasis on creating mixed-income neighbourhoods not only revitalised communities, but also made them more resilient (NYU Furman Center, 2006). Over the years, the initial housing projects grew into a gigantic system of affordable housing with two complementary approaches: prevention and mitigation.

New York City's housing programs can be divided into six categories which include both approaches (NYU Furman Center, 2022). First, government-supported land and financing programs include loans that are provided at below market-rate terms, non-refundable grants, and reduced land acquisition costs. Second, planning and zoning programs enable and incentivise affordable housing development through various regulations, prescribing what can be built and where. Third, tax incentives programs offer subsidies to developers and landlords. Fourth, rental subsidies and assistance programs, such as rent-control and -stabilisation, provide tenants or homeowners with financial assistance to increase access to affordable housing and enable tenants to remain in their units. Fifth, a diverse range of programmes regarding homeownership, housing stability and quality attempt to improve low-income homeownership rates, neighbourhood stability, and housing stock quality by means of grants, free counselling, and social services. Sixth, supportive housing programs includes funding for medical services, non-clinical services, and personal care services for eligible tenants, such as formerly homeless individuals, persons with disabilities, and seniors. In addition to these, there are eviction prevention measures in special cases, such as the Covid-19 Pandemic (New York State Government, 2022).

Although it is a comprehensive system, gentrification in NYC is alive and kicking, suggesting that these measures alone are insufficient. In addition, there are no policies targeting nonhousing- or healthcare-related expenses. Consequently, development-induced price increase in local services can still render neighbourhoods unliveable for residents, thereby contributing indirectly to their displacement. Moreover, due to the complexity of NYC's housing market, the system, however fine-tuned it may be, inevitably fails to cater for everyone's needs. For instance, the definition and criteria along which the above aids are granted is often skewed. Some of the housing programmes are based on tenants' relative income in relation to the area median income. However, the 'area' in question includes Westchester and Rockland, where median income is significantly higher than in the five boroughs of NYC, thus inflating income tiers (Murphy, 2016). Finally, as the way Columbia eventually procured the necessary land for its development project suggests, the most important issue is that the housing system with all its protective measures can effectively be gamed, and residents' rights shamelessly violated. As McFarlane befittingly put it,

'despite the long history of socially reformist housing movements and activism in New York, patterns of gentrification and exclusion continue apace, and progressive politics at the state level exist largely in name only' (2021, p. 200).

RECOMMENDATIONS

Indeed, in the context of a rights-centred issue — housing as a right versus a commodity3 — it is most difficult to offer feasible solutions for residents when their very rights (to the city, to decent housing, etc.) are routinely infringed, if not outright taken away with the assistance of the city government.

Recognising the insufficiency of either top down or bottom-up approaches, this brief proposes that the two be looked at as complementary, rather than mutually exclusive ways of tackling the issue in question.

Reflecting on Uitermark's (2012) paper on housing in Amsterdam, this paper argues that the most important step towards fighting gentrification is the decommodification of housing and, ultimately, the recognition of housing as a basic human right. In this spirit, two promising initiatives will be highlighted that residents could and, indeed, should petition the government to adopt: good cause eviction and community land trusts.

A particularly strong housing protection measure proposals is the so-called 'good cause eviction' (GCE) policy. As per current NYC law, landlords are not required to renew leases in many cases. However, the adoption of GCE would prohibit them from ending a tenancy as long as leasing contracts are not breached. '[GCE] "gives you confidence that you can raise kids" in your apartment', explains Judith Goldiner, a Legal Aid Society lawyer (Kaysen, 2022). Similar policies are already in place in several states, including New Jersey, California and Oregon, but State Senator Julia Salazar's proposed GCE bill was rejected in June 2022 by the New York State Senate amidst doubts of its efficiency (Hogan, 2022).

The other recommendation was inspired by DeFilippis' argument that

'[communities often] suffer not from a lack of capital but from a lack of power and control over even the most basic components of life — that is, the places called home. In order to realize that power, communities have created forms of ownership in which investment decisions are made collectively' (2004, p. 89).

This inspired the exploration of the formation of government-sponsored community land trusts (CLTs) — a model of land tenure that emerged from the civil rights movement in the United States in the 1930's — as a potential solution to community displacement in NYC (Catalytic Communities, 2014b). CLTs are non-profit corporations owning and managing the land upon which a community resides. Individual households can own and build houses through lease arrangements, but the land itself remains protected under trusteeship. CLTs have been used effectively to forestall gentrification in economically deprived areas in the US, the UK, Kenya, Uruguay, Bolivia, and Brazil among others (Catalytic Communities, 2014a). Naturally, land prices being how they are, the introduction of CLTs into NYC it is highly unlikely. Nonetheless, with appropriate government funding, such a scheme could yield success in the fullness of time.

Finally, the scope of already existing programmes should be strengthened and expanded, especially that of 'HomeFirst Down Payment Assistance Program' with the cases of Paris and Budapest in mind, where gentrification was less disruptive to locals' life, partly because

of the proportion of home ownership and renting. While in Manhattanville 15.7% of tenants owned the property they occupied, in Montreuil it is 51.9% and in Budapest (no district-specific data available) 85.3% (KSH, 2011; INSEE, 2018; the Census Bureau, 2019b).

Now let's turn to solutions that the Manhattanville community itself has the wherewithal to embrace. Here, this brief proposes partnerships with two existing organisations, CB9 and Association for Housing & Neighbourhood Development (ANHD), with whom the community could develop awareness-raising and educational projects as well as initiatives in support of locals' fight for self-determination.

First, before looking for the establishment of a community organisation, it would be interesting to look into the possibility of building a partnership with CB9 to launch a project, which would function as a community-building platform by a) running awareness raising campaigns; b) developing free education materials to teach locals about civil & housing rights; c) advocating for the rights of the community; d) serving es a platform for activism coordination; and e) informing the community on the practice of civil disobedience so that they are equipped with informal tools for situations where the formal protection of their rights by authorities falls through.

In addition, the possibility of expanding CB9 into a more inclusive platform of community governance should be considered and explored. A good example of this is the 'Budget of Public Initiatives (BPI)', a community project developed and run in Vinnytsia, Ukraine, that provides an opportunity for residents to partake in the city's financial decisions. Offering the community a say in how the budget is used in their locale is conducive to greater local control and the fostering of an active, cohesive, and resilient community. Community listening — i.e., the interaction and dialogue between policymakers and citizens — can help promote positive and sustained relationships within the neighbourhood and better communication between agencies and residents. In Vinnytsia, BPI is used by active citizens, pro-active NGOs, and city council representatives, including the mayor, for open discussions and could potentially be imported and adapted to the needs of CB9 residents (Counseil de L'Europe, 2020).

Second, the Manhattanville community could reach out and build partnership with the ANHD, whose self-proclaimed mission is to 'build community power to win affordable housing and thriving, equitable neighbourhoods for all New Yorkers' (ANHD, 2022). ANHD has a wide range of projects, including Rezoning Technical Assistance that provides support for community groups engaged in campaigns around large-scale rezonings; United for Small Businesses NYC that fights to protect businesses from displacement, focusing on owner-operated businesses that serve low-income and minority communities; Thriving Communities Coalition that includes grassroots organizing, advocacy, policy and technical assistance; and the Displacement Alert Project. They are also advocating for non-profit public land use and affordable housing. In addition, other organisations with similar focus, such as the Brooklyn Anti-Gentrification Network or the Bushwick Action Research Network could also be contacted for future collaboration on anti-gentrification and community building projects (McFarlane, 2021).

CONCLUSION

Throughout this community briefing I have outlined some of the most pressing issues facing Manhattanville's community, including the imminent danger of displacement. By outlining these issues, I hope they can be addressed both by the government and the community itself, perhaps in a joint effort. While top-down solutions in and of themselves

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The Gentrification of Seattle's Central District Neighbourhood

Becca Salenjus



INTRODUCTION

The United States is suffering from a systemic and pervasive lack of affordable housing. For every 100 affordable and available rental homes needed in the US, there are only 36; when looking at Washington state specifically, that number drops to 31 (NLIHC, 2022). Housing is largely considered a lucrative commodity, when it should be considered a basic human right (Slater, 2011). Access to housing is also a social justice issue, as people of colour in the US are significantly more likely to experience housing insecurity and homelessness than their white counterparts (NLIHC, n.d.). Seattle, though it has the highest concentration of Black people in the state, has a relatively small Black population (McGee, 2007). Gentrification in the city of Seattle is rampant, making housing increasingly inaccessible, most poignantly for the Black population.

This community briefing explores the factors leading to the extensive gentrification of the Central District Neighbourhood in Seattle, the once historically Black neighbourhood that is now predominantly white, through history and a contextualisation within the dominant economic paradigm that makes housing a commodity, and anti-Blackness a requirement for development. The focus turns instead to the incredible resistance coming from the community, who are reclaiming their right to the city by rebuilding the physical neighbourhood through a community land trust, and the once-flourishing community through art. In this briefing, I recommend rent control and property tax subsidies as economic relief policies that can be demanded from the city, to relieve the burden on those that have not yet been displaced from the community and slow the continuous destruction of gentrification.

POSITIONALITY

This report is particularly relevant to me as a white woman, for I have directly contributed and participated in the gentrification of the Central District (CD). I spent the first 18 years of my life living in the city of Seattle in a predominantly white, middle-class neighbourhood. However, from age 11 to 18, I attended school in the Central District, under a city programme

for 'advanced' students. The programme, decades old by the time I was a student, created an accelerated learning course for a cohort of 'gifted' students at one of the most chronically underfunded schools in the city. In its impetus, the program was intended to limit 'white flight' and bring funding to the city through middle-class parent donations. In practice, it served only to segregate the school and isolate the minorities within the student body, as the program was majority white, while the rest of the school was predominantly Black and Latinx. In my final year of the program (2018-19), 59% of the program was white, despite white students constituting only 48% of the district. Meanwhile, despite black students making up 14.5% of the district, that same year, only 1% of the program was black (Cielos, 2019). I watched the Central District change around me in the 7 years I spent there; today, it is a completely different neighbourhood. Because of my complicated history with the area, I feel a personal responsibility to call attention not only to the issues that the community faces, but also to the community's methods of resistance against gentrification. My recommendations are suggestions to the Central District community, but also have the intention of calling attention to the greater population of Seattle to highlight organisations and activism to support and preserve the Central District as a Black cultural and community hub. It is important to highlight that these are recommendations only and are coming from a predominantly external viewpoint as I am not an active member of the Black community in Seattle.

I feel both a sense of pride and guilt towards my history with this community, as my years there exposed me to the realities of life as a non-white person in a predominantly unforgiving white city, and played a massive part in my radicalisation, and shaping my identity. At the same time, I can neither escape my contribution to the gentrification of the area, nor ignore my role in the exclusionary education practices that have contributed to gentrification and the loss of the community.

HISTORY OF THE COMMUNITY

The Central District (CD) is one of the oldest neighbourhoods in Seattle and sits directly adjacent to the Downtown area. Formally plotted in the 1880s, and home to many of the city's oldest homes, the neighbourhood was primarily Jewish until the late 1940s. The CD has had a strong Black community since the 1920s, primarily due to racial restrictive covenants and redlining which served to legally segregate the city (Morrill, 2013). Despite the racist practices which forced Black citizens into the area, the neighbourhood thrived — creating its own economy with community doctors, lawyers, and a newspaper (Balk, 2015). On the Brink, a 2019 documentary on the neighbourhood and the community within featured numerous interviews of community members reminiscing about the community at its height as a flourishing Black community, filled with art, activism, and connection. Such pride in the community is clear, as members discussed not just the well-known people of the music industry who grew up in the area, like Jimi Hendrix and Quincy Jones, but the sense of community and day-to-day interactions, as well as the constant support from neighbours and family (On the Brink, 2019).

However, the 1970s ushered in an era of change in the CD that led to the fracturing of the local community. An anti-discrimination legislation passed in the late 1970s encouraged middle-class, Black inner-city residents to move out to the suburbs (McGee, 2007). At the

same time, downtown Seattle redevelopment raised the attractiveness of the CD due to its proximity and good quality of housing and land, bringing in predominantly white, affluent resettlement (Morrill, 2013). Although the introduction of anti-discrimination legislation is perceived as a step forward, it had adverse impacts on the community, as it began a trend of relocation to city suburbs that has not faltered since. Today, there is a greater trend of forced displacement rather than voluntary relocation. The 1990s witnessed the establishemnt of technological and specialty retailing industries in the downtown area, such as Amazon and Microsoft, which moved the craft and labour jobs formerly based in the city southwards into the nearby suburbs in order to make room for the influx of new, high-salaried workers (Morrill, 2013). This movement in jobs meant that many central district inhabitants either moved south to the suburbia or became unemployed (Morrill, 2013), further fracturing the community and entrenching the poverty amongst those that remain. As of 2022, the CD's population is less than 10% Black (Wa Na Wari, n.d.).



Proximity of the Central District (in dark grey) to the Downtown Seattle area (outlined) made it desirable for re-settlement by affluent individuals.

COMMUNITY CHALLENGE

The Black population of the CD has been declining since the 1970s due to intensive gentrification, which increased home values and, as a result, property taxes, to levels unsustainable for many homeowners of the community (McGee, 2007). Additionally, although the restrictive covenants and redlining policies legally ended in the 1970s (Morrill,

2013), racial discrimination in home mortgage lending is still very much alive and well, with Black loan applicants being 2.56 times more likely to be denied a conventional loan mortgage than their white counterparts (McGee, 2007). For many who have already paid off their homes, the massive increases in property taxes are beyond their ability to pay, which ultimately leads to the selling of their homes to younger, more affluent, and usually white buyers (McGee, 2007). The CD community faces economic realities that they have little recourse to navigate, which has led to a significant drop in homeownership, from 50% in 1960 to 13% in 2000 (Morrill, 2013). Beyond homeowners, renters and Black-owned businesses also struggle under increasing rents (Morrill, 2013). In 2019, Seattle was the 4th most expensive city for renters (Balk, 2019). The disappearance of Black-owned businesses with the replacement of stores catering to the new, affluent, and white population further serves to isolate the community (Marcuse, 1985 in Slater, 2011). The trend of relocation to the suburbs beginning in the 1970s, and the displacement of community caused by increasing property taxes, inaccessible rents, and disappearing Black spaces is harming the cohesion of the historic Black community and threatening the continuation of the historic district. The assumed a-spatiality of Black residents and pervasive anti-Blackness inherent to corporate strategy (Bledsoe and Wright, 2018) has allowed developers and corporations to move into the CD with relative ease, increasing capital accumulation through the commodification of housing, rather than viewing housing as a basic right.

EXISTING POLICY AND GOVERNMENTAL ACTIONS

All existing policy on affordable housing in Seattle is city-wide. Most of the policies pay explicit attention to the CD (e.g., House Bill 1918), as it is an area of special concern, due to its minority community and historic culture. However, none of the policies or strategies specifically focus on the CD itself. This section will briefly outline some of the existing and proposed affordable housing policy and address their value to the community.

As of November 2022, there is an initiative being put on the ballot for February 2023, which, if passed, will create a public housing developer that will work in conjunction with non-profit as well as federally-funded, affordable housing programmes to pull the housing sector out of the private market (House Our Neighbors, n.d.). Opponents of the initiative argue there is a lack of clarity in where the funding to set-up this developer and pay salaries would originate, with concerns that the funds would likely be drawn from existing city funding set aside for affordable housing that could otherwise be used to make affordable homes (Housing Development Consortium, 2022). Additionally, this initiative is only being added to the ballot in early 2023, losing valuable time needed to create affordable housing and prevent further gentrification. Rather than planning new programmes and setting up organisations funded by the city, the planned funding could be given to the organisations already working within the city.

The Mandatory Housing Act (MHA) was approved by the Seattle City Council in 2019, 4 years after being initially proposed (Cohen, 2019). The MHA requires developers to either build some affordable housing into their project or pay a fee into the city's affordable housing fund. To encourage developers to continue building within the city, building height and size allowances were increased, thus offering more profit for the developer

(Cohen, 2019). However, if a developer opts not to build affordable housing into their project, the MHA does nothing to prevent displacement, and limits the amount of affordable housing being actively built with each new for-profit project. As such, the MHA's attempt to be a solution for struggling communities instead acquiesces to the desires of the corporations. The demand of global capitalism for constant capital accumulation has resulted in the increasing power of corporations over the nation-state as the primary governing body, directly influencing the structure of communities within the US (Newton, 2002 in Bledsoe and Wright, 2018).

Policy responses take time to be implemented, which the CD simply does not have. In addition, they are lacking a comprehensive scheme to prevent the displacement and isolation caused by gentrification, as evidenced by the MHA. Top-down solutions that continue to prioritise the commodification of housing will not provide relief for the Black community of the CD. In addition, within fractured communities, concerns over government services and funds becoming the sole benefactor of communities are sighted, creating a culture of dependency, and removing agency from communities, thus resulting in catastrophic fallout if and when the money runs out (Harrison, 2019). By contrast, internal networks of support and increased agency within the community could support positive change (Harrison, 2019).

EXISTING COMMUNITY RESPONSES

The following section will outline two community responses to the ongoing gentrification of the CD. As community-based and community-led solutions, both responses are effective forms of resistance against gentrification.

Africatown Community Land Trust

A community land trust (CLT) offers long-term affordable housing and increases community assets for low-income communities (Choi et al., 2017). Community land trusts are built on shared ownership of land and are democratically governed with an elected board of trustees (Peterson, 1996). Rather than selling land to buyers, CLTs sell residential or commercial buildings, while retaining ownership of the land, ensuring it does not leave the community and decreasing the cost of purchasing homes by eliminating the cost of the land from the selling price. The format of CLTs ensures that community members have their say in how land is managed and sold (Peterson, 1996). Africatown Community Land Trust (ACLT) was founded in 2016 by a lifelong Central District resident. The goal of ACLT is to acquire and steward land on behalf of the Black community in Seattle and ensure the continuity of the community for all future generations (Africatown Community Land Trust, 2020). As of now, ACLT has one building with 115 units of affordable housing and reserved retail space for Black business-owners in the Central District. ACLT intends to go beyond providing affordable housing and it is also in the process of creating a space for unhoused community members through the building of a community home, a cultural centre for entrepreneurship and workforce development, as well as a youth achievement centre providing stable housing and services to court-involved youth to disrupt the school-to-prison pipeline (Africatown Community Land Trust, 2020). Thus far, they have been primarily funded by the city through grants, and donations from other organisations working in the city,

including another community land trust (Africatown Community Land Trust, 2022). Community land trusts are an effective tool against gentrification in that they begin the process of de-commodifying housing, turning it into a right rather than a profit mechanism (Bajocchi et al., 2018). ACLT is reclaiming the Black community's right to the city by actively remaking the neighbourhood to function for the residents and their needs, rather than private property and profit (Harvey, 2003). Africatown grants and protects access to long-term physical space for the community to re-inhabit and revitalise within the CD.

Wa Na Wari

Wa Na Wari is a self-described 'centre for Black art and belonging' that was founded in 2019 in the heart of the CD (Wa Na Wari, n.d.). The project aims to give space to the Black community to revitalize cultural life through art. In addition, by renting their physical space from a vulnerable Black homeowner (Wa Na Wari, n.d.), the project is actively combatting displacement by preventing the sale of the house, keeping the property within the community. In the past, art has been used as a tool to fight exclusion and promote democracy and citizenship in Brazil. As such, it can act as a form of participation for minority groups experiencing political exclusion (Reiter, 2009). Due to the ever-increasing trend of political power coming from corporations (Harvey 2003) and the anti-Blackness inherent to developers' business model (Bledsoe and Wright, 2018), the low-income Black community of the CD has little power against gentrification. However, participating in art as a form of resistance may increase their visibility and agency in the community. Art can be considered as a form of urban exploration that has the potential to disrupt everyday urban life and make use of creative means of examining social problems, conflicts, and resisting capital interests (Pinder, 2008). In addition, art can be used as a tool for community empowerment, especially for young people (Reiter, 2009). Wa Na Wari is not only physically resisting gentrification through the retention of a Black family home, but they are also empowering the community through art and encouraging connection within an increasingly fragmented community, by rebuilding that which has been lost and giving agency back to Black Seattle.

RECOMMENDATIONS FOR COMMUNITY

In this section, I will outline recommendations for the community to increase and strengthen its resistance against gentrification and community loss in the CD.

Continuation and Expansion of Existing Community Responses

The community responses generated thus far to fight the gentrification of the neighbourhood have been admirable and multifaceted, not only resisting the physical displacement of the community but attempting to rebuild the culture of the community despite increasing isolation and fracturing. I recommend that both programmes continue to expand, as well as collaborate with other activist and community groups in the area, bringing together more of the community, as there are many groups working tangentially but not in a joint effort. For example, the New Hope Missionary Baptist Church in the CD is attempting to reclaim land they sold to the city in the 1960s to create affordable housing (Groover, 2021). As a larger organisation with experience in establishing affordable housing in the neighbourhood, the ACLT could work in collaboration with the church to either regain the land or create affordable housing elsewhere. In addition, Wa Na Wari is located one block east of the CD's sole high school, Garfield. Inviting Black students to join the programme might have great

potentials to both expand it beyond their current scope and create intergenerational engagement in the fight against displacement.

Limitations to Existing Community Responses

The existing community responses provide affordable housing and community creativity and agency, however there are limitations to the economic relief they can provide to active residents, including both homeowners and renters. I recommend that the community organise to advocate for rent control and property tax breaks, in order to give current homeowners and renters immediate relief from the threat of displacement and halt the trend of resale to developers.

Property Tax Breaks

As explored earlier, increased property taxes are forcing low-income Black homeowners to sell their homes, displacing them to suburbs. As of 2022, King County, the county containing Seattle, only has two property tax relief schemes for citizens — one for those above 61 years of age and one for the disabled, who must also be over 61 to be eligible (Kingcounty.gov, 2022). In addition, low-income residents can defer the second half of their property taxes until a later date, but they accrue interest and must eventually pay the complete sum (Kingcounty.gov, 2022), so the policy provides little more than temporary relief against a pervasive and systemic issue. Ultimately, neither of these existing policies are helpful in combatting the economic stress of increased property taxes in the CD. I suggest that the community demand that the city create a property tax subsidy for low-income homeowners, which would allow vulnerable Black homeowners to stay in their homes. In 2021, Durham, North Carolina, began the Low-Income Homeowners Relief programme (Durham County, 2022), which provides property tax relief to an estimated 3,227 homeowners in the city (Ross, 2022). A group of non-profits and organisations in Raleigh, NC, have taken inspiration from Durham and are currently advocating for the implementation of a similar program in the city, as 'long-time, low-income homeowners are being displaced in gentrifying neighbourhoods, and this pressure disproportionately affects African Americans' (Ross, 2022). Though Raleigh, Durham, and Seattle are disparate cities with different communities and needs, the similarities between the displacing nature of gentrification suggest that a property tax subsidy could be a useful tool in reducing economic stress. For that reason, I recommend the launching of a similar programme as in Durham and proposed by Raleigh by the Seattle City Council to help alleviate the pressures on low-income Black homeowners in the CD.

Rent Control

Rent control is an increasingly popular demand made by communities with insecure housing and unsustainable rent. According to the city council website, half of Seattle is renting (Sawant, n.d.), meaning much of the city is highly vulnerable to housing instability in the face of gentrification. Rent hikes caused by gentrification are primarily due to two factors: reduction in total housing supply (Lawrence, 2002) and an increase in affluent potential tenants who increase prices through demand (Rahman, 2020). At its most basic, rent control prevents current tenants from rent increases (Sawant, n.d.). Due to extensive lobbying by the real estate industry in response to grassroots organising, there has been a state-wide ban on rent control since 1981 in Washington (Sawant, n.d.). A strong community and a cohesive movement that places pressure on the legislature, which has no in-office roadblocks to overturn the ban, will be key to instituting rent control legislation (Sawant,

n.d.). In other cities, there have been concerns over city-wide rent control being overexpansive (Lawrence, 2002), but Seattle's housing crisis is not limited to just the CD. Therefore, it would likely be beneficial to the wider community, while also specifically helping the Black community of CD. Rent control has been proven successful in New York state since the 1920s (Sawant, n.d.). However, it is important to note that rent control alone is not enough. It must also be accompanied by protective measures for tenants to ensure that landlords do not discontinue maintenance on units with lowered rents and to prevent unjustified evictions (Lawrence, 2002), otherwise the utility and value of rent control is significantly diminished. Nonetheless, rent control could be a useful strategy within the CD, because it would allow current Black tenants to remain within their neighbourhood at prices economically viable to them, instead of being displaced to the southern suburbs with cheaper rents.

CONCLUSION

The Black community of the Central District is fighting for their neighbourhood and community. The existing policies for Seattle's affordable housing are slow-moving and partial in their solutions to stopping gentrification. Through their creation of affordable housing and community services, the Africatown Community Land Trust is reclaiming and remaking the physical space of the neighbourhood to work for the community rather than profit, while Wa Na Wari is encouraging resistance and community re-building through art and engagement. To supplement the already existing grassroots methods of resistance, I recommend that the strengthened community organise and fight for rent control and property tax subsidies from the city council, in order to ease the economic burden of housing and prevent further displacement and community fracturing. The combination of grassroots responses and economic relief policies have the potential to allow the community to fight the gentrification of the area and retain and expand its historical and cultural life.

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Population Decline in Stonington, Maine

Avery Reynolds



INTRODUCTION

Jane Jacobs defines a city as '[a] settlement that consistently generates its economic growth from its own local economy' (Jacobs, 1969, p. 262). While Stonington lacks the sprawling urban spread of New York City, which is where Jacobs focused much of her own work, it is the 'urban' epicenter of economic activity and artistic culture of the surrounding areas and islands. Stonington's town center is a place full of artists, the Stonington Opera House, and a beautiful historic working waterfront. With at least 1,000 year-round residents linked to the lobster industry, Stonington presents the optimal place to recognise the 'multi-scale relationships between humans and their environment,' the focus of many urban ecosystem studies (Marcotullio and Solecki, 2013, p. 20; Miller, 2021). As a resident of Deer Isle, and with my family reliant on the lobster industry, the changing landscape of the island is of high importance to me.

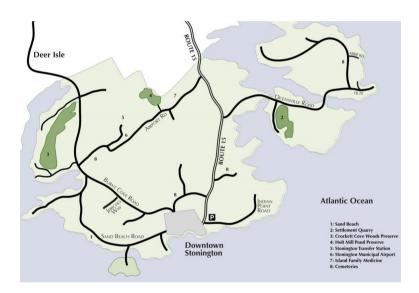
As the island evolves, it faces a myriad of issues, such as the change in Stonington's population structure and the consequent impact on the island's workforce. Housing shortages are happening as there are insufficient properties for low- or moderate-income individuals. This shortage is partially due to the reputation of Stonington as a renowned summer destination and previously year-round homes being converted to summer houses. While the notoriety of the Stonington lobster has brought the community an era of economic prosperity, this newfound popularity has also brought an influx of tourists and is something the island has yet to, but must reconcile with. Stonington will need to find a way to balance the increase in its summer residents without continuing to price out the year-round ones.

This briefing aims to introduce the communities of Stonington and several issues they face. First, I will look back on Stonington's history and use it to look forward to see how the community can continue to thrive in the future. Second, I will outline the overarching issue of the declining population and subsequently discuss the critical determining factors. Finally, as a community member, I will make recommendations regarding what the community can do to combat current and future problems.

COMMUNITY CONTEXT

Stonington, Maine, one of two towns on Deer Isle, is known informally as the 'Lobster Capital' of the world. Located 250 miles north of Boston, around a 5-hour drive away, this island has a robust year-round community. Famous for its granite, yachting, and, most importantly, lobster, Stonington is one of the most picturesque islands in Downeast Maine, leading it to be a tourist hotspot.

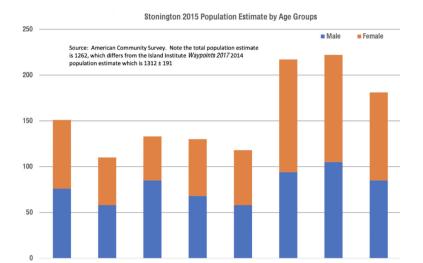
In the late 1800s, Stonington experienced the Granite Boom (Town of Stonington, 2022a). During that time, Stonington granite was used for the Brooklyn Bridge, Holyoke Dam, and the Museum of Fine Arts in Boston (Deer Isle Granite Museum, 2016). In addition to granite, the original seafaring industry was cod and mackerel. Today, the island's life still revolves around the sea. In 2021, Stonington was the largest lobster port, bringing ashore over 11.7 million pounds of lobster annually, with a value exceeding 76 million US dollars (DMR, 2022). As such, Stonington is the base of the US and Canadian lobster industry.



A map of the Town of Stonington, Maine, and its important sites (Town of Stonington, 2022b).

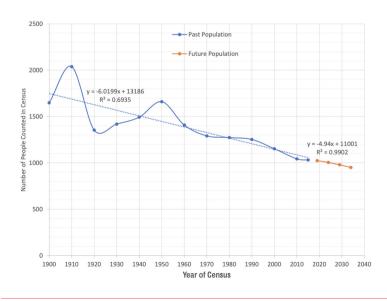
DECLINING POPULATION

During the Granite Boom at the turn of the 20th century, Stonington was a thriving town with a population of around 5,000; this coincided with the peak of Stonington's canning, quarry, and cod industry (Town of Stonington, 2022a). However, as of 2020, Stonington had a population of just 1056, a growth of only 1% from the town's lowest recorded population (State of Maine, 2020). Collectively, the island of Deer Isle has just over 3,000 residents, yet Stonington remains Maine's largest lobster port (State of Maine, 2020). Population decline in a place with a previously growing economy has limited the growth and success of the community, leading to a vicious cycle: on the one hand, the town cannot increase the population without adequate economic opportunities, on the other, it cannot create more economic opportunities without increasing the population first. In addition, not only is the population declining, but it is also rapidly aging as well. Based on a 2015 estimate from a town report, roughly half of the population is over the age of 50 (Town of Stonington, 2017).



A chart of the 2015 Stonington population estimates separated by age groups and gender conducted by the American Community Survey (Town of Stonington, 2017).

Stonington is not always a 'sleepy' coastal town; during the summer months, its population grows significantly. Suddenly, the quiet downtown becomes crowded, with tourists flooding for the summer months. However, this influx of summer residents and visitors has created a housing deficit. According to Stonington's town council, most of the population decline can be attributed to the conversion of year-round housing to seasonal housing (2017). In 2017, more than half of the land and housing stock in Stonington was owned by non-residents. Year-round residents own 56% of the assessed building value but only 39% of the assessed land value. This inequality means year-round residents own only 45% of the combined assessed value of buildings and land in town (Town of Stonington, 2017, p. 3.6-4). Although non-residents own the majority of housing and land stock, tourism and second homeowners only 'constituted about 12% of the Stonington economy in 2016' (Town of Stonington, 2017, p. 3.7-2). This creates asset disparity, wherefore fewer homes are available for the average Stonington resident to either purchase or rent. The issue is further exacerbated in the summer months when seasonal laborers, in addition to summer tourists, come to town to help assist tourism-focused local businesses.



A chart of the population estimated population decline in Stonington, including estimated population decreases (Town of Stonington, 2017).

CURRENT POLICY TO ADDRESS DECLINING POPULATION

Stonington town leaders are aware of the issue of declining population and, as such, it was well outlined in the 2017 Town of Stonington Comprehensive Plan. The executive summary highlighted that the town had a 'great need for low- to moderate-income housing, including workforce housing' (Stonington, 2017, p. 1-3). The comprehensive planning committee's 2017 estimate was that the town's near-term needs for 'low to moderate income housing [was] 10 rentals, 5 starter or mobile homes and a dormitory space for 15 to 20 people' (Town of Stonington, 2017, p. 3.8-1). Based on the Housing Affordability context in 2019, 83.8% of people could not afford a median home — meaning that 425 out of 507 households were unable to afford the median rent. In 2019, 87% of homes in Stonington were inaccessible. In 2019, there were 3 affordable homes and 20 unattainable homes sold (Maine State Housing Authority, 2019). This disparity contributes heavily to inhibiting low and moderate-income families from moving to Stonington and the displacement of current residents.

Stonington also addresses the population decline coupled with the summer influx of tourism, causing the downtown to enter an economic state of 'feast or famine' (2017, 3.7-2). To combat this, the town has created plans to help address and support the local tourism industry; however, this support may also contribute negatively to increasing the year-round population.

- 1. Reconstructed Hagen dock and re-configured parking there
- 2. Improved the sidewalk in the village area
- 3. Created Small Cove Park
- 4. Created the Farmer's Market during the tourist season
- 5. Funded a part-time Economic Development Director
- 6. Supported the local Chamber of Commerce
- 7. Supported the Opera House and excellent local arts community
- 8. Created a microloan program (a revolving loan program with a current balance around \$125,000 which loans a maximum amount of \$25,000) to assist businesses (Town of Stonington, 2017, p. 3.7-3).

Stonington is conscious of the need to increase its capacity for summer tourism, even though this may be detrimental to the local population's access to housing. In conclusion, the three most common suggestions to maintain or increase year-round population identified by the town were to provide 'affordable housing options, increase the resources to the schools, and create more job opportunities that pay a living wage' (Town of Stonington, 2017, p. 1-4).

COMMUNITY RECOMMENDATIONS

From my research, the primary method that the community could use to combat the urban sustainability problem of declining populations is to increase the amount of affordable housing. However, retaining current residents is another critical issue, thus expanding access to community events, information on rentals, and children-oriented initiatives is also of crucial importance. Capital — or the lack thereof — is one of the principal constraints of combatting issues, such as housing and education. Therefore, the town needs to base itself

on so-called community-based adaptation (CBA). Community-based adaptation is 'based on the premise that local communities have the skills, experience, local knowledge and networks to undertake locally appropriate activities that increase resilience' (Forsyth, 2013, p. 440). My community proposals seek to advance the communities' 'understandings of technical and social change' (Williams, 2009, p.130). These suggestions can include technical solutions, such as the creation of new housing as well as social recommendations that bolster community engagement. The below section will contain my suggestions to my local community on what they can do to combat the issue of a declining population. My recommendations can be broken up into the following sub-sections: creating affordable housing, enticing moving, community engagement, and preparing for economic changes ahead.

Affordable Housing

The Island Workforce Housing Initiative has recently began building five duplex buildings, each containing two, 900 sq.ft. apartments with two bedrooms (Island Workforce Initiative, 2022). These buildings will serve as a steppingstone for island workers and provide individuals and families with steady year-round rentals. This initiative has been spearheaded by a group of community volunteers who view it as an issue and want to help change the community. The Island Workforce Housing community calls people to join them in their efforts, and I would urge fellow community members to support this cause. This organisation is a successful example of community-based action and adaptation that links together participatory approaches to solving housing-related problems.

In 2017, economic analysis reinforced the importance of lobster landings in Stonington, accounting for 76% of the economy (Town of Stonington, 2017, p. 1-3). Again, applying Jacob's theory that 'cities are also primary economic organs,' Stonington is the heart of the island, surrounding islands, and the lobster industry as a whole (1969, p. 6). Despite lobster trade being so important for the community and its economy, only 25 commercial lobster licenses and 25 commercial fishing vessels were registered with the State by Stonington Residences in 2016. Despite this, satellite imagery revealed that that there were usually around 100 boats moored in Stonington (Town of Stonington, 2017, p. 3.7-1). Indeed, in 2021, Stonington was the largest lobster Port, bringing ashore over 11.7 million pounds of lobster, with a value exceeding 76 million. On the island of Deer Isle, there are only 378 harvesters, meaning very few individuals are hauling a large quantity of lobsters (DMR, 2021). These numbers reinforce the idea that Linda Campbell cites that 'one third of the island workhouse crosses the bridge onto Deer Isle daily' (Island Workforce Housing, 2022). Local businesses need employees, and many people want to be part of a community that is driving the regional economy.

To increase the population, the Town of Stonington and its community could entice fishermen to move there: having only about a quarter of fishing boats in Stonington registered to town residents means that there is an opportunity to invite commuters to move to town. Through the creation of affordable housing, Stonington could drastically increase its year-round residents. In addition to fishermen often being young and with families, the fishery-oriented community also allows the passing on of sustainability values and practices. Introducing young families into Stonington could bolster the schooling system and economic value of the area. As Linda Campbell said, 'keeping the community

vibrant is crucial' (Island Workforce Housing, 2022). In conclusion, the most effective way the Stonington community could increase and maintain its population is through the creation of new and affordable housing; therefore, this community briefing would encourage the community to support initiatives like Island Workforce Housing and to support their innovation of approached to create sustainable, affordable housing.

Community Initiatives

It appears that the town is stuck in a negative self-perpetuating loop of families moving to Stonington, then being unable to access needed services, and eventually moving away. My recommendation would therefore be to increase access to to social activities, the affordability of childcare, the use of local organisations, and the visibility of events. Further increasing the town's community events off-season and better advertisement is essential. As the Stonington population halves in the winter, it needs to continue organising uplifting community events for those who stay there during that time. Creating events targeted at families and children will help retain and engage younger populations in the community.

Community Center

Stonington is a lively community during the summer months; however, as the seasons change and tourist figures drop, the town becomes much quieter. To combat this and keep community morale up during the winter, I would suggest that the community keep the services or expand during winter. The town has already identified that the creation of farmers' markets and support of organizations such as the Stonington Opera House are indispensable to increase the town's tourist revenue (Town of Stonington, 2017). Stonington has a very vibrant summertime farmers' market, and to further expand this service, I would recommend that the market reconvene for a wintertime Christmas market to support local artisans and provide social events for the local community in winter. I would also run the market in conjunction with the local school's concerts, providing the opportunity for a community of all ages to gather.

The Deer Isle Stonington community centre is a vibrant community organisation engaging children and adults. The community centre offers zumba and yoga classes, children's summer camps, meetings for anonyme alcoholics, and hunter safety courses, and it also houses the island's food pantry. In addition to this food support, the Healthy Island Project issued 120 meals to older islanders per week, allowing them to see a friendly face and providing them with a respite from the isolation during the pandemic (Stonington Town Report, 2021). To expand these already thriving initiatives, I believe there are three core focus points that the community could consider in order to develop and engage all community members:

- 1. Create year-round community events (with an emphasis on winter events)
- 2. Create community events aiming at young families, the elderly, and children
- 3. Create community events that engage and welcome new community members

School Programs

The island is full of lively organisations that provideengagement and help address community issues. For example, the Mariners Program and the Healthy Island Project spearhead thriving alternative education programmes for the Deer-Isle Stonington Elementary and High School.

Despite the existence of these programmes, due to a lack of enrollment, the local high school can only provide some college preparatory classes. While the town currently lacks the funds or capacity to expand the curriculum for those receiving these preparatory classes, I would suggest that the community create an enrichment program that targets college-bound students. I would suggest that they create a monthly symposium where they could get different members to speak on their diverse college experiences or how their studies helped them with their work life. Additionally, the symposium would bring in community members with knowledge on and experience with financial aid schemes, connections to admissions projects, and offer free services to read and review college entrance essays. Similarly, these college-bound students could help organise afterschool activities for the adjoining elementary school that would both provide free after school childcare for working parents to build the extra-curricular volunteer hours. Both these school system solutions could increase retention without further straining the school's budget.

Social Media Engagement

Social media can aid the retention and increase of community members in two ways, by providing information on rentals and engaging the community in town events for all ages. An online forum for members of the community to share available renting options and housing resources could help streamline the process. While noting and providing winter rentals is only a temporary fix to a long-standing problem, it can help alleviate pressure on the community. Such social media-based community action has both real applications in providing housing but also building awareness to the issue and unifying the community to a common goal. Social media can also be used to increase awareness of town events and gatherings.

For example, there is a town of Stonington and Deer Isle Halloween Facebook group (Leaf, and Infelise, 2022). As the town lacks an actual town center and most of the population lives in houses scattered throughout the town, the group has come together to be a place where people can post Halloween decorations and candy for trick-or-treating. Closer to the date, they publish a map, allowing families to go about and engage in the community. Using the same model as the Halloween group, the island can easily promote programs and ideas to the extended community. Social media events, such as fun runs, church groups, school beautiful projects, artistic events, and engagement with the elderly community members, could help bring the community together.

Economic Diversification

Another central issue that the island is facing is that the economy of the island is heavily dependent on lobster. Stonington became home to one of the country's largest lobster ports as climate change has caused lobster populations to migrate Northwards from New York and Massachusetts towards the Gulf of Maine (Steneck and Wahle, 2013). As the water continues to warm, it can be predicted that those populations will continue moving Northward. Jane Jacobs in her book 'The Economy of Cities', highlights the importance of diversity to a city's prosperity (1969). Stonington could benefit from economic diversification, and this could come from new working professionals moving to the island.

As mentioned earlier, the primary economic value of Stonington is lobster. However, as more summer residents move in and lobsters move North, Stonington needs to capitalise on its other economic revenues. 'The town is entering a new era in which transient residents

and summer tourism, in general, are becoming bigger economic players than before' (Town of Stonington, 2017, p. 3.1-9). This statement poses the question of whether year-round residents would be forced off the island due to a hike in real estate prices. I choose to look at it another way: there is the option to entice those new 'transient residents' to make Stonington their permanent home. With the emergence of the 'spaceless city,' the interface between urban and rural spaces is smaller than ever (Marcotullio and Solecki, 2013). Post-Covid, many Americans appear to continue to choose to work from home and more people seem willing to opt to live in a picturesque rural setting over congested and expensive cities. These residents will likely be employed outside the lobster industry and will provide more diversification to the local economy. Stonington could capitalise on this option and push to convert some of the summerhouses back to year-round residences.

CONCLUSION

In this community briefing, I have explored one of the most pressing issues facing Stonington, Maine. While Stonington is not the typical urban space, it serves as the economic and cultural hub, making it a more abstract picture of the modern 'urban'. As it is faced with declining population, I hope that the community can heed my recommendations and act to maintain a stable year-round population. My suggestions are to increase the amount of affordable housing to entice those working in Stonington to live there and encourage young families to move there. Additionally, I urge the community to keep up and expand their outstanding work with community outreach and engagement. Finally, I recommend that the town also view that there may be a need for economic diversification in the future as the long-term effects of climate change on the lobster industry are unknown. As this is my local community where I was born and raised, I have seen these issues develop. I hope Stonington can solve these current issues while maintaining its working waterfront and historical small-town charm.

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St Andrews' Student Housing Crisis

Elizabeth McElroy



INTRODUCTION

In September 2022, 350 students were in a state of complete uncertainty as to whether they would find accommodation in or around St Andrews (CASH, 2022). While the University of St Andrews was named the best university in the Guardian's University Guide 2023, this does not reflect the fact that it has one of the lowest rankings in terms of social inclusion, according to The Times and The Sunday Times Good University Guide, and it exists in a town facing a major housing crisis (Fitzpatrick, 2022). The Campaign for Affordable Student Housing, known colloquially as CASH, has emerged as a voice for students on the housing crisis, bringing it into the public discourse. This community briefing explores the range of factors contributing to the current crisis, including the zero growth cap for houses in multiple occupation (HMO), which limits the amount of properties rented by three or more people, who are unrelated and share common spaces (Private Rented Housing Act, 2011). Additional causes of the housing crisis include the transition of private rentals to short-term lets, especially during the Open Championship golf tournament, the demolition and muchdelayed reconstruction timeline of Albany Park, an affordable accommodation option in town, and the ever-growing number of enrolled students. The briefing also recommends viable solutions and paths forward to the benefit of the student population, whilst considering the needs of local residents as well.

POSITIONALITY

The most evident cause for the lack of available shared housing is a policy decision made in April of 2019 regarding HMO licensing. HMO licensing was launched in 2006 to establish a standardized quality check for rented, private properties. The license aims to ensure that the accommodation meets legal compliance regulations with a focus on health and safety (The Ultimate Guide, 2022). The regulations set for obtaining an HMO license are vital for the protection of tenants in shared houses, as they ensure that safety standards, like smoke detectors, are in place and functional. In 2019, Fife Council established an HMO cap, declaring a strategy of "no growth" (Beer et. Al, 2020). This HMO cap meant no new licenses could by applied for, directly limiting the availability of recently converted flat shares. The

intention of the license cap was to guard non-HMO properties for the sake of local, low to middle class families (O'Neill, 2019). This is an admirable intention, and the needs of low to middle class families must not be neglected in the effort to provide affordable accommodation to students, but this cap has also resulted in the displacement of students.

Much interest circulated around a proposed exemption to release locked bedrooms to the market, but this request was denied by the Council due to suspected student bias from university research (O'Neill, 2019). This research suggests that the students are putting their needs above those of the community, and the Council appears resistant to making changes based on this reasoning. John Mills, Head of Housing Services, explained how the survey had been sent too close to the decision to allow a thorough investigation into the validity of the information (St Andrews QV, 2019). Instead, Councillor Ben Thomson reassured the public that there was no insufficiency of available student housing, disregarding the concerns raised by the survey.

'The policy may restrict choice for students but there is not currently a shortage of student accommodation in the town, and the University is to be commended on progressing its development programme to provide additional bed spaces' (St Andrews QV, 2019, p. 2).

Councillor Ben Thomson's statement releases some responsibility of the University by stating there's enough student housing. Thomson's statement also divides the housing crisis by signalling student-specific concerns. However, the housing crisis is an issue to be collaborated on and systematically worked through, as it impacts students and locals alike.

While the HMO ban was well-meaning in its intent to increase access to the market for low-and middle-income households, it drives the under-utilization of student flats because rather than going to families, these flats are being rented out by wealthy students instead (Robertson, 2018). In order to comply with HMO regulations, landlords restrict the number of students renting flats without an HMO license. However, this has resulted in upwards of 200 vacant rooms and, therefore, in unreasonable and inaccessible prices for most students (Gatrell, 2022). Some university students can pay for spare rooms, but those who cannot are forced to seek options elsewhere, often with lengthy commutes.

Councillor Jane Ann Liston shared her opinion suspecting negative outcomes of the HMO cap, stating:

'The proposed ban on new HMOs is unlikely to result in lots of homes for low- and middle-income households. Prices rose throughout the 8-year moratorium thanks for the buoyant St Andrews property market, suggesting that any houses not used for student rental are likely to become second or holiday homes, or go to better-off retired people, rather than households of modest means' (St Andrews QV, 2019, p. 2).

In this same briefing, Liston directly refuted Councillor Ben Thomson's claim regarding the availability of housing in St Andrews, while pointing out how the aims of the HMO cap would be undermined by the rental market. Liston's opinion reflects the attitude of many students, who are dubious of the efficacy of the HMO cap, including University of St Andrews former Student President, Paloma Paige. Paige released this statement of disappointment:

'[Cllr Brian Thompson] has in no way considered the needs and views of students, or the situation they have found themselves in. I am astounded at the lack of regard for students in all the discussions today' (Robertson, 2018, p. 2).

Although CASH and the University of St Andrews differ in their approaches to resolve the student housing crisis, one goal they do share is the intention to lobby Fife Council to abolish, or at least reconsider, the HMO ban (Gatrell, 2022). Reassessing the HMO legislation with the needs of students considered and a comparison of its real versus expected outcomes on the local community could lead to the Council's adoption of strategies to benefit all parties affected by the housing crisis.

If CASH and the University worked together on the HMO lobbying, greater progress would likely be made towards their shared goal. In addition, a partnership between these two stakeholders would also send a strong message to the students about how the University is willing to follow through with tangible actions to support their wellbeing.

The HMO cap is not the only legislation to reduce the availability of affordable student accommodation. Since coming into effect in 2017, the Private Housing Act has placed more power in the hands of tenants by only requiring that they give 28 days' notice of departure (Lindhorst, 2022). Surprisingly, the Private Housing Act, which at first sight appears to expand the rights of tenants, seems to have negative consequences in the city of St Andrews. The shorter notice period poses a lack of stability for landlords, making private rental agreements a riskier option than other alternatives. Consequently, the housing market saw an uptake of Airbnb rentals replacing accommodations previously rented out long-term (Flett, 2022). Because Airbnb has little to no online competition, the company holds an unfair advantage over smaller hotels (Kemmis, 2022). A significant urban planning issue arises from the transformation of private rentals to more profitable short-term accommodation, which stifles the supply of available options for students (Gurran and Phibbs, 2017). A cap of available Airbnb rentals would benefit both the local housing and hotel market.

In terms of what was affordable and available for students, Albany Park, at £3,500 per year, made life in St Andrews financially accessible for low- to middle-income students. Despite the important function it held, Albany Park was torn down in 2019 by the University due to health and safety concerns. According to the University's plan, they intend to rebuild the area into a higher standard building, which will be more costly and only accessible to wealthy students (Geyer, 2022). Barry Will, a 3rd year CASH representative, expressed his concern over the construction plan, saying 'they're replacing what was affordable and functioning halls with luxury blocks of flats that only the wealthiest students can afford' (Flett, 2022, p. 3). The Albany Park reconstruction will cost £70 million and, in return, will provide 681 new student rooms and a variety of extra facilities including a café (University of St Andrews news, 2021). Although this development seems like a promising solution, given that it will provide enough beds for currently commuting or houseless students, the predicted steep pricing continues to be a source of concern. Nonetheless, according to Alastair Hamilton, the Fife Council service manager, it still presents more advantages than disadvantages in terms of housing and employment provisions, relieving the current pressure on the housing market and creating job opportunities. The University Quaestor and Factor, Derek Watson, agrees:

'This is great news for the University, our students and the community. The development is central to the University's strategy to provide more student accommodation for our students and ease the pressure on the housing stock in St Andrews. The new Albany Park will provide new student accommodation of the highest quality in an attractive landscaped environment and has the potential to revitalize the eastern area of St Andrews' (University of St Andrews news, 2021, p. 2).

The provision of additional student housing is a step in the right direction, but uncertainty pervades regarding the pricing strategy and whether it will reflect the values of inclusivity and accessibility that the University claims to uphold. The expected completion date of the Albany Park investment is 2026, but representatives from CASH and the wider student body call for a prioritisation of this construction over other funded and unrelated projects, so that current students have the opportunity to utilise the space (CASH, 2022).

As a more immediate solution to the housing crisis than the Albany Park reconstruction, the University has negotiated 140 rooms in the Old Mill Student Residences in Dundee (Fitzpatrick, 2022). However, it can take up to an hour to commute by bus from the Old Mill to St Andrews. On a busy bus, it is natural for students to be unable to study during the commute, so it is reasonable to estimate that most commuting students lose 1.5-2 hours of study every day while their peers living in St Andrews benefit from shorter commuting times. The University has attempted to make up for the negative impact of this travel time and lack of access to social activities by providing a night bus, Dundee-based socials, reimbursement for Stagecoach transport costs, and rooms reserved for commuters with a kitchen, locker space and showers (Gatrell, 2022; Upton, 2022). These efforts by the administration of the University are commendable, but only suitable as a short-term solution. Regardless of the perks offered to commuting students, what they desire most is the opportunity to live locally. According to a survey conducted by CASH, 100% of St Andrews students living in the Old Mill would prefer living in their own university town, with 63% answering that the residence in the Old Mill was their only option (CASH, 2022). Furthermore, 100% of the surveyed students commuting from Dundee reported academic consequences as a direct result of their distance from the University. The physical distance from town can understandably make students living outside of St Andrews feel emotionally remote and alienated from the student community, which was confirmed in the CASH survey as they may miss out on campus activities to make the last bus back to Dundee. Although there exists dedicated commuter groupchats, they would likely benefit from dedicated support from Student Services through regular communication and/or a live-in counsellor to ensure that each commuter has access to professional support.commuter has access to professional support.

Although the University's partnership with the Old Mill is a necessary temporary arrangement, the housing crisis in Dundee is the worst in Scotland due to the increasing amount of property investors as well as attractive mortgage agreements (Geyer, 2022; McLaren, 2022). This means that the University is effectively transferring its own housing crisis to another market that is already under pressure, further exacerbating the situation of the latter. According to the National Union of Students, sourcing affordable student housing is a country-wide issue (Fitzpatrick, 2022). Thankfully, the Scottish Government has taken steps to intervene where universities and city councils have fallen short by passing a rent freeze this year, titled the Cost of Living (Tenant Protection) (Scotland) Bill. The rent freeze

suspends any rent increases from September 2022 to March 2023 for the 700,000 renting tenants in Scotland (CASH, 2022). If the Scottish Parliament were to prolong the Cost of Living Bill to prevent rents from further increasing, it would make the prospect of living in St Andrews more achievable for incoming and current commuter students.

The economic implications of the energy crisis coupled with the expensive accommodation options make it increasingly unaffordable for students to afford these costs given current amount of Government funding available for students. Student Awards Agency for Scotland (SAAS) grants have only risen 10% (from £4,500 to £4,750) in the years 2006 to 2021 which is minute compared to the 154% rise in the price of the University's self-catered accommodation over the same period of time (CASH, 2022). Obviously, over the past year, almost every individual in St Andrews has experienced a drastic increase in their energy bills, burdening students with financial pressures. The increase in these energy and accommodation prices compared to the marginal increase in SAAS funding illustrates how St Andrews is a highly exclusive town to live in, where familial wealth drives the expensive way of life. The inaccessibility of St Andrews contradicts the University's area of focus for an accessible, diverse community in the Strategic Policy (2008-2018). Improved accessibility in St Andrews is apparent when examining acceptance rates as half of the Scottish student population from low-to-middle class backgrounds, but these students are amongst the most affected by the housing crisis (Geyer, 2022). Therefore, a push by the University for an increase in government funding for Scottish students in need is highly necessary, otherwise the affordability crises will push these students out of their well-deserved spots.

Despite the University's inability to tackle the housing crisis, it tries to help students in other ways. The University offers a range of financial support schemes and an accommodation hardship fund to those in need (Flett, 2022). Additionally, in a cost-of-living update from November 2022, the Principal's Office wrote to all students and staff regarding a new support scheme in the form of travel subsidies, money advice, discretionary funds, scholarships and bursaries, student employment, cost of living guide and subsidised food in all University cafés. The University has also increased their letting over properties in and around St Andrews, acting as a mitigator and guarantor between students and property owners (Gatrell, 2022). Many University-managed properties include bills in set rental agreements to support students through the cost-of-living and energy crisis. Positive student feedback came back at 92% satisfied with university-managed properties in 2021 (University of St Andrews). The University's efforts to give student support during the housing crisis has not gone unnoticed. (Gatrell, 2022). Many University-managed properties include bills in set rental agreements to support students through the cost-of-living and energy crisis. Positive student feedback came back at 92% satisfied with University managed properties in 2021 (University of St Andrews). The University's efforts to give student support during the housing crisis has not gone unnoticed.

Even with the support available from the University, the accommodation situation is still very much constrained in St Andrews. There also exists another pressure on the market, which has been created from the excessive number of enrolled students. There are currently 10,425 students - a number that has considerably soared by 2,025 in the last five years (Flett, 2022). The drastic increase in student numbers was largely due to the ruling for universities to accept A-level grades awarded by individual teachers without the actual exams having taken place due to the Covid-19 pandemic, resulting in a surge of conditional offers being

met (Fitzpatrick, 2022). Although these acceptances were non-negotiable by law, the University of St Andrews simultaneously accepted twenty times as many postgraduates than previous years, which did not fall under the said regulations (Geyer, 2022). Barry Will, of CASH, recommends the university to set affordable limits on university housing costs and a sustainable number of enrolled students going forward, saying 'if that comes at a financial cost [to the university], that's what it needs to be' (Flett, 2022, p. 3). The University Strategy has promised to maintain student numbers at around 10,000 (Gatrell, 2022). This is a crucial aspect of strategic planning in terms of relieving the strain on the housing market and for the local residents as well. The sizeable student population is problematic for affordable housing as it creates an extremely competitive market in St Andrews. When flats from private letting agencies are released, applications almost immediately fill up and close. The most common way to secure a flat is by recommendation, which in itself excludes many students from the market, especially newcomers, and feeds into the social hierarchy that is so uniquely entangled in this town. One recommendation is that all flats be released back to letting agents to give an equal opportunity to new renters through application rather than who you know.that who you know.

Although the significant student population places a heavy strain on the St Andrews housing market, it's not the only cause. Tourism is a major industry for the city, supporting 29% of the workforce and bringing in an average of 666,300 people each year (St Andrews Partnership, no date). While its contribution to the local economy is significant and positive at an average of £98 million per year, the large number of visitors also shuts out students and locals seeking to rent. When St Andrews hosted the Open Championship golf tournament in the summer of 2022, landlords and rental agencies were quick to capitalise on potential short-term letting gains. Lawson & Thompson contracts incorporated a July rent increase of £7000, making properties simply too expensive for many to hold onto (CASH, 2022).

CASH has organized numerous demonstrations in St Andrews to bring awareness of the housing crisis to the forefront of public attention. Student and staff discussions surrounding the effects of a shortage of housing, especially the unfortunate effects on academic performance and mental health, would help challenge the stigma surrounding the crisis, so that more students are aware of the problem, improving the likelihood of political engagement on the issue. From the students' perspective, transparent disclosure of the lack of accommodation from the University, further in advance of September and before tuition payments have been made, would allow families to make plans, including back-ups if accommodation could not be found (Upton, 2022).

The local community, including the University, has the potential to lead the student-housing movement in lobbying for a reassessment of the HMO cap, pushing for increased Scottish Government funding, tightening Airbnb regulations and releasing flats back to letting agencies. Within the University, there exist great housing potentials from prioritising an affordable Albany Park over other funded projects, freezing rents on other accommodation options, giving increased attention to commuting students, maintaining sustainable student numbers and transparently disclosing the situation. While St Andrews is not the only university facing a student-housing crisis, their recent renown places them in the unique position where they could become a leader to other universities, showing how to create viable solutions that are inclusive of the entire student body as well as the surrounding community. surrounding community.

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The Implications of Amazon's Gentrification of Crystal City, Virginia

Grace Sisel



DISCLAIMER: AUTHOR POSITIONALITY

Crystal City is a neighboring suburb of Washington DC, where I grew up, thus the gentrification-led displacement crisis is near to my heart. However, I am a white woman from a predominantly white background and have limited direct exposure to the problems that the lower-income communities face day-to-day, beyond that which I have researched for the purposes of this Community Briefing. The proposed suggestions within the Briefing are based on interpretations of both theory from peer-reviewed academic literature and non-academic, public, and online sources. Given this, the results of this Briefing are meant to supplement the ongoing narrative of community displacement and should be considered second to the existing community's own attitudes.

INTRODUCTION

Theoretical Background on Gentrification and Community Displacement

The increased popularity and circulation of sustainable development concepts has created a growing awareness surrounding instances of social injustice. More specifically, sustainable development has helped contextualise issues of social injustice within an urban context. Over the past couple of decades, there has been mass urbanization, which has led to an increased attentiveness towards the politics behind urban growth and management. When one considers neoliberal, or market-driven,- urban development the shortcomings of mass urbanization become obvious. Neoliberalism has established the urban environment within a delicate ecosystem that reflects a capitalistic, economic market through increased privatization; if left unchecked, it gives way to injustice rooted in social and spatial change (Glass et al., 2014). Increased privatisation and public-private partnerships threaten the stability of existing communities by challenging both their social and economic viability. This is because neoliberal policies encourage 'social mixing' between different socioeconomic communities, frequently seen through gentrification and the commodification of housing (Shaw and Hagemans, 2015: pp.323; Aalbers and Gibb, 2014). Social mixing is used to justify and promote gentrification of typically low-income communities, with advocates stating that the introduction of a larger middle-class population will result in a 'rub-off' of benefits between the differing socio-economic communities (Shaw and Hagemans, 2015: pp. 325). However, this is rarely the case as gentrification leads to community displacement as a result of the middle class residents driving the market practices, which can create an exclusive social infrastructure, if not managed properly (Shaw and Hagemans, 2015; Schoon, 2001). Gentrification inherently impacts neighbourhood resources through engaging with the local economy and directly affects how cities undergo economic transformations (Shaw and Hagemans, 2015; Freeman and Braconi, 2002; Newman and Wyly, 2006).

Within a neoliberal urban context, the market is influenced by the influx of higher income residents, resulting in the increase in housing prices (Shaw and Hagemans, 2015). This places pressure on the established, lower income residents as they are outpriced by the middle class (Freeman and Braconi, 2002). Low-rent housing options decrease as the market begins reflecting the preferences of the middle class. However, gentrification affects more than just the housing market; it shapes the development of services and social spaces (Fraser, 2004). The development of the neighborhood will reflect the dominating market preferences, and, with the influx of new, higher income residents, the community in question will change to cater towards the middle-classes' capabilities, ultimately negating the attitudes and preferences of the vulnerable community. This increases pressures on the existing neighborhoods, encouraging both physical displacement and promoting a feeling of 'out of placeness,' ultimately pushing the residents to move elsewhere (Shaw and Hagemans, 2015: pp.326). For lower income residents, this is significant not only because they are becoming increasingly marginalised, but also because it diminishes their already smaller capacity to find local, affordable housing (Shaw and Hagemans, 2015).

Cities are lived spaces, expanding beyond physical boundaries. They are composed of social infrastructure (Fraser, 2004). The relationship between and presence of the varying socio-economic communities brings about a conflict of interest within the shared, urban space. This conflict calls attention to the notion of urban rights;, more specifically, an individual's right to the city. Leading urban activists and scholars, Henri Lefebvre and David Harvey championed the idea of an individual's rights to both the spatial and social components that make up a city (Harvey, 2009). Residents have the right to remain a part of the cities that their communities helped to shape.

Neoliberal rationale uses economic growth to justify gentrification, claiming the new capital investment within the community will relieve the negative impacts resulting from the declining industrial sector (Fraser, 2004). Advocates argue that if residents actively participate in the community, they will create a social infrastructure and economic market that will mitigate the overall neighborhood poverty (Fraser, 2004). However, this is rarely the case as the higher income residents drive the local economy, thus creating a community that reflects their preferences rather than create one with an inclusive outlook. This places an exchange value on the residents rather than value their significance outside the economic market, marginalizing the lower income residents and straying further from a just management of shared living spaces (Shaw and Hagemans, 2015).

AMAZON'S HO2 IN CRYSTAL CITY, VIRGINIA

Context: A Demographic Overview of Crystal City, Virginia

Crystal City is a part of a neighborhood conglomerate within the greater Washington, DC metropolitan area in Arlington, Virginia, often called National Landing. Situated within the Richmond Highway Planning Corridor, National Landing consists of three neighborhoods, Crystal City, Pentagon City, and Potomac Yard.



Map of Neighborhoods within Arlington, VA (Arlington County, 2020)

Before the strategic urbanisation of the neighbourhood in the 1960s, Crystal City served as an industrial space, featuring warehouses and low income motels and housing (CCCA, 2022). Its proximity to Washington, DC and Reagan National Airport, in addition to its spatial potential, made Crystal City a target for urban development. In the mid 1960s, the neighbourhood developed an urban plan to revitalise the area and create a mixed-use space. By 1977, the Crystal City Metro and Virginia Railway Express stations opened, further expanding the reach of the neighbourhood (CCCA, 2022). Crystal City has continued its urbanisation trajectory and, as of 2022, it is currently undergoing several revitalisation projects targeting density development (Crystal City, 2022). In the 1970s, the neighbourhood transitioned from blue collar industry towards one of white collar industry, with about 60% of the residents currently working within professional, technical or governmental services (Crystal City, 2022; Arlington County, 2020). This resulted in the presence of tall office buildings and reduced spaces for community gatherings (Dobson, 2021). The neighbourhood features a significant Department of Defense industry presence, and, after the 2005 Base Realignment Closure, Crystal City reignited its urbanisation plans and created a development framework to combat the estimated loss of 13,000 jobs and 3.2 million square feet of office vacancies (Crystal City, 2022; Crystal City, 2022b; D'huyvetter, 2011). The Base Realignment Closure initiated an economic decline of the neighbourhood as there was a mass exodus of residents, diminishing the sense of residential and commercial identity that was built up in the decades prior (Kang and Hsu, 2018). With a significant number of vacant properties, Crystal City has immense potential for developers to come in and rejuvenate the area. In line with this, the local government is investing in and encouraging private and publicprivate partnerships to bring about more jobs.

Due to its prime location, traditionally available public transportation, and government investment, Crystal City is now one of the main business districts in Arlington, VA, with 51% of its spatial planning listed for commercial use and 49% as residential, despite the Base Realignment Closure setback in 2005 (Arlington County, 2020; Crystal City, 2022). Even so, Crystal City remains a target for increased urbanization and gentrification. Former Virginia Governor Ralph Northam and other local authorities have partnered with e-commerce giant Amazon, among lobbying with other large corporations, to revitalize the area. The implications of this will be discussed within this chapter.

According to the 'Department of Community Planning, Housing and Development Profile 2020', 20,100 residents, or 17% of Arlington's population, live within the Richmond Highway Planning Corridor (Arlington County, 2020). The 2010 Consensus outlined that 64% of Arlington's population is white, 8.28% is Black or African American, 9.6% is Asian or Pacific Islander, 3% is Multi-Racial and 15.1% is Hispanic or Latino (Arlington County, 2020). Within Arlington as a larger county, the socioeconomic demographics of the residents is split between the northern and southern corridors; the southern corridor, where Crystal City is located, is less affluent compared to the predominantly white north side (Bittle, 2018). Out of these residents, 91% live in renter occupied units, and are therefore directly impacted by the rise of housing prices, according to the Alliance for Housing Solutions (Arlington County, 2020; Lawson and Bozman, 2022). There are a total of 448 Committed Affordable Units within the Richmond Highway Planning Corridor, however, 300 of which are age-restricted, further limiting low-income housing options (Arlington County, 2020; Lawson and Bozman, 2022). This is problematic as Crystal City has emerged as an affordable alternative to in-city housing and office space (Dobson, 2021). To combat this and accommodate for the anticipated growth of 8,500 more residents, local governmental officials have set out a development plan that involves investing in more affordable housing units and increased transportation, though the housing work has been halted by Arlington County (Crystal City, 2022; Kang and Hsu, 2018).

A Brief Overview of Amazon's Expansion into Crystal City

In 2018, Amazon selected Arlington, VA as the new site for their second headquarters (HQ2). Crystal City offers a perfect opportunity for the expansion of Amazon's headquarters as it has plenty of vacant commercial spaces as well as a well-established transportation network (Kang and Hsu, 2018). Amazon officials selected Crystal City as the new home with the hopes of bringing in more than 25,000 jobs after significant lobbying efforts from former Virginia Governor Ralph Northam (Kang and Hsu, 2018; Schoettler, 2022). As part of the partnership, Amazon has agreed to create affordable housing opportunities to challenge the current tight housing market in Crystal City, seen through their voluntary Housing Equity Fund, which commits \$163 million to affordable housing in the Washington, DC metropolitan area (Armus, 2022a; Amazon, 2021; Amazon Staff, 2022).

In partnership with Virginia's local government, Amazon has set up a project plan to redesign Crystal City through building more social spaces and increasing affordable housing (Dobson, 2021; Schoettler, 2022). Amazon plans on investing \$2.5 billion of their HQ2 expansion budget into Crystal City, featuring three to four large office 'spheres', multimodal paths, increased publicly available green spaces, and retail spaces, among other features (Dobson, 2021; Schoettler, 2022). The corporation is actively trying to rebrand Crystal City through the introduction of HQ2. Joe Chapman, Amazon's director of real

estate and global facilities, boasted about creating a space that would encourage a '18-hour work day' where neighborhood residents would engage with the company's publicly available community areas after the typical 9 o'clock to 5 o'clock work hours (Armus, 2021). Through this, Amazon is trying to secure itself within the everyday activities of the Crystal City community, further embedding itself into the fabric of the neighbourhood.

Furthermore, Amazon's presence has thus far created 5,000 jobs, which is one-fifth of the target outlined for job creation in Arlington, VA (Armus, 2022b). Their existence in Crystal City has promoted the neighbourhood's potential as a hub for large tech companies and since Amazon's arrival, other large corporations such as Raytheon and Boeing have committed to relocating to Arlington, VA (Armus, 2022b).

Conflict

Although Amazon and Virginia's local government pledge significant funds towards investing in affordable housing in Crystal City, there is a disconnect between intention and action. Out of the \$750 million allocated to affordable housing development, only 6% of the units have been allocated for the lower-income renters (Armus, 2022a). Amazon's Housing Equity Fund director, Catherine Buell, noted that the voluntary fund targets 'market need,' and that the responsibility of solving the housing crisis is not a responsibility of Amazon, but that of the government (Armus, 2022a). This is problematic as Amazon's presence attracts residents of different socioeconomic status compared to the existing residents. While this challenges the current social dynamic, it also creates an economy that favours residents with higher income. Within a neoliberal system described earlier, the allocation of resources will become skewed and increase the presence of inequality within the neighbourhood (Harvey, 2009). In prioritizing the new, imported working class residents, Amazon is promoting and driving the gentrification of Crystal City in such a way that the lower-income, marginalised residents are forcibly displaced as they cannot afford the increased housing prices. Simply put, Amazon is encouraging displacement and marginalisation of the most vulnerable residents in lieu of economic development.

As discussed earlier, cities are made up of communities and social infrastructure, and the residents have an inherent right to remain part of their communities (Fraser, 2004; Kadi and Ronald, 2014). Through actively changing the demographics of Crystal City, Amazon is putting displacement pressures on the already marginalised, lower-income residents. By excluding the lower-income residents in the growth of Crystal City as a community, Amazon is harming the interests of the poor (Freeman and Braconi, 2002; Shaw and Hagemans, 2015). Furthermore, in encouraging a culture shift within the neighbourhood as demonstrated through the changing market discussed earlier. The e-commerce corporate giant is creating a feeling of 'out of placeness' and challenging the rights of the lower income residents to stay put (Shaw and Hagemans, 2015; Fraser, 2004; Kadi and Ronald, 2014). Amazon is facilitating a change that will continue to push out lower income residents, further worsening the affordable housing crisis in Crystal City and silencing the lower income residents in favor of economic self-interest.

Looking past the inherent injustice rooted in community displacement, Amazon's gentrification of Crystal City has other negative social impacts as well. If lower-income residents are displaced, they are further disadvantaged within the Crystal City community beyond simple expulsion. Displaced residents are burdened with increased accessibility

costs, both physically and psychologically — accessibility and proximity to one's workplace and established community are key features within an urban environment (Harvey, 2009). Displacement can result in a physical separation between resident subgroups and has the potential to give way to a heightened sense of inequality as the physical change in location of a community results in a change of opportunities (Harvey, 2009). For example, moving residential locations results in changing costs of transportation through both time spent traveling and money spent on commuting. These costs can affect the job and housing opportunities available to the displaced residents, further separating them from their former community, and driving an unbalanced redistribution of income in favor of the non-displaced residents (Harvey, 2009; Shaw and Hagemans, 2015). Displaced residents are not only forced to spend more time traveling to and from work, sacrificing personal time, but they are also at risk of needing to pass up job opportunities as a result of increased transportation costs. These economic changes are often accounted for in urban planning and design, however the social implications are frequently overlooked (Harvey, 2009). As a result, the inequalities persist and lower-income residents are further excluded from the city that they helped to shape.

Beyond the physical displacement of low-income residents, Amazon's ambitions to shape a new culture within Crystal City has made locals wary. An article in the Washington Post noted that residents have voiced their concerns with the changing dynamic of Crystal City, worrying about being priced out by the influx of tech workers (Armus, 2022a). Current residents have noted feelings of pressured displacement as their communities are targeted for redevelopment (Bittle, 2018). Even before the introduction of Amazon into Crystal City, there was a housing crisis in the DC metropolitan area as the population was, and continues to be, growing rapidly (Dobson, 2021). Yet the arrival of Amazon has led housing market prices to skyrocket as new, higher- income residents move in. In order to boost employment levels in Northern Virginia, Amazon is planning on creating 25,000 new jobs with an average salary of \$150,000 (Lerner, 2019). With an influx of higher paid workers, Amazon is saturating the neighborhood with higher income residents. These new residents are competing for the same housing units as the already established, lower income residents and are ultimately coming out on top. As a result, the lower income residents are pushed out and the inequalities between the varying socioeconomic groups worsens.

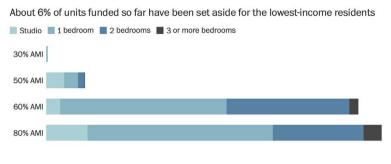
COMMUNITY RECOMMENDATIONS

The housing crisis is a leading force in driving social injustice and inequality in Crystal City. Given this, Amazon, as a large investor and influential actor in the development of the neighbourhood, needs to continue to ameliorate the burdens caused by the rising housing costs. Currently, Amazon's pledge to create affordable housing does not alleviate the pressures of the majority of low-income residents; instead, it targets those with at least 60% below the median income (Armus, 2022a).

In addition to Amazon's efforts, Virginia's local government needs to follow through with their ambitious goals to develop committed affordable housing units in Crystal City. The current development plan only retains the units for 30 years, ensuring but a short-term retention (Lawson and Bozman, 2022). To encourage long term housing stability, Arlington County should look to extend the retention period beyond 30 years to accommodate for the

projected rise in population. However, unless Arlington County officials adopt a reflective outlook on their urbanization plans, they will not address these issues. Therefore, it is up to the community to voice their concerns to draw attention to the crisis. In doing this, the existing community can draw on the specificities adding to the housing crisis, such as the development plan retention timeline.

Most units funded by Amazon are for low-to-moderate income renters

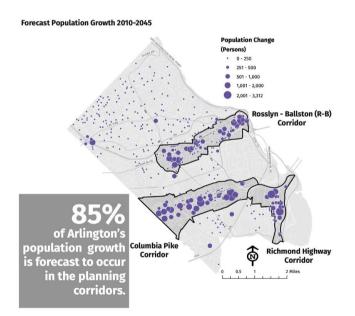


"AMI" stands for "area median income," which is determined for the D.C. region by the U.S. Department of Housing and Urban Development. Rent prices for each AMI are set so that a household in that bracket would spend no more than 30% of its income on housing costs.

Source: Amazon Housing Equity Fund

TEO ARMUS / THE WASHINGTON POST

This graph shows a breakdown of the housing funds allocated by Amazon, sourced from a Washington Post article (Armus, 2022a). Though Amazon has donated a significant amount of money towards the cause, the distribution of its resources is unbalanced. Furthermore, Amazon only set aside 215 out of 4,100 housing units to residents who make up 50% or less of the area's median income (Armus, 2022a). To combat the displacement pressures and consequent social injustice caused by their strategic gentrification, Amazon should expand their Housing Fund to assist the poorest renters. Though, this is easier said than done; changing public-private policies takes significant lobbying. The local community could petition Amazon or the local Arlington County government to draw attention to the skewed allocation of resources.



Forecasted Population Growth in Arlington, VA (Arlington County, 2020)

As displacement and gentrification go hand in hand, Arlington County officials can look to extend the publicly funded transportation options to mitigate transportation costs and pressures placed on those forced to move away from Crystal City. Currently, both Arlington County and Amazon are investing in green transportation pathways, expanding walkable sidewalks and increasing the presence of bike lanes (Crystal City, 2022; Schoettler, 2022). However, these efforts are only beneficial for the local residents. Therefore, it would be

prudent for each of these actors to invest in and lobby for increased bus and metro infrastructure throughout the Richmond Highway Corridor. Not only would this alleviate some of the negative impacts of physical displacement discussed earlier in this Briefing, but it would also maintain an inclusive community experience as the residents would remain connected to their original neighborhood.

CONCLUSION

Through a critical lens rooted in urban theory around community displacement and social injustice, this Community Briefing discusses the implications of Amazon's HQ2 presence in Crystal City as well as provide research-based recommendations for future action. The expansion of Amazon's headquarters into Crystal City has encouraged gentrification and community displacement within Arlington County, Virginia. Before the introduction of HQ2 in National Landing, Crystal City was already facing a housing crisis due to previous industry closures and regional population growth (Dobson, 2021). However, this does not belittle the serious impact that Amazon's presence has had on the community; the influx of a higher income population places displacement pressures on the existing, lower-income residents, and threatens increased marginalisation. Therefore, it is recommended that both Amazon and Arlington County work together as leading forces to ameliorate the pressures imposed by the current housing crisis on local residents. They could do this by not only investing in better public transportation, but also committing to funding and maintaining affordable housing units targeted at the most vulnerable, low-income residents. If left unchecked, the gentrification efforts of Amazon and Arlington County will only worsen the housing crisis and consequently force out the community that has shaped the neighborhood for decades, leading to unprecedented levels of social injustice.

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St Andrews' Student Housing Crisis

Aliha Jannah Babar



The University of St Andrews resides in a beautiful and quaint coastal town, laced with idyllic cafes and spirited with century long traditions. Known as the home of golf, alongside its scenic beauty, St Andrews is a prime destination for holidaymakers and those looking to retire (MacLennan et al., 2013). It has been ranked above other prestigious universities such as Oxford and Cambridge and continues to rank 1st for student satisfaction (The Guardian, 2022). The sum of these features attracts increasing numbers of students and tourists each year, already making rents considerably higher in St Andrews than in the rest of Fife (Fife Housing Partnership, 2011). However, for the first time in the University's history, students have found themselves questioning whether they will be able to find housing at all. The Campaign for Affordable Student Housing (CASH), reports a shocking figure of over 350 students who are currently homeless (Gatrell, 2022). According to this independent studentrun campaign, 85.4% of students affected by the homelessness crisis have communicated a significant negative impact on their mental health (Gatrell, 2022). This is strongly related to the fact that many students have had to resort to living in neighbouring towns, such as Guardbridge, Cupar, Leuchars, and Dundee. In consequence, many students are facing increasing levels of anxiety and stress, as they have limited choice in the freedom of their university experience and ability to excel in their academic performance.

The purpose of this briefing is to address the disorganization and unsustainability of housing from a student's perspective and to offer solutions to other student communities both locally and nationally, as well as to the University itself. The briefing will layout personal positionality in writing this report, followed by an analysis of possible reasons for the crisis, its effects on students and finally, suggestions in moving forward. Throughout the report, I will be using qualitative data conducted through interviews in an effort to represent the student body affected by the crisis. In order to protect the identity of these students, names will remain pseudonymous.

POSITIONALITY

This issue is particularly interesting to me as I have been directly affected by the housing crisis in St Andrews. Having been at the University for almost five years, I am accustomed

to the waves of incoming freshers that fill the streets with new faces. This was especially the case after the pandemic, whereby students were more excited than ever to regain a sense of normality. However, due to the University admitting more students than they could house, resulting in a high level of housing competition, I found myself homeless. I was looking for, applying to and being rejected from private accommodation for over 6 months, leaving me with no place to stay days before coming back to university. Due to many housing agencies preferring in-person viewings over virtual ones, I returned to St Andrews before the start of the academic year for the sole purpose of house-hunting. Thus, throughout the first month of my final year, I was couch-surfing between several houses. On multiple occasions, I even had to resort to self-certifying tutorials in order to view houses, hoping to secure accommodation at the earliest possible date. As a result, I was eventually removed from one of my modules due to increased absences and will have to appeal to the board at the end of the semester for any chance of passing. Consequently, this topic is deeply important because not only does the housing crisis strip students of the basic right to shelter but also affects their personal and academic lives. I have witnessed first-hand the extent to which students are impacted by not having access to accommodation, as well as by the changes of the price and quality of housing. As a result, the shared strife of housing within the community of St Andrews inspired this paper.

BACKGROUND AND CONTEXT OF CHALLENGES

Part and parcel of the housing crisis is the removal of House in Multiple Occupancy (HMO) -defined as a flat or house occupied by three or more unrelated persons (Fife Housing Partnership, 2022) – from the St Andrews private market. In 2018, the fife council introduced an over-provision policy to restrict any further growth of HMOs within St Andrews (Fife Housing Partnership, 2022). Since students are not eligible to pay council tax, Fife Council discouraged landlords from letting to students, as they would be legally unable to rent 3+ bedrooms to more than two students anyway. Consequently, students end up having to pay extortionate prices to reside in homes with empty bedrooms. In response, the university invested in a £100m programme to recreate Albany Park which would provide 1000 extra units of bedspaces to contain the growing number of students and reduce pressure on the private housing market (Fife Housing Partnership, 2022). However, less than a year later, the University demolished this hall which incidentally was the most affordable universitymanaged accommodation – with rent at £3,500 a year (Geyer, 2022). The University aims to replace it with new luxury development, using the edge of its scenic seafront views for summer tourism lets (Geyer, 2022). The revised plans for Albany Park state that half of the 750 high-quality student beds will be affordable, which is a significant decrease to the previously provided 1000 affordable student beds (St Andrews QV, 2020). Therefore, all of the buildings in St Andrews are three-four times more expensive than the demolished Albany Hall.

Nevertheless, the University's shortfall in accepting more students than it could house intensified the crisis significantly. Whilst the University claims that Covid-19 was the driving factor of the number behind A-level students achieving good grades, it cannot be the main contributor to the surplus of students in St Andrews. This is clearly shown as the University admitted twenty times more postgraduate students compared to the year before, which is unaffected by A-levels (University of St Andrews, 2022). This is particularly

shocking as in 2020, the University reached a student body of 10,000 which was not supposed to have been reached until 2025 (University of St Andrews, 2022:2). The exponential increase continued and in 2022, the student body rose to 10,425, leaving roughly 400 students in search of a roof over their heads (University of St Andrews, 2022). This intentional and steady influx of students has essentially created an artificial housing crisis; with a high demand on private lettings and university-managed halls.

Unfortunately, the housing crisis was further affected during the 150th anniversary of The Open Championship Golf Tournament in 2022, in terms of not only availability but affordability. Many landlords renovated their previous student lets into short term lets such as Airbnb's. By providing holiday rentals to golfers in the summer, a considerably greater amount of revenue was made compared to student rentals. With 290,000 attendees, and more than 1.3 million ticket requests made for the event, landlords increased their rental prices sustainably with the most expensive accommodation charging £5000 a night for just two bedrooms sleeping four people (Connor, 2022). This would amount to a staggering £52,624 over the course of the tournament, including a £7,624 service fee (Connor, 2022). Meanwhile, at the time of search, the cheapest available property would cost £1,173 per night, reducing housing stock for students by interfering with the supply from the market (Geyer, 2022). Although the tournament took place outside of term time, even a handful of students were not privy to housing support as all of the prospective residences were not only occupied but implementing unaffordable prices. This is a testament to the struggle that students faced in the sole search of somewhere to stay even whilst property-hunting.

COMMUNITY CHALLENGES

The housing crisis is intersectional - as it affects students of different ethnic backgrounds, income households, and gender identities both mentally and physically. Thus, the housing issue is too complex and interconnected to subcategorise. Therefore, the following section will illustrate the ways in which the housing crisis has affected students in the St Andrews community through examples and testimonies.

An estimated 140 students have been offered student housing in Dundee (The Old Mill), 14 miles off campus, as the University's attempt to respond to the housing shortage in St Andrews (Fitzpatrick, 2022). Students commuting from Dundee note a prominent negative effect on the quality of their social and academic lives. Since the journey to St Andrews is thirty to forty minutes by bus, even the availability of modules has become limited to those dissuaded by the tiresome routine of waking up as early as 6am for 9am classes. Due to the lack of proximity and accessibility to university facilities, students have reported severe cases of loneliness, alienation and in extreme cases - suicidal thoughts. Moreover, the emotional drainage and stress of having to live off-campus, commute, and miss out on the fulfilling student experience of the best university in the UK (The Guardian, 2022) has resulted in many students deferring their course completely. The University's approach to the crisis was to provide, 'additional, affordable University-managed beds in a modern, purpose-built student residence' (Gatrell, 2022). Yet, a testimony received from a St Andrews student living in, 'The Old Mill', proclaimed that the ceiling had collapsed and that it is yet to be repaired (at the time of writing). Thus, the effects are twofold: a mentally-draining university experience paired with a hazardous risk to student health and safety.

Other students have had to travel to Guardbridge, 3 miles north-west of St Andrews. Whilst this is a better option than residing in Dundee, students still feel the discontent of commuting and shared feelings of missing out on student leisure. One student noted that he was surprised to have ended up there due to university staff claiming the ease of reapplying to his previous hall - Andrew Melville. He goes on to say that it was especially hard to rent privately as landlords weren't keen on renting to a seventeen-year-old. Finally, after months of 'waking up early to check for new houses', he was able to find accommodation through the Facebook page – 'get a Room St Andrews'. According to many students, the act of waking up to check this site was an inbuilt ritual of their everyday life. The site became essential for students looking for a place to stay. The student continues to explain that living in Guardbridge has become an inconvenience, particularly due to the football team that demands his time quite often. Thus, checking bus times and organising places to stay after training sessions becomes a stressful endeavour. The desperation of students to find housing has led them to reside in neighbouring towns – a noteworthy reduction to their freedom.

The unaffordability of housing is yet another barrier that students face in St Andrews. An interview conducted with a member of CASH, indicated the sheer intricacies of the housing crisis. The student interviewed proudly identifies as nonbinary (they/them) and bisexual but only in the LGBTQ+ friendly setting that the University has provided for them. On the contrary, if their sexuality was to be expressed in the context of their home, it has been made clear to them that they would not receive financial aid. In the case of this happening, the student explains that they would face immense struggle in financing themself due to the extortionate prices of accommodation. Furthermore, upon applying for disability accommodation, the student was told that they did not meet the specific criteria to qualify and was deemed, 'not disabled enough.' Thus, their fear stems in not only a lack of housing, but its affordability and the ability to depend on the university for assistance in such extenuating circumstances.

This brings attention to the cost of accommodation and its relationship with different income backgrounds in St Andrews. The university takes pride in encouraging applicants from disadvantaged backgrounds (Geyer, 2022). In fact, over 50% of Scottish students are from underprivileged areas, bringing it to around 1,500 students (Wilson, 2019). In 2022-2023, on average, students will pay £847 per month for a catered hall with shared bathrooms - £7,623 for nine months (University of St Andrews, 2022). On the other hand, Gannochy House – one of the cheapest university halls – provides 167 self-catered rooms with shared bathrooms, for £550 per month (University of St Andrews, 2022). If the University recognises these figures, it is clear that the number of affordable rooms of residence (167) does not come close to its level of low-income students (1,500). Thus, the overall response from the University has forcefully rendered students to accept a new normal that is anything but. The Complete University Guide describes St Andrews as a, 'small university fostering a strong sense of belonging', and ranking first in student satisfaction (2022). This will be a challenging statistic to maintain as students are figuratively and literally far from feeling connected to the university.

COMMUNITY-LED SOLUTIONS

Having conducted thorough interviews with Barry Will, a third-year student who helps run CASH, it is evident that clear and effective communication and accountability towards the crisis is pertinent in moving forward. The lack thereof, reflects negatively on the reputation of the University regardless of its status on any university guide. More importantly, it leaves students feeling unaccounted for and mistreated which completely shapes their outlook on their entire university experience. A lack of housing is a barrier to education, especially for low-income students and whilst the University hosts programmes for widening access, the barrier to entry though accommodation remains the same. The housing crisis creates a fragmented society for everyone, not just students. The sky-high rents are increasingly unaffordable for locals, let alone students. Thus, posing the risk of driving locals out even further than they already have, given the vast influx of students expanding their house search to residential areas.

Unfortunately, in this instance, tangible change is institutionally driven and is strongly imposed through a top-down approach. However, this does not mean that the community should sit by as they struggle. Instead, this briefing proposes direct action through advocating for affordable and accessible housing to all students, holding the University accountable for the surplus of students, and instigating activism through sharing the stories and experiences of students at the University. In this way, the likelihood of such conditions occurring again largely dissipates. Community-run initiatives such as peaceful protests and marches are indicative of the solidarity within the community and the story of a shared struggle. Collaborating with causes such as CASH, would be an impactful way to unify voices in an effort to be heard on an institutional and national level. Further down the line, different groups in similar socioeconomic positions across Scotland may also relate and come forward in sharing the student experience of being near homeless.

In order to combat mental health issues, a strong student network could be created to specifically cater to those affected by the housing crisis. In this way, a shared experience may be invaluable to those going through feelings of loneliness and isolation. The University and student services may even consider organising activities in Dundee, as a means of connecting students who live afar. Naturally, there are limitations to what the University can do, thus making it important for students and student-led organisations like CASH to petition the bans of HMOs to the Fife Council.

Moreover, the University should be more transparent and communicative in managing student expectations before coming to St Andrews. Many of the students arriving in St Andrews are making their first ever trip, making it a completely foreign arena to them. So, transparency goes a long way for students, especially when coming from afar, of what to expect upon arrival in terms of secure accommodation.

Collaborations between the student body representatives and the University could go a long way in accurately raising the concerns of those affected by the housing crisis. For instance, having gone against their own University Strategy in the first place (capping the student intake at 10,000), the University may want to implement checks and balances to avoid over-accepting student applications. Through this method of conscious decision making, an optimal level of students can be reached to fit the availability of housing. Other

ways include suggesting a rent cap to Fife Council towards private landlords who rent at extortionate prices as seen during the Open Championship. Liaising with student and private landlords, as well as agencies, may also be a strong move in negotiating rent prices and accessibility to housing. In this way, the community strengthens itself through relying upon one another based on a shared struggle rather than profiting from one another at the disadvantage of students.

CONCLUDING REMARKS

There were several factors that induced the housing crisis. On the University's side, the unreasonably rapid increase of students paired with the reduction in student accommodation contributed to a large disparity in demand and supply. On the other hand, factors affecting the market such as inflated private rents in tandem with limited properties in the market, has also attributed to the crisis. The increase in demand and shortage of supply for basic shelter should not be a concern for students coming to university, nor should they face the consequences through living in Dundee. The shortage of accommodation has resulted in extreme mental and physical distress, whereby students are unable to enjoy their student lives at all. The intersectionality of the crisis illustrates the sheer severity of the ways in which limited and unaffordable housing can affect every facet of someone's life. This is a preventable issue that the University and Fife Council must be vigilant of. Through foresight and proper planning, the University can ensure that the number of students enrolled are directly correlated to the ability to house them. Similarly, the Fife Council must consider the efficiency of the HMO ban and whether or not its time has come to an end. Most importantly, it will be the unanimity of the St Andrews community that will push for change on an institutional level. By raising the concerns of the student body thoroughly and consistently, the strength in our collective voice will be sure to spread awareness and hopefully work hand in hand with these governing bodies to create sustainable frameworks to end the crisis.

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The Impact of the Energy Burden Crisis and the Inaccessibility to Renewables within Brooklyn, New York

Sophie Browning



INTRODUCTION

I have always been interested in sustainable innovation and the ways in which technology can be employed to mitigate climate change. However, it was not until this summer that I saw how new sustainable technologies can impose unwanted injustices and can work to create "winners" and "losers" of climate change, especially in energy accessibility. I spent my summer living in Brooklyn, New York working for a commercial solar panel company, where I first-hand saw how U.S. climate legislation prioritized the corporate sector over residential homeowners. New York City during the summer months was exposed to an unprecedented number of heatwaves, power outages, and water shortages, making it miserable to be outside during the day. Energy prices were exorbitant – it was difficult to afford Air Conditioning (a necessity) for more than three hours – many of my neighbours and I suffered from heat stroke while others had electricity cut-off entirely for failure to meet utilities payments. Ironically, solar power was advertised across the City as a costeffective "sustainable" solution, but in reality, accessibility to renewables was safeguarded by those who could afford it. I am passionate about desegregating renewables and finding solutions that equip the Brooklyn community with the power to harness residential solar energy.

CONTESTING THE SUSTAINABILITY OF RENEWABLES

The challenge of achieving both sustainability and justice in the energy sector through the implementation of renewable technologies can be characterized as a pursuit of 'two lofty goals' (Campbell, 2013). Renewables in New York City have been situated as the 'technological messiah of development' (Bulkeley et. Al, 2014). However, in this energy development, energy justice is seldom a priority, as lower income communities and non-white citizens in particular, are often excluded from decision-making processes. Therefore, it is critical to investigate how this new sustainable urbanism, "messiah", works to discriminatorily drive social injustices of health, access to green space, employment, education, electricity, and pollution.

In order to understand this briefing, we must ask: what is social justice? (Harvey, 2003, p.940)

I am suggesting that in the case of clean energy accessibility and affordability: social justice is 'simply whatever the ruling class wants it to be' (Havey, 2003, p.940). The higher income class's environmental interests consistently rank as more important than those of the impoverished, resulting in a sustainability of privilege, whereby 'Manhattan in effect turns into one vast gated community for the rich' (Harvey, 2003). Energy systems power the city, therefore; those who know and produce knowledge about how these systems operate and are funded, can control the way and the where of how the power flows. The nuance of renewables is only known by a select few; the transition from traditional to modern carries a political imbalance of authority, in which re-configuration of infrastructure by those in the know and with the capital establish a selective agency tied to their built 'regimes of power' (Foucault, 1975). It is indisputable that those who get to benefit from this new "green" infrastructure have the privileged right to do so, evidently the right to "clean" energy is not free, nor equal, compromising the fundamental 'right to the city' (Harvey, 2003). Energy is arguably the most important human right, as it is needed to 'heat, cool and light homes, power information and communications devices, and operate the appliances' we depend on for cooking, wellness and sanitation (NYC Gov., 2019a). New Yorkers in the Brooklyn community are now forced to pick between payment for energy or rent, food and medical bills. The right for Brooklyn residents to imagine themselves as part of the net-zero state agenda has been restricted, these citizens within the same city as the elite are prevented from 'shaping the process of urbanization', thus, prevented from the process of shaping themselves (Harvey, 2003).

INTRODUCING BROOKLYN AND THE ENERGY COST BURDEN:

Background on the Brooklyn Borough

Brooklyn is one of the largest and most racially, religiously, and economically diverse areas in America. For reference, Brooklyn is larger than Boston, Atlanta, Washington D.C. and Minneapolis combined; 'it has more African Americans than Atlanta, more people living in poverty than Detroit, and more wealthy people than Greenwich' (BCF, 2022). The community has a high rate of income inequality, approximately '1 in 4 residents live in poverty', ranking as the area with the greatest number of children living in poverty in all of NYC (BCF, 2022). A third of Brooklyn residents spend half of their annual salary on rent alone, it is critical to acknowledge that this does not include energy bills. Observation through a historical lens of immigration in Brooklyn unsurprisingly results in '50% of all households speaking a language other than English, and over 33% of residents who were born in a different country' (BCF, 2022). Racial injustices, along with America's history of police violence towards non-white citizens contributes to the high incarceration rates (3,000 residents a year).

What is the Energy Cost Burden?

The Energy Cost Burden refers to the amount of income that is spent on energy bills. Energy prices within NYC in the last year have been exceptionally high. The global energy crisis, sparked by the Ukrainian War (where prices increased due to Ukraine's blocked exports of oil and natural gas), has induced a new pandemic of utilities debt. National Grid and Con

Edison, two of the largest natural gas utilities in NYC, predict a 30% bill increase on electricity this winter (Barron, 2022). Consumers already saw a 200-300% increase earlier this year, leading to disconnection notices and shutoffs throughout Brooklyn. Lower-income and non-white communities are disproportionately affected as they are the most vulnerable (Tejani, 2022). Additionally, while solar panels are advertised as a solution to this crisis, 'residential photovoltaic (PV) adopters are more likely to have higher incomes, be more educated, and live in white-majority census geographies than non-adopters' (Ross et. al., 2022). Brooklyn's higher rate of poverty, unemployment, and uncompleted educational degrees make the transition to renewable solar energy riskier, cost-inefficient, and unrealistic.

Systemic racism has led to numerous environmental-related health issues such as asthma, chronic dizziness, PTSD, DNA mutations, and genotoxicity, due to the disproportionate distribution of fossil fuel dependent infrastructures in lower-income neighbourhoods (NYC Gov. 2019b). The cost of living in areas adjacent to power plants and gas pipelines may be more financially affordable but costs a fortune in terms of health and pollutant-related medical emergencies. Furthermore, NYC is suffering from accelerating climate change hazards: sea level rise, flooding, extreme weather, and heat waves are all exasperating the need for energy resilience. The exponential increase of harmful climatic weathering pressurizes energy resources, causing more frequent power outages, network delays and battery-storage failures. It is not-surprising that lower-income communities are most vulnerable and more susceptible to climate change; therefore, climate-resilient energy technologies, especially solar power, are essential in Brooklyn.

A. Asthma Hospitalizations

Fossil fuel energy generation produces high levels of air pollution that contribute to asthma hospitalizations. Based on city data, it is evident that poorer air quality is situated in Brooklyn's lowest-income communities adjacent to the oil refineries and pumping sites in the north-west district and that hospitalisation rates for asthma are also elevated in these areas (NYC Gov., 2019b). Deployment of renewable energy solutions can help mitigate fossil fuel induced hospitalizations. Solar panels can distribute clean electricity, enabling people to move away from gas-powered appliances (NYC Gov., 2019b).

B. Heat Vulnerability

NYC has suffered from extreme heatwaves this past summer, in which the temperatures climbed way above 90 degrees Fahrenheit. The neighbourhood of Greenpoint, North Brooklyn, ranked as 'one of the City's most vulnerable areas to heat and heat-related illnesses and deaths' (Poletto, 2021). The built environment of Greenpoint consists of little tree coverage; thick traffic; and congested glass, asphalt, concrete, and metal structures. A New York Times article released before the summer began, in May, headlined: 'It's going to be a hot summer. It will be hotter if you are not rich' (Barnard et. al., 2022). On The Upper East Side, the richest and whitest neighbourhood in Manhattan, '96% of households are airconditioned', and most residents have the funds to escape to summer homes during the boiling mid-July weeks (Barnard et. al., 2022). Central Park, surrounded by the Upper-West and Upper-East, is the largest greenspace in the City; it is a privilege to live near it; however, during July and August it was 'left largely untapped' (Barnard et. al., 2022). On the other hand, residents in Brooklyn's most heat-vulnerable neighbourhoods were forced to stand in four-hour long lines just to enter the public pool – the only way to cool off without access

to electricity for air conditioning. Betsy Head Pool in Brownsville, Brooklyn also has strict rules, contraband counts as 'bottled drinks, snacks, newspapers, flotation devices, even coloured T-shirts' (Barnard et. al., 2022). Furthermore, to highlight the extremity of inequality: Brooklyn residents remark that 'two police officers stood by, wearing bulletproof vests and armed with 9-millimeter pistols' (Barnard et. al., 2022).

Asthma hospitalization and heat vulnerability showcase two examples of the harmful effects induced by the Energy Cost Burden in Brooklyn. Dirty fossil fuel energy resources contribute to health hazards and cannot withstand the increase in climate change weather extremities. It is evident that a stable and affordable electricity source is necessary for every citizen; access to renewables, therefore, is not something that can be guarded by wealthier residential districts, but instead should be an investment priority in the Brooklyn community.

INFRASTRUCTURES OF POWER

All built infrastructure within a city is strategic, dictating the particularistic ways people interact socially and physically with the structures around them and one another, ergo controlling the production and reproduction of everyday knowledge. In short, to understand how renewable energy infrastructures configure the future in contemporary Brooklyn neighbourhoods, it is critical to investigate the 'complex conditions of their emergence, to the ways in which specific understandings of the relation between past and future are sedimented in their material form, and the ways these projects articulate expectation and experience in their trajectory toward an emergent future' (Harvey, 2018, p.82). Sustainability defines itself in the ability for the present generation to meet their needs and the needs of the future (World Commission on Environment and Development, 1987). In this context, we are required to think about and imagine the future of the city. The unequal distribution of "clean" and "renewable" energy infrastructure prevents certain neighbourhoods from imagining their future as sustainable, as fossil fuels technologies that surround them are labelled dirty, hazardous, environmentally unfriendly, and traditional. infrastructures in the Brooklyn community do not inspire people to believe they are a part of the climate justice movement, or a healthy-eco-friendly future. Thus the "infra" quality of an infrastructure does not necessarily refer to invisibility; roads are there for all to see' (Harvey 2018, p.82). It is rather the imaginary properties that infrastructures possess that is powerful; it is the agency that solar panels carry in their ability to showcase a future that is inclusive, clean and sustainable that is important. Therefore, the inclusion of Brooklyn in NYC's transition to renewables is not only critical for physical health and physical access to electricity, but also crucial for encouraging community members to be confident and included in any sustainable future of the city.

THE HISTORY OF ENVIRONMENTAL INJUSTICE IN BROOKLYN

Brooklyn has a history of environmental injustice that is integral to determining how dynamics of trust between local communities, and state government and corporations are reconfigured due to their verbal promise of renewables, but the actual stagnation in project construction and fossil fuel abandonment. Since the 1800s Greenpoint, Brooklyn has been a hub for industrial oil refineries (NCA, 2016). In 1950 a reinforced concrete sewer exploded

in the centre of Greenpoint, resulting in a massive hidden oil spill that until present leaked 'between 17 and 30 million gallons from ExxonMobil's refinery and storage facilities' (NCA, 2016). It was not until 1978 that the spill was discovered by a routine helicopter patrol of Newton's Creek. The spill 'formed a 50-acre underground petroleum plume that underlies local businesses and residential sectors of Greenpoint' (Riverkeeper 2022).

It is unsurprising that residential drinking water and soil was contaminated, along with any natural greenery that may have existed beforehand. Fires routinely break out in Newton's Creek, as the spill still is yet to be properly cleaned. Residents today are currently reaping the consequences of an environmental disaster that happened almost 75 years ago. It is no shock that the Brooklyn community has little faith in the NYC government's ability to implement just policies that will actually be regulated and beneficial. Fossil fuel infrastructures in Greenpoint have institutionalized inequalities, making the transition to renewables even more challenging

NEW YORK CITY'S CLIMATE GOALS AGENDA

New York State has pledged to meet ambitious climate goals, the most impressive being the City's claim to have '70% of all its electricity coming from renewable energy resources' by 2030 (NYSERDA, 2022). Furthermore, on a federal level, The White House passed, the Inflation Reduction Act (IRA), a momentous climate bill in August 2022. The IRA 'donates \$369 billion' to develop clean energy, battery storage, and pollution reduction, aiming to incentivize renewable energy economy-wide (Congress, 2022). This bill invests billions into renewable tax credits, yet commercial corporations have been the first to benefit, while residential homeowners still lag behind due to the fragmented landscape of solar vendors and installers.

In 2015, New York's Governor Andrew Cuomo stated that 'climate change is an issue of society's sustainability, whereby denial is not a survival strategy' (NYSERDA 2017). Cuomo put forth a strategy to achieve three collective sustainability targets by 2030 in NYC:

- 1. 1,000 MW of solar power citywide
- 2. 40% reduction in greenhouse gas emissions from 1990 levels
- 3. 600 trillion Btu increase in state-wide energy efficiency (NYSERDA 2015-2022)

Cuomo's targets were set in 2015; however, in 2022, there is an even greater energy crisis and starker clean energy accessibility inequalities. This leads us to raise the questions: Who is renewable energy really for? Renewable energy infrastructure, but where? Solar electricity accessibility, but at what cost? Are these goals really for the entirety of NYC citizens, or are they sustainable targets for the higher-income neighbourhoods? Is the state agenda for "sustaining" 'the privileges and lifestyles of the elites and middle class, the active building of exclusionary "green bubbles for rich people"' (Campbell, 2013)?

THE THREAT: THE NORTH BROOKLYN PIPELINE

New York City's climate pledge to establish renewables as the dominant energy source is

contradicted by National Grid's current construction of a natural gas transmission pipeline through North Brooklyn. The goal of this pipeline, according to National Grid, 'is to increase the company's safety and reliability'; however, the new development requires a '7-mile, high pressure, 30-inch pipeline to run through neighbourhoods of Brownsville, Bedford, Bushwick, Williamsburg and Greenpoint' (Slacks, 2022). The gas transported by the pipeline is liquified by 'lowering its temperature to -200°F', resulting in tremendous safety risks as the natural gas is 'highly flammable and cold enough to cause burns in the event of exposure' (Slacks, 2022). Residents have been protesting the construction for over two years, pleading that the U.S. The Environmental Protection Agency conduct an environmental racism investigation, as the pipeline is to terminate in Greenpoint, an area as I have discussed earlier, has a history of environmental injustice. The big question residents and activists are asking is: 'why are they doing this' (Conkling, 2022)? The pipeline does not uphold the City's new energy policies or targets to cut Greenhouse Gas emissions. Additionally, the pipeline is being constructed at the exploitation of National Grid customers. National Grid is demanding '\$300 million of ratepayers' money' in order to fund the project's costs; therefore, the lower-income communities disrupted by the pipeline in the first place will also experience a utilities bill increase (Conkling, 2022). The Brooklyn community's most vocal and prominent coalition is called the 'No BK Pipeline'. This protest group has organized hundreds of educational events and speeches, helped enact lawsuits, organized protests and met with government legislators in hopes of blocking the project. At the heart of residents' concerns is the Pipeline's path through '81 day-cares, 55 public schools, 9 healthcare centres, 3 EMS stations, and 3 nursing homes', all while carrying fracked resources (a practice allegedly banned in New York State) that contaminate water aquifers, alter soil makeup, disrupt ecosystems, and endanger human health (Slacks, 2022).

The pipeline's infrastructure does not benefit the people it is impacting, further revealing the inequality of energy regimes. Brooklyn protesters are calling for alternative solutions, in particular solar solutions, why are these not accessible to them? Environmental energy justice within the urban is gatekept by those who can afford "clean" and "sustainable" power sources, highlighting, once again, the privilege of sustainability.

COMMUNITY RECOMMENDATIONS

The top-down approach for sustainable renewable energy systems has been ineffective in Brooklyn, as energy costs are currently exponentially rising and commercial solar is legislatively more incentivized than residential solar. It is essential for Brooklyn to take community-based action, whereby residents establish a bottom-up method that is tangible for enacting change.

Recommendation 1: Cool Roofs

A rooftop can be more than the ceiling of a building. Solar panels serve as an exceptional cost-effective renewable energy solution; however, "cool roofs" are even more affordable and require minimal effort. A "cool roof" simply refers to painting a roof in a reflective, weather-resistant white coating. A white roof 'can reflect 85% of sunlight that hits it', creating an artificial albedo effect that directly lowers the amount of heat a building absorbs (Lewis, 2017). This initiative is an optimal solution for Brooklyn because almost all the apartments in the borough fit the cool roof precondition: a flat roof. In comparison with a

black roof, a white roof does not heat the surface or the outside air surrounding the building, meaning that air conditioners no longer will 'suck in hot air that further exacerbates an apartment's cooling requirements' (Marsetti et. al., 2013). A "cool roof" reduces a tenants' need for electricity, as the overall inside air will remain at a naturally cooler temperature (Marsetti et. al., 2013). Studies show that increasing a roof's 'reflectivity from 10-20% to 60% can cut a building's cooling costs by more than 20%' (Lewis, 2017). Additionally, "cool roofs" can build community collaboration and grow the network of knowledge sharing that educates people about tackling climate change through small actions

Recommendation 2: Green Roofs

A second approach that combats high electricity prices and mobilizes community participation while simultaneously creating green spaces is the employment of a "green roof". This concept encourages tenants within an apartment to collaborate on transforming barren roof space into built integrated vegetation systems. A green roof system is 'site specific depending on climatic conditions, structural capacity, intended usage, grow media, and irrigation' (WGIN, 2021). The designing process and upkeep of a green roof involves the whole neighbourhood, in which there is opportunity for constant learning and teamwork. The green roof concept 'can reduce the heat loss rate by 34% in the winter and lower the heat gain rate by 84% in the summer' (Marsetti et. al., 2013). It is indisputable that this nature-based initiative has the potential to greatly decrease electricity prices throughout all of NYC's changing seasons. This bottom-up solution enables the Brooklyn community to make their own strides to securing environmental justice, neighbourhood by neighbourhood, making "green" and "clean" spaces attainable.

Recommendation 3: Community Solar Energy Micro-Grid: a power sharing solution According to the World Economic Forum 'solar power is now the cheapest electricity in history' (Masterson, 2021). The enactment of The Inflation Reduction Act subsidized solar, boosted domestic manufacturing and designated tax incentives to alleviate initial instalment costs; however, for lower-income community members who did not own the roof of their apartment building, solar panel adoption was still challenging and exclusive. New Yorkers that produce 'an excess amount of energy via solar, have no other option but to sell it back to the grid': Con Edison or National Grid. A solution to break up the monopoly that the City's utility providers harbour lies in a micro-grid solar sharing scheme (Noto, 2019). A micro-grid generates solar locally and sells excess power directly to neighbours or tenants. Participants in this nexus-thinking community solar program 'can access the local energy marketplace through the Brooklyn Microgrid mobile app' (BMG, 2019). Energy consumers can choose to 'select their energy sources and set their daily budget for purchasing local energy in the marketplace' (BMG, 2019).

The concept of the Brooklyn Microgrid is new and needs local community members to spread knowledge of the scheme to boost adoption of multiple local solar power marketplaces. A micro-grid design transforms the way energy is bought and sold. Solar panels are visible energy infrastructure that actively encourages Brooklyn residents every day to think sustainably and feel connected as an activist in the climate agenda. This solution serves to lift the weight of the Energy Cost Burden, providing lower-income communities with easy accessibility to renewable solar energy sources. Furthermore, the community-based action creates jobs by training individuals on solar panel maintenance and installation processes. People can benefit from the actual energy sources they are seeing, enabling

community members to imagine themselves in a sustainable future, and remake themselves and their urban city through greening rooftops and purchasing community solar energy (Harvey, 2003).

NEXT STEPS...

To conclude, this community briefing has outlined the energy crisis in Brooklyn, New York, highlighting the contestation between sustainability and social justice in the development of renewable energy infrastructure. The three proposed recommendations all work to inspire the community and generate education that is applicable to creating bottom-up environmental resiliency and justice.

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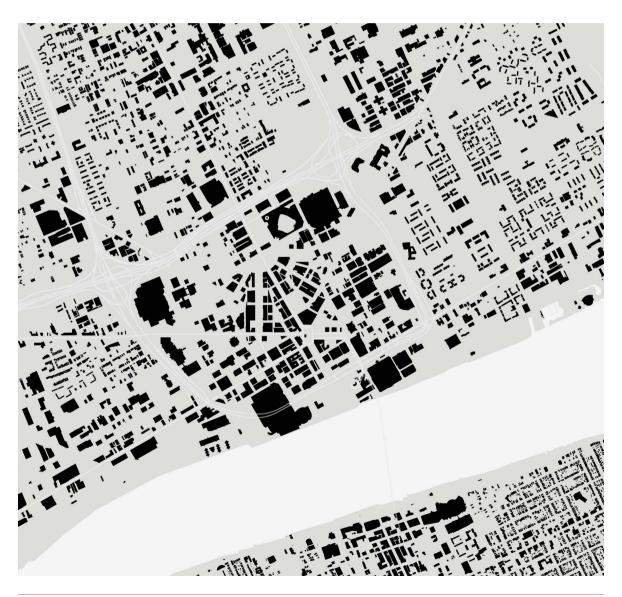
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Detroit: The Fight Against Urban Blight

Samantha Hambleton



INTRODUCTION

Once the fourth largest city in the United States of America, the city of Detroit, Michigan, now has an estimated population of only 632,464 (Farley, 2018; U.S. Census Bureau, 2019). Ineffective leadership, an over-reliance on the Auto industry and its financial ruin, population decline, crime, and racial – as well as geographical – divisions have left many to question whether Detroit is a failed city; tourists visit to take tours of the urban decay, a phenomenon that has become known as 'ruin porn' (Zebracki, Doucet and De Brant, 2018). Amidst the bleak and dismal headlines, many hold out hope, hailing Detroit as the "comeback" city (Ager, n.d.).

Due to the complexities of Detroit's current situation and the variety of problems facing the city, a significant portion of this paper will be dedicated to providing the reader with the historical background necessary to understand its challenges and, thus, potential solutions, as it is impossible to do so without first turning back to root causes. It will then go on to delineate how these issues have culminated in what is known as urban and neighbourhood blight: when "neglected properties deteriorate, causing depreciated valuations" (Pinto et al., 2022).

The briefing will conclude with a discussion of current policies, followed by recommendations to potentially be undertaken by the local community. The focus on change at the community level is deliberate; community members have a deeper understanding of the needs of the area than outside authorities. Additionally, a bottom-up approach is favourable as local residents hold more of a stake in the future of a said community than any other entity.

HISTORICAL BACKGROUND & CONTEXT

A Struggling (and Recovering?) City

This section will introduce issues that have, or are currently, afflicting the city of Detroit. Its purpose is not to present an in-depth analysis of each problem, as it would be impossible to accurately and justly do so in this report, but instead is meant to provide a general overview.

Following each topic, its application to Detroit's history, as well as insights into how circumstances have changed in the present, will be explored.

Topic	Application to Detroit	How are things changing?
Ineffective leadership	Coleman Young, Kwame Kilpatrick	Mayor Dave Bing, Mike Duggan; Govenor Rick Snyder
Over-reliance on one economic area	"Dutch disease"- Auto industry	Rebirth of GM/Chrysler, out of bankruptcy, new technology (Chevy Volt), \$8 billion paid back to the government
Population growth	Growth (until the 1950s), leading to urban sprawl	Millennials moving back into the city (Berglund et al., 2022)
Crime	Drugs, arson, murders	Remains one of the top deadliest cities in the United States (FBI Criminal Justice Information Services Division, 2019)
Racial divide	Two race riots	City's population (2021 estimates): Black 77.1%, White 14.4%. Hispanic 7.7%.(U.S. Census Bureau, 2019)
Geographic divide	Highway split neighbourhoods, City vs Suburbs	Q1-light rail line from downtown 3.3 miles to New Center Area
Financial distress	Largest municipal bankruptcy in US history (Barnes, Roose and Turner, 2020)	End of emergency manager, out of immediate danger (\$8 billion USD paid back to the govt)

The Uprising of 1967

The Detroit Rebellion of 1967, also commonly referred to as The Uprising of 1967, started with a police raid. The riots lasted almost a week, ultimately involving "the Detroit police and fire departments, the Michigan State Police, the Michigan National Guard, and the US Army" (Detroit Historical Society, 2019). Forty-three deaths, 467 injuries, and an estimated 7,200 arrests occurred as a result of the riot, the largest civil disturbance in 20th-century America (Detroit Historical Society, 2019).

The rebellion was the result of years of ingrained segregation and institutionalised inequality and injustice. The Race Riot in 1943 also brought racial and social divisions to the forefront in a similar manner; around this time, the east side experienced a loss of almost 70,000 jobs (Detroit Historical Society, 2019). Many white Detroiters left the city for the suburbs as a result of the building of the city's motorways; this mass exodus became known as the "White Flight" (Jego and Roehner, 2006). Ultimately, this departure can be traced back to the development of newer housing and the possibility of more racial integration as a result of the tearing down of the two largest black communities, Black Bottom and Paradise Valley. Detroit's population decreased by about 20 per cent between 1950 and 1960 (Detroit Historical Society, 2019). With the departure of such a large proportion of the city's population, or what has become known as the white flight, coupled with the loss of manufacturing jobs, property values fell, taking the tax-base with it, along with city services. Public education, the lighting of streetlamps, and utilities such as sewage and water all suffered massive blows.

Leadership Issues - Former Mayor Kwame Kilpatrick

Allegation	Police hired and used as bouncers	
Held parties at Mayor's mansion		
Murder of Tamara Greene	Greene worked at Mayor's parties; was shot with the same type/calibre gun as used by Detroit Police, body dumped on the street	
Extra-marital affair	The Mayor was having an affair with his Chief of Staff, Christine Beatty; 14,000 texts/pages were recovered from city-issued phones and pagers	
Criminal charges	Perjury, obstruction of justice, Assaulting a police officer, Allegations of corruption	

The Growth of Detroit's Population

Year	Population	Event, Issues, Effects?
1900	285,704	Migration from farms to cities (Hirschman and Mogford, 2009)
1910	465,766	Eastern European immigration booms, \$5 per day on Ford's assembly line (Ford Motor Company, 2020)
1920	993,678	The auto industry grows on Woodward corridor (Sugrue, n.d.)
1930	1,568,662	Detroit was a prime example of a successful manufacturing city (Boyle, 2001)
1940	1,623,452	Growth slows; 1943 race riot over competition for jobs kills 34 people (Walter P. Reuther Library, Archives of Labor and Urban Affairs, Wayne State University, n.d.)
1950	1,849,568 (peak population: 12,306/mi2)	WWII Wartime (and post-war) growth

The Decline of Detroit's Population

Year	Population	Event, Issues, Effects?
1960	1,670,114	Construction of highway, dividing the city's neighbourhoods
1970	1,514,063	1967 Riot leads to "White Flight"; Coleman Young elected Mayor (1974), serves five terms (Rich, 1999)
1980	1,203,3658	Detroit hosts Ronald Reagan's GOP Convention in 1980 (UC Santa Barbara - The American Presidency Project, n.d.)
1990	1,027,974	Drugs and crime continue to plague the city
2000	951,270	No jobs, little progress under Kwame Kilpatrick, who resigned (Saulny, 2008)
2010	713,777	Dysfunction in government: council vs. Mayor Bing vs. Governor Snyder(Davey, 2011)
2015	677,116	Emerging from bankruptcy; signs of hope (?)

To summarise the above tables, the key categories of struggle and failure in Detroit can be broken down into jobs, leadership, blight, crime, education, and sprawl.

CHALLENGE: URBAN BLIGHT

Blight exists everywhere: the suburban, urban, as well as rural. Vacant lots with rubbish, overgrown vegetation, and deteriorated and/or abandoned structures or automobiles are all signifiers of urban blight. Blight can be considered a sort of "structural and functional shortage," and in this way, the city is no longer able to meet the needs of its inhabitants (Hosseini et al., 2017). Following David Harvey's conception of the right to the city, it can be argued that blight is an obstruction to one's access to urban resources and participation (Harvey, n.d.).

Current Policy and Course of Action

Mayor Duggan has made the removal of blight central to his plan for the city. The ambitious plans have become known as the "Blight to Beauty" strategy. According to the City's guidance, "Blight to Beauty: Property Maintenance Ordinance Reinforcement Guide", much of the responsibility is placed on the property owners; those found not to be complying with city code can be issued blight tickets following an inspection and correction order. Blight ticket fines can range from one hundred dollars to five hundred, with repeat offenders charged at least \$1,000 (City of Detroit, n.d.). Ultimately, fines and General Services Department (GSD) clean-up costs can be extremely costly, with clean-up costs typically ranging from \$2,000-\$20,000 (City of Detroit, n.d.).

Policy Failures

While demolishing abandoned and vacant buildings have been successful to a certain degree in addressing blight in Detroit – as of early 2022, 23,000 vacant houses have been torn down since 2014 – it does little to address the fundamental causes of urban blight, namely 'tax foreclosure, underemployment and educational barriers' (Ferretti and Huffman, 2022). Until these systemic issues are dealt with, blight will continue to be a problem for Detroit. Additionally, the practice of issuing blight tickets and fines could exacerbate the issue of blight, making it more difficult for already impoverished neighbourhoods to afford personal remediation efforts.

COMMUNITY RECOMMENDATIONS AND POTENTIAL BENEFITS

With the city of Detroit's unique history and needs in mind, this paper sets forth three recommendations for the community with regard to managing blight:

Expand and Promote Side Lot Incentives

Not all blight remediation efforts are viewed favourably by Detroiters. A survey found that more respondents were in favour of using taxpayer money to rebuild abandoned properties in order to remove blight. Approximately three-quarters, or 74.5 per cent, of Detroiters favour restoring blighted homes rather than demolishing them, and 70.2 per cent favour funding side lot purchase programmes that enable homeowners to affordably purchase unoccupied parcels next to their properties. Less than half of Detroit residents (45.8 per cent) support utilising taxpayer money to remove the blight that creates vacant land, which is currently what often results from demolition efforts (University of Michigan - Detroit Metro Area Communities Study, 2020).

It is not practical to redevelop all of Detroit's abandoned properties due to the city's aforementioned poor revenue base. Offering unused or abandoned lands to nearby homeowners at a discount is, nevertheless, a solution that receives a lot of support, as evidenced by a survey conducted by the University of Michigan in 2020 (University of Michigan - Detroit Metro Area Communities Study,

2020). There are several advantages to this proposal. Fundamentally, existing neighbours have a vested interest in their own communities. Thus, allowing them to buy the adjacent blighted properties gives them ownership and voice in the communities within which they are already involved. The program is currently provided by the city of Detroit and Wayne County where you can purchase side lots for as little as \$100; however, this program's website and online application process are the primary means of access and information (Wayne County, n.d.). As a result, applications are approved via email, excluding those without access to the internet or many of the low-income and elderly population that would most benefit from this program. Efforts to expand and promote the side lot purchase program would help reduce blight in Detroit. An in-person community outreach campaign in partnership with the Detroit Land Bank Authority to reach those interested community members who do not have reliable access to the internet and email would improve participation and remove blighted properties all the while keeping ownership, self-determination, and pride within neighbourhoods.

Improved Communication and Education Regarding Blight

Low levels of communication with city officials regarding local blight remediation operations are reported by residents of communities where blight removal has taken place in the last five years. Just 8.8 per cent of Detroit residents who report neighbourhood blight removal believe they were informed in advance of the demolition activities (University of Michigan - Detroit Metro Area Communities Study, 2020). The land authority in Detroit must improve their communication with the areas where blight eradication is planned. Communities need to be involved in the process and informed of the justifications and advantages of deconstruction and repurposing. In order to remedy this situation, town hall-style meetings could be held to discuss the advantages of reclaiming swales and grasslands, bioretention initiatives, the development of low-impact areas with permeable surfaces, and the construction of community gardens and spaces. According to the same research, more than half of locals were satisfied with the decisions made concerning which homes to demolish, and approximately 65 per cent of residents were happy with the contractors who completed the work. This data would suggest that while most locals are not opposed to blight clearance, having their questions and concerns heard as well as a voice in the process would make the programme work more efficiently.

Repurposing - An Expansion of Urban Agriculture

As pointed out by Taylor and Ard, some studies have claimed that Detroit is a food desert or an area that has little to no access to supermarkets "with racial inequities in access to food" (Taylor and Ard, 2015). Although Taylor and Ard aptly critique this statement, maintaining that such a declaration about an entire city is misleading, Detroit undeniably has a problem when it comes to the accessibility of food. When discussing this situation in Detroit, Martusewicz and colleagues recall that "the last major grocery store left in 2007 because it could not make a profit. Instead, people are forced to turn to convenience stores or fast-food restaurants" (Martusewicz, Lupinacci and Edmundson, 2011, p.235).

Here, the community holds the key to addressing blight as well as food insecurity: urban agriculture. Detroit is already witnessing a growing urban agriculture movement through what has become known as the Detroit Black Community Food Security Network, or DBCFSN (White, 2011). In the creation of urban farms and gardens, unused land is transformed into a space that lends itself to the strengthening of community. The farm is used by DBCFSN as a community hub, a way to speak about healthy eating and active lifestyles in a way that is meaningful, and a practical example of teamwork, autonomy, and political agency. The network utilises a community-based approach to expand Detroiters' access to wholesome and healthy food. Using the vacant lots left after demolition –which, as earlier established, most residents are not in favour of leaving vacant – for urban agriculture and gardens is perhaps one of the best options for the community moving forward.

While the benefits of urban agriculture are numerous, it is also necessary to review the possible pitfalls; Walker reviews critics of urban agricultural efforts such as Oosting and Whitford, who claim it is "idealist and elitist environmentalism" (Walker, 2015, p. 166). Here, we are reminded that it is imperative that any action undertaken remains inclusive and just, with the community at the forefront.

Repurposing - Community Art

Detroit native and artist Tyree Guyton, along with neighbourhood children as well as his grandfather, began what has become known as the Heidelberg Project in 1986 (The Heidelberg Project — History, 2014). About three miles northeast of the city centre, in a residential area that was severely damaged during the 1967 Detroit Riots, Guyton started the project by turning vacant lots and abandoned houses into massive art pieces. Guyton was raised in the Heidelberg Street area and had personally experienced how blight affected the community. Ordinary items such as shoes, clocks, and bicycles were attached to homes, cars, and trees in thematic groupings (The Cultural Landscape Foundation, n.d.). The themed houses—named after the personality of their installations—became famous.

Similar community art initiatives could be established as a way to aid in the fight against blight. Not only would such projects strengthen community bonds, but they would also be a source of education and development. Areas surrounding buildings well-known for attracting ruin tourists, such as the Fisher Body Plant, could be prime locations for such initiatives, as they would provide an opportunity to alter existing perspectives of Detroit as a 'ruined' city.

Southeast Michigan has a strong art community; the nearby city of Ann Arbor's annual art fair attracts nearly half a million visitors over the span of three days. By these numbers, there is clearly significant interest in local art within the immediate locality. Capitalising on this popularity could prove fruitful for the communities of Detroit as well.

Changing the Narrative

While manicured lawns have become an expectation of many, there is nothing inherently wrong with overgrown vegetation. Initiatives like "No Mow May", a community-based movement that has grown significantly in recent years, urge residents to reduce or completely eliminate their use of lawnmowers and general lawn maintenance during the month of May in order to ensure pollinators have the resources they need for their return in the springtime (Del Toro and Ribbons, 2020, p. 2). A study found that "No Mow May lawns have a fivefold higher bee abundance and threefold higher bee species richness compared with regularly mowed areas" (Del Toro and Ribbons, 2020, p. 2). Although many might view overgrown and unkempt lots as blight, lawns are easily accessible urban environments, providing an excellent opportunity for the promotion of native species and biodiversity.

A community-led campaign for the rebranding of vacant lots as a 'return to nature' would shift perspectives around 'vacant' or 'empty' lots and would instead highlight the productiveness of these wild areas. When it comes to opinions on Detroit's blight remediation efforts, it was found that 51.4 per cent of Black residents, 71.6 per cent of White and 87.1 per cent of Hispanic Detroiters hold favourable opinions of the city's blight elimination efforts (University of Michigan - Detroit Metro Area Communities Study, 2020). According to these numbers, the majority of people, regardless of race, approve of efforts to remove blight from the city. The challenge here is to reframe the way many views 'unused' land; it is essential to recognise that this 'empty' land is actually extremely productive. A rethinking of land use, and consequently disuse, is necessary not just in Detroit but more broadly as well.

Learning from Project Re-imagining Cleveland

The city of Cleveland in Ohio adopted an approach combining recommendations three and four. The

initiative sought to re-evaluate abandoned sites in relation to urban watersheds, general green networks, and development possibilities in order to establish a more comprehensive framework for their inclusion into the city as a whole (Burkholder, 2012, p. 1155). Beginning in 2009, the Re-imagining Cleveland project has encouraged alternative land use initiatives, including soil remediation projects, neighbourhood footpaths, side yard extensions, community gardens, market gardens, vineyards, orchards, as well as smaller parks. Re-imagining Cleveland received a National Planning Excellence Award for Innovation in Sustaining Places from the American Planning Association in 2012 in recognition of their unconventional methods for repurposing otherwise abandoned property (The City Built by Hand - Cleveland's Grounded Civic Art, n.d.). Not only did Project Re-Imagining Cleveland involve the participation of the city's residents, but it also brought together local community, artists, and organisations (The City Built by Hand - Cleveland's Grounded Civic Art, n.d.).

Addressing blight not only has economic and aesthetic benefits but its remediation has also been connected to a reduction in firearm violence. An analysis of the effects of remediation efforts regarding 5,112 abandoned buildings and vacant lots in relation to firearm and non-firearm violence in Philadelphia from 1999 to 2013 was conducted, finding that abandoned building remediation led to a reduction in firearm violence by 39 per cent, with little effect on non-firearm violence (Branas et al., 2016). Branas et al. concluded that abandoned buildings and vacant lots "seen daily by urban residents" could provide "physical opportunities for violence" and cover for illegal activities or firearms (Branas et al., 2016). In this respect, blight remediation provides a cost-beneficial approach to reducing firearm violence.

It is of the utmost importance to note that these recommendations are coming from an outsider's perspective as well as a place of privilege. As previously stated, the residents of Detroit are integral to addressing and identifying problems in the city; these recommendations are merely possibilities moving forward and are in no way a panacea.

CONCLUSION

This briefing sought to provide a succinct overview of the history and background relevant to the city of Detroit and its challenges, going on to then explore the existing policy, covering its successes as well as failures. This analysis informs the proposals made for the Detroit community. In summation, this briefing provides five recommendations: the expansion and promotion of the existing side lot programme; improved communication and education regarding blight; repurposing through the development of urban agriculture and community projects; the reframing of the narrative surrounding vacant lots; and reflecting on initiatives in nearby cities like Re-imagining Cleveland. The proposed solutions in this paper offer the city of Detroit and its community alternative ways forward, with an emphasis on community participation and change at a more localised level.

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Solutions to Bangkok's Traffic Congestion for Internal Migrant and Low-income Communities

Larissa Nandhabiwat



INTRODUCTION

Bangkok Metropolitan Area has undergone significant socio-economic changes of new shopping malls, governor elections, even introductions into the Metaverse, but there still exists the major urban problem of traffic congestion. The COVID-19 pandemic significantly decreased traffic congestion because of industries shutting down, tourism at an all-time low, schools and offices moving to online platforms, 9pm government curfew, and internal migrant workers returning to their home districts. With the country transitioning back to its original state (bustling industries, opening international borders, in-person meetings and removal of curfew) there is an apparent increase of traffic. This especially affects internal migrants from relatively poorer provinces, and low-income worker communities in terms of time spent commuting and cost of transport. During this volatile period, it is crucial to ensure preventative measures against traffic congestion. This community briefing is structured as such: the main problem, Bangkok background, current government policies, policy analysis and suggestions for community action. It is understood the limits of communities' actions regarding available resources, accessibility of knowledge and capital, and negative stigma from wider society. The applicability of such solutions is based on assumptions from observation and secondary news articles. Therefore, these are merely potential suggestions that should be paired with governmental action to increase effectiveness.

THE PROBLEM

The Bangkok Metropolis is known for one of the world's worst traffic. Statistics show that the average time spent riding public transit was 62 mins and 59% of workers wait over 20 minutes for their transit line daily (Moovit, 2021). Shockingly, over 63% of riders spend more than 2 hours on public transit daily (Moovit, 2021). The long hours of public transport, made the convenience of private transport attractive causing an excessive number of cars. Currently, there are nearly 5 million cars and around 40% of daily trips are made by private transport modes (Jittrapirom & Jaensirisak, 2017). To add fuel to the fire, the public transport department encouraged citizens to buy a car if they can afford to (Marks, 2019). Other

sources of traffic congestion include, few designated bus lanes, illegal parking on roads, poor road etiquette, easy driving license tests, lack of road safety education and corrupt traffic police practices. Discontinued road and railway infrastructure has created high economic, social and environmental costs. In particular, unplanned economic and population growth has led to excessive urban sprawl on the fringe of Bangkok and the creation of "superblocks", described as large land areas trapped in major road networks (Sintusingha, 2006).

Unfortunately, poor road management has led to several negative consequences beyond traffic congestion. Annually, more than 20,000 Thai people die from road accidents or suffer from serious injury and permanent disabilities (WHO, 2021). In particular, the 2018 World Health Organisation Global Status Report on Road Safety found Thailand was in the top 10 for road traffic fatality rates in the world, where motorcycle-related and pedestrian deaths averaged to 60 deaths per day (WHO, 2021). Motorcyclists are most at risk during the Thai National holiday, Songkran, when the roads are wet coupled with fast driving. Only 51% of motorcycle drivers and 20% of passengers wear helmets (WHO, 2021).

Environmental consequences include the destruction of green space for the continuous urban sprawl and new city plans, community displacement, and increasing air pollution. The transport sector accounts for 26% of national emissions in Thailand (WHO, 2021). Schools were closed in January 2019 due to unhealthy levels of PM2.5 (fine particle matter). There was a level of 47.4 μ g/m3. Dangerous levels were capped at 35.4 μ g/m3 (IQAir, 2022). One key cause for Bangkok's poor air quality is the exhaust fumes from automobiles and diesel-engines on boats combined with the burning of agricultural material (IQAir, 2022).

The communities that are most affected are the rural migrant communities, as they have to travel long distances for work; sometimes from outside of Bangkok. Internal migration happens seasonally and usually comes from the North and Northeast provinces to the Bangkok Metropolis and Central region during dry seasons of agriculture (UNESCO, 2016). 28.1% of internal migrants said that the main purpose of migration was because of employment-related issues (NSO, 2021). Most internal migrant workers get employed for low-income jobs such as agriculture, construction, manufacturing and other services (UNESCO, 2016). Women are more vulnerable to exploitation by taking low paying/informal jobs in order to provide for their families back home (Clement, et al., 2020). Even if there are significant income opportunities in Bangkok, 40% of rural-urban migrants reportedly did not receive a stable income and 1/5 earned less than the minimum wage (UNESCO, 2016). Low-income jobs, remittances to families, exploitation of worker rights and high public transportation fees make internal migrant workers vulnerable to social injustice.

BANGKOK BACKGROUND

Bangkok is the capital city of Thailand with an estimated population of 10,900,000, a 1.65% increase from 2021 (UN, 2022). The Bangkok Metropolitan Region covers an area of 7,762km, whereas the Bangkok Metropolis has an area of 1,568 square km and is located on the delta of the Chao Praya River, about 40km from the Gulf of Thailand (PopulationU, 2021). Known for its thriving tourism industry, it is also popular for work among internal migrants from

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Present day BTS sky train, MRT underground train, Airport Rail link, SRT trains, APM line, Bus Rapid Trainsit lines, and State Railway.

rural provinces, and with expats from the Indochina region and South Asian countries. The Bangkok Metropolitan Administration (BMA) is the local government that owns most public transport and delegates private companies to manage them.

There are several long-distance transport options within the Bangkok Metropolis: the BTS sky train, MRT underground train, bus, public van, boat, motorbikes, taxi and – most popular – private cars. Factors that affect travel choice include travel time, travel (fare) and good access.

Public bus and van services are the main form of public transport despite growing rail infrastructure (Narupiti, 2019). The Bangkok Mass Transit Authority (BMTA) is a state-owned enterprise and operates the Bus service alongside private operators on select routes. The Department of Land Transport control bus fares. As of 2020, The BMTA bus fleet was 3,629 on 167 routes compared to private joint buses, with 4,973 big buses and 497 minibuses operating on 230 routes (BMTA, 2020). BMTA are in debt by around 4,300 million THB, equivalent to 113 million USD, prohibiting their ability to improve efficiency and quality of services (BMTA, 2020).

Three organisations run the railway: The Bangkok Mass Transit System PLC (BTSC) operate the BTS Skytrain, Sathorn and Ratchapruek Bus Rapid Transit and APM gold line (BTS, 2022). Mass Rapid Transit Authority (MRTA) runs the undergrounds railway MRT; and SRT Electric Train Company (SRTET) owns and operates the Airport Rail Link (ARL). Combined, they operate a total of 125km of rapid rail lines (Narupiti, 2019). All three companies appoint to different authorities, subsequently, have different fare systems. The Bangkok Mass Transit System (can be seen in Figure 1) has a total distance of 210.25km with

plans to expand (Wikipedia, 2021).

The new Bangkok Governor, Chadchart Sittipunt, was elected on 22 May 2022 and has already caused a new power dynamic within Bangkok. It was the first election for Bangkok Minister since 2013 after the military coup and political instability delayed elections (Peck, 2022). The new Bangkok Governor was the former Transport Minister and has listed new demands regarding the lowering of BTS transport fares (Rattanasevee, 2022). Currently, the maximum fare for the BTS sky train is 59 THB, but Chadchart believes the fare should be reduced to 25- 30 THB between 11 stations (Thai PBS World, 2022). Although those who commute from outside of the Bangkok Metropolis have to travel more than 11 stations, this does present an opportunity for low-income workers to ride the BTS Skytrain as well; especially within some of the most congested areas are around the Central Business District (CBD) (FRESH, 2020).

A large number of native Bangkokians and low-income workers reside outside the CBD area and travel daily into the city, leading to severe traffic during the morning and evening. 'The population of the Bangkok Metropolis increases to 9 million during the day to 8 million at night' (Moovit, 2021). Market failure and social problems are caused due to time lost in transit, for example, delayed public transport and queueing time. 'During 2011-2013, the annual average economic loss resulted from the road traffic trauma of the country was 545,435 million Thai baht, representing 6% of the national GDP' (WHO, 2021). Whereas the environmental burdens of air pollution must be fixed as it affects pedestrian's well-being and quality of life. Lastly, there are high infrastructure costs as more cars require more road maintenance and road protection. This creates social burdens on the economy, environment and transport infrastructure (Achariyaviriya et al., 2021).

CURRENT POLICY

One key solution to solving traffic congestion is through the development of road infrastructure and public transportation options. The Ministry of Transport formed the Office of Transport and Traffic Policy and Planning (OTP) in 2002 to formulate policy and plans, advise on urban development government projects and ensure all transportation bodies are integrated (Jittrapirom & Jaensirisak, 2017). Historically, transport policies began in 1942 but have experienced multiple barriers including political instability, insufficient government funding, corruption and poor management resulting in many revisions and plan extensions. One main policy was the Mass Transit Master Plan, where the aim was to connect Bangkok to Don Mueng International Airport. This was first proposed in 1995, but after the Asian financial crisis 1997, was revised as the Urban Rail Transportation Master Plan (URMAP) in 2000 (Achariyaviriya et al., 2021). URMAP had ambitious goals to build 375km new transit lines and to be completed in three stages during 2001-2023 onwards (Jittrapirom & Jaensirisak, 2017). But this was delayed and revised again until the final stage called M-Map, which consists of 12 mass transit lines: 8 primary and 5 feeder lines. There were several objectives including engineering and connectivity, which promised residents to travel continuously from home to destination within 75 minutes and no more than 4 transits (Achariyaviriya et al., 2021). Also, economic and investment objectives, where they would provide the lowest fare with optimum economic benefits (Achariyaviriya et al., 2021).

Another method to reduce traffic congestion is to improve policy for road safety. WHO conducted research to see Thailand's status, after setting goals in 2018, against 12 Global Road Safety Performance Targets (2021). Results found that among the 12 targets, 4/12 were low moderate; 6/12 moderate; and 2/12 described as moderate/high progress (WHO, 2021). Other statistics found that during COVID, there was a 50% reduction in road traffic deaths and was caused be the reduced volume of vehicles on the road, reduced access to alcohol and significantly reduced road traffic deaths (WHO, 2021). The Thailand Cabinet Resolution promised in June 2010, there will be 10-year dedication for improving road safety within a 5-step plan:

- 1. building road safety management capacity;
- 2. improving the safety of road infrastructure and broader transport networks for all road users;
- 3. developing the safety of vehicles;
- 4. enhancing the behaviour of road users;
- 5. improving the post-crash response.

The BMA installed speed-guns to better monitor vehicles and the revision of the Land Traffic Act implemented increased fines – with some raising four-fold to 4,000 THB and imprisonment (Bangkok Post, 2022). Despite this, in October 2018, only 17% of reported fines were paid (The Nation, 2018). However, drivers and motorcyclists oppose this motion as it incentivises police checkpoint corruption (Jotikasthira & Sattaburuth, 2018).

The OTP have also made attempts at integrating green public transport, which would help with improving air quality and mitigate health hazards. The five-year collaboration between OTP and the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) aims to facilitate the development of green transportation mitigation actions with the project TRANSfer (Jitrpatima, 2022). It was found that by switching 3,200 diesel-public buses to electric, this could reduce 184,000 tCO2 annually (Jitrpatima, 2022). The project has since concluded but has produced umbrella projects including Thailand Clean Mobility Programme (TCMP). The TCMP focuses on Bangkok congestion charge scheme to discourage private car travel, modernization of bus fleets, and the establishment of clean mobility fund (Jantanalikhit, 2022).

POLICY ANALYSIS

Evidence shows that the OTP has proposed a number of projects to reduce traffic congestion with regards to public transport M-Map, Global Road Safety Targets and multinational collaborations for green transport integration. However, the commonality within all policies is the lack of implementation and absence of vulnerable community input. The delay and repeated revision of the M-Map reflects the unrealistic targets of railway distance within the delegated period of time. Moreover, the goals regarding engineering and connectivity appear to exclude low-income workers as embarking on four transits twice a day can be costly. Reports found BTSC plans to raise BTS maximum fare rate to 158 THB despite backlash (Thaiger, 2021). This affects those working minimum wage/low income jobs and travelling long distances, who can only afford to spend 11.7 THB per trip, well under the starting price of 16 THB (Thaiger, 2019). This is lower than the current average train fare of

28.3 THB, whilst middle income earners are capable of paying 20.3 THB per trip (TDRI, 2019). It was found that the cost per kilometre travelled by train was 14.8 THB compared 12.4 THB in London, 4.08 THB in Hong Kong and 2.3 THB in Singapore. The separate actions of the BTSC contradicts the original objectives of M-Map, which had economic and investment objectives to provide lowest fare numbers. This shows that there is a lack of consideration for low-income, internal migrant workers regarding decision-making in fare price, producing social inequalities of income disparity and leaving communities no choice but to use private transport of cars or motorcycles.

However, the construction of such infrastructure, road policy and public transport is in the long future. Implementation is excessively difficult because it requires the active collaboration of different stakeholders: governmental figures (BMA, Ministry of Transport, OTP), private companies (BTSC, MRTA company), architects, and the local community. One study found the transport master plans could not be implemented because of the budget exceeded local government's capabilities, lack of technical capability to implement such projects, and poor management and leadership (Jittrapirom & Jaensirisak, 2020).

The Global Road Safety Targets displayed that only 1/6 of target's progress were considered moderate/highly achievable, leaving much room for improvement. Moreover, it is seen that there is a strained relationship between enforcement of the law for public safety and abuse of power from the police. This causes a vicious cycle of road accidents and traffic congestion. Governments are stuck in a grid-lock of trying to improve road safety and the quality of public transport but are unable to effectively implement laws.

The TRANSfer policy is the most-noteworthy policy implementation out of these examples as it is highly praised as a significant contribution to research. The success of this policy may be attributed to the funding from multinational partnerships, but there has yet to be any implementation into real life policies. There is also great risk with middle-class environmental interests trumping poor and marginalised interests (Campbell, 2013). Kaika argues that urban planning requires both up-close observation of socio-environmental struggles and a zoomed-out perspective to see the bigger picture and make wider societal connections (2018). Thus, with TCMP and other green mobility programmes rather than restrict their private car travel, there should be financial assistance for migrant and low-income workers to afford green mobility alternatives.

COMMUNITY SOLUTIONS

With stagnant top-down solutions, another way to reduce traffic congestion is with community solutions. The community can carpool to the nearest BTS/MRT station or to work to reduce the number of cars and share costs of fuel. This can apply for those who live in the same "moo-baan"/housing village or street. For example, most families within a moo-baan own a car, which neighbourhoods can utilise and organise bi-weekly trips between 2-3 families to run errands at the local supermarket. This would reduce the number of cars used for trips per household and area. Internal migrant workers can join worker unions that propose demands to companies to provide pick-up transport options and guarantee the protection of worker's rights, preventing underpaid labour. Worker unions have power in numbers and political pressure against a company. Perhaps, worker unions could also

request cheap, temporary living areas/dorm solutions for those who prefer to live closer to the CBD and carpool back home during the weekends. As local motorcyclists have experience navigating the best routes depending on traffic flow, they could draft a map of soi (side-street) road networks for workers to use instead of the main roads.

The problem of traffic congestion also affects both public transit and private car users, hence, they have incentive and more resources than migrant low-income workers. Around 75% of trips made within the Bangkok Metropolis are school or work trips (Narupiti, 2019). It is observed on school holidays holidays/closed days, traffic is reduced significantly. The parents of students who go to reputable schools can move their children to schools closer to their home. One barrier to this is there is a stigma of that schools close to home/ in more rural neighbourhoods do not provide good quality education. Reputable schools are located near the centre of the Bangkok Metropolis. Parents, within the neighbourhood, can collaborate and provide feedback to local schools about what they want within the education system, and work on their competitiveness.

Industry-level action is advised alongside community solutions. Companies can promote a workplace shift. One key cause of traffic congestion is traveling at peak times, which coincides with the 9-5 working schedule. Due to COVID-19, those in office jobs and students have become more flexible in their activities in terms of location and time. People should be able to partially design/design their workplaces and work hours to manage space/time distribution of travel demand for better overall mobility and individual quality of life (QOL) (Achariyaviriya et al., 2021). Flexible working provides alternatives of daily travel. Those in office jobs can work in shared working spaces and disrupt the 9-5 narrative, by providing information to people to raise their awareness of QOL and reduce the social burdens.

It should be noted there are limits to community action and these suggestions are recommended alongside local government action. The Mobility as a Service (MaaS) is a relatively new, public-private partnership within Thailand and has goals to integrate many forms of transport and transport-related services into a single integrated mobility service to best cater to customer's needs (MaaS, 2022). Within Bangkok, the key MaaS providers for public transport is more likely to be either the BTSC or MRTA instead of the BMTA because of past financial performance and the quality of service provided (Narupiti, 2019). Hopefully, MaaS will improve accessibility and ease of public transport to internal migrant workers as it shifts demand from purchasing vehicles to purchasing a service.

One key implementation of this model is to introduce intelligent information and communication technology (ICT) to persuade people to use public modes of transport (Achariyaviriya et al., 2021). Achariyaviriya and colleagues, suggest a MaaS ICT option should be combined with the government promoting the workplace shift model (2021). This would reduce traffic during peak hours and promote a work-life balance. To ensure this does not exclude low-income migrant workers, MaaS must display good governance by providing affordable options as well. Governments could approve notions to implement road safety education within schools and the delegation of a public committee (separate to the police) to uphold traffic laws.

CONCLUSION

Traffic congestion is a significant urban problem within Bangkok, creating negative externalities of road accidents, air pollution and social burdens of long travel times. Economic growth should be in tandem with the protection of vulnerable communities' interests, but this is not always the case. A review into current public transport, road safety and green alternative policies indicate that progress of implementation is slow and a lack of consultation from communities.

Potential community solutions for internal migrant workers included car-sharing with those in the same area and joining worker unions to pressure companies to provide transport and housing options. Solutions for office workers and students, who are also affected by traffic congestion, included enrolment into nearby schools and flexibility within work times and place. Some industry-level and government actions for companies were to support this change within the 9-5 work schedule and implement intelligent ICT within MaaS transport services.

Ways to expand discussion include exploration into the feasibility of other modes of transport to solve traffic congestion for example, boats along the Chao Praya River provide cheaper fares but are not as common. Moreover, a look into other social political factors that make internal migrant and low-income workers vulnerable such as housing costs within the Bangkok Metropolis or raising minimum wages to improve accessibility to public transport.

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Urban Farm not Toxic Harm: The Roof Depot site, environmental justice, and public health in Minneapolis, USA

Frances Mackinnon



BACKGROUND

The Community

East Philips is a neighbourhood in central Minneapolis south of I-35W and bordering Hiawatha Avenue to the east. It is in the city's 9th council ward. Socioeconomically, 63% of East Philips households make less than 35,000 USD a year compared to the city average of 36%. 1% of households make over 100,000 a year whereas the city average is 23% (Martinez, 2016). There are also 12% more youth (persons under 18) than the aggregate city average (Martinez, 2016). Additionally, it has a diverse population that consists of predominantly Black, Indigenous, and People of Colour (BIPOC) compared to citywide statistics (Figures 1 and 2). The neighbourhood has the largest proportional population of Indigenous peoples in the city (Martinez, 2016). It is also a site of some of the city's worst environmental indicators such as air and soil quality (ATSDR, 2022). A part of the neighbourhood has been dubbed "arsenic triangle" due to previous industrial usages of the land (Wei-Ho, 2005). Taking this all into consideration, the city designated the area a Green Zone in 2018, supposedly protecting it from further intentional pollution (SSGZ, 2019). This was in line with the city's 2040 plan that recognized environmental harm as an issue of social and economic justice. Finally, East Philips has strong grass roots community engagement, primarily through the East Philips Neighbourhood Institute (EPNI) which is a neighbourhood group that advocates for the protection of East Philips' community members interests and well-being.

The Proposal

In East Philips, Minneapolis Public Works has proposed an expansion of their current Hiawatha Maintenance Facility in the neighbourhood onto an adjacent abandoned industrial lot they currently own (Hiawatha Campus Expansion, 2022). The plan includes the consolidation of water distribution maintenance services by relocating them from around the city. This proposal involves the destruction of the Roof Depot warehouse on the adjacent lot and the construction of approximately 328,000 ft2 of new structure, including a multistory parking structure. This has been described as the largest truck stop in the state (Dovolis, 2022). Community members have been opposed to this development from its impetus claiming it is both environmentally and physically harmful. Instead, the community

have endorsed plans to rehabilitate the existing structure into a community owned indoor urban farm with affordable housing, community meeting space, and sustainable retailer spaces (EPNI, n.d.).

Timeline

(Minneapolis Public Works, 2021b; Epding, 2022; Diamond, 2022; East Philips Urban Farm, 2022)

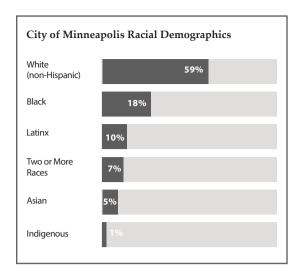
To understand the context of this dispute, the timeline below outlines a brief history of the site as well as recent city and community action.

Site history:

- 1938-1963: Pesticide plant on site buries arsenic deposits as a pollution from product production.
- 1991: Record of city's initial interest in acquiring site.
- 1994: Minnesota Department of Agriculture determine arsenic found in surrounding soil and groundwater originate from site.
- 2001: First known informal plans from city to develop site.
- 2007: Site placed on EPA National Priorities list for clean-up efforts.
- 2014: Site placed on the market; EPNI expresses interest in developing sit into an urban farm.
- 2016: City acquires site.

There has been active organizing against the city's proposal for the site since their acquisition. For the sake of being concise, a timeline of community and city action in 2022 is provided: January 20: Webinar held by EPNI and Sierra Club with local community stakeholders on proposal for indoor urban farm.

- March 10: City Council votes 8-5 to suspend Hiawatha Expansion Project.
- March 11: Mayor Jacob Frey vetoes suspension. He provides a list of conditions for the community to gain his support:
 - Financial plan for the repayment of the \$14 million already invested by the city in the expansion
 - Outline of proposed community engagement, cost estimates, business plan, capital funding model, operating financials, space programming, permitting, organizational structure, business plan, and design for indoor urban farm
 - Development of a strategy for remediating the site
- April 3: Community meeting for new suspension resolution with Councilmember Chavez
- April 23: Earth Day rally held.
- May 22: Engagement meeting held to discuss the alternatives given by the city:
 - Accept city settlement offer which demolishes the building and gives 3 acres of the site to EPNI on a 99-year lease for \$1 USD.
 - Allow demolition and bid for entirety of land in the proposal process





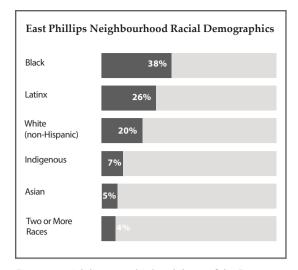


Figure 2: racial demographic breakdown of the East Philips neighbourhood (Martinez, 2016)

- Accept a 3-month trial period to raise \$30 million and meet Mayor Frey's conditions
- June 3: EPNI meets with Mayor Frey for the first time.
- June 12: Community vote on settlement offer.
- June 14: City's remediation plans delivered to EPNI; they do not include agreed upon precautions.
- June 22: Community meeting with CM Chavez.
- June 30: City Council passes (13-0) a Memorandum on Understanding. EPNI claims that the MOU did not contain key verbal agreements from meeting with Mayor Frey and that the council was misled on their support.
- August 11: EPNI holds a press conference at City Hall.
- August 25: Progress Meeting held by EPNI, Clean Water Action, and Sierra Club.
- August 27: Rally held at site.
- September 19 & 20: Protests held outside of City Hall during council committee meetings determining whether to go forward on demolishing the Roof Depot building.
- September 22: Full City Council meeting disrupted by community protests. Council members adjourned the meeting until 1 pm with intention of conflicting with group's pre-established meeting with city sustainability team. The motion to receive demolition proposals passes.
- October 9: Art rally held at Little Earth.
- October 27: Rally held outside of Mayor Frey's home.
- November 11: Civil disobedience training at Little Earth
- November 15: City's deadline for demolition contractor's proposals.
- December 11: Information sharing and fundraising virtual event
- December 15: Virtual hearing and subsequent rally held outside Minneapolis City Hall

ISSUES

In this section I will expound upon how this project is an example of environmental racism, a public health issue, and – overall – an egregious example of environmental injustice (Vital in FBN Staff, 2022). I will do this by outlining the issues the community has with the city's proposal to demonstrate how the project is in opposition to the goals the city has set for itself – and the East Philips neighbourhood more specifically.

Environmental Racism and Environmental Justice

The Hiawatha site expansion is a case of environmental racism and overall goes against the principles of environmental justice. As explained earlier, the East Philips neighbourhood is over 80% non-White and over half of individuals make below the city's median income (US Census Bureau, 2021). It is also understood that the impacts of environmental harm are not felt evenly in urban contexts (Kern & Kovesi, 2018). East Philips continuously ranks among the worst air quality in the city (MCEA, 2021), and the Hiawatha expansions environmental assessment estimates that greenhouse gas emissions will increase by 20% from the project (CPED, 2013). The expansion will also see an increase of 1800 vehicles trips a day on the site (Healing MN, 2021a). The city has failed to account for how pollution is cumulative creating misleading figures on the impact of the site to the surrounding air quality (MCEA, 2021). Furthermore, the building sits on an arsenic plume and when the building is demolished it will unleash that plume and further harm the surrounding air quality with toxic fumes. The deposits of arsenic in the soil have previously caused the remediation of over \$60 million USD of soil (Epding, 2022). These figures paint a clear picture, as community leader Joe Vital states 'East Philips is such a blatant example of environmental racism' (in FBN Staff, 2022).

Upsettingly, the city has acknowledged this disparity, designating the area as one of two city Green Zones, an initiative to have a 'resident city collaboration to support community health, economic development, and the environment' (Green Zones, 2022). In the Green Zone's community developed work plan action, the community addressed their concerns about the Hiawatha site calling for community participation in the process and strong principles of environmental justice (SGZC, 2019). Additionally, community members have pointed out that the city's plan for the site also work against the city's mission statement to 'address climate change and close disparities in health' (City Goals, 2020). Overall, the dispute around the site is a site of environmental injustice. Dr. Ryan Holifield outlined that environmental justice does not have one stable consensus definition but can have a multiplicity of interpretations based on the geographical, historical, political, and institutional contexts (2001, p.78). The community of East Philips have outlined that environmental justice encompasses the disproportionate distribution of the impact of issues including multiple contamination sites, pollutant exposure, cumulative health impacts, and chronic long-term effects of health risks (Martinez, 2016).

Area environmental activists in the area have asserted that key to the effective implementation of environmental justice is self-determination; an understanding of how the large structures of heteropatriarchy, white supremacy, capitalism, and colonialism shape our systems; and to continue to envision futures where these mammoths are not hegemonic in the global order (Kalala, 2021). Undertaking these principles, this report will investigate strategies and highlight connections to the Roof Depot site.

Little Earth

It is also important to note that East Philips neighbourhood houses the Little Earth community which is the United States first and only subsidized urban housing program with a preference for Indigenous residents (Little Earth, n.d.). Little Earth's mission is to 'empower residents by creating a culturally strong, supportive and healthy Little Earth community' (n.d.). The Little Earth leadership has been instrumental in the efforts to oppose the Hiawatha expansion alongside the EPNI, hosting many of the organizing events in their communal spaces. Little Earth's direct effect from the expansion's disruption underscores the pillars of environmental justice and land back that permeate the thesis of the community-owned urban farm proposal.

Public Health

The demolishing of Roof Depot and subsequent Hiawatha expansion project is a public health issue. According to the Minnesota Pollution Control Agency (MPCA), 32% of all Minnesotans experience pollution related health risks that exceed health statute guidelines; however, the statistic goes up to 91% in communities of colour (Wegner et. al., 2021). There is a clear tie between the pollution in our communities and the health of the community. Additionally, health is not the result of personal choice but is constituted through one's social determinants of health (SDOH), or the factors that define someone's living conditions (Cook et. al., 2021). Poverty, air quality, nutritional food access, energy access, education level, and gender all are examples of SDOH.

This was seen empirically in North Minneapolis with the activism of Anta Urvina Davis (Adams, 2021). After the diagnosis of her own infant, Davis noticed that the correlation of high asthma rates in her community was not a coincidence but an environmental justice issue due to surrounding industrial pollution. East Philips has increased environmentally related cases of asthma and respiratory condition related deaths compared to the rest of the City (City of Minneapolis, 2021). In this way, environmental justice and public health are linked as one's environment determines one's health risks. This is also acknowledged by the city council's 2019 resolution declaring racism a public health emergency (City Goals, 2020). In the United States, the largest barrier to health is access to insurance (Faust, 2019). Under the private insurance model, low-income populations are more likely to be bracketed out of healthcare due to chronic conditions such as asthma. Demorest & Smith explain how environmental justice is a public health issue, and therefore, health care providers are 'ethically bound' promote environmental justice so to 'protect their patients' and communities' health' (2022).

RECOMMENDATIONS

Positionality

Above, I have outlined the strong and vibrant grassroots fight that the community is leading against the Hiawatha expansion project. It is important, however, when looking at recommendations to be critical of one's own positionality and highlight connections rather than impose an agenda. I am not from Minnesota but was raised in the neighbouring state Wisconsin. I first moved to Minneapolis as an intern for the city's public works department where I became aware of the Hiawatha expansion and have spent the 2 years living and working in the city intermittently. I have not lived in East Phillips, and my position as a

white settler woman and the privilege this affords has informed my lived experience and, therefore, understandings of this issue. As an external academic, the following recommendations are meant to be interpreted as avenues to further contextualise the ongoing work of the community and illuminate potential opportunities for future action.

Current Action - Upcoming Events

The most important recommendation from this report on how to assist Defending East Philips is highlighting that – at the time of publication – this is an ongoing fight and information about how to get involved can be found on the organization's social media: their upcoming events: @eastphilipsurbanfarm on Instagram (2022).

Bolster Current Action

By looking to the testimonies of environmental justice activists across the Twin Cities area, one can identify themes and techniques that can be important ways to contextualise and bolster the Defend East Philips project.

One such strategy advocated for by community leader Abé Levine is placekeeping; which is a response to the preestablished concept of placemaking and gentrification (Welch, 2021). Where 'placemaking is the idea of generating a culture where maybe its lacking or needs revitalization,' placekeeping 'is unearthing the stories and assets that already exist here' (Welch, 2021 p.93-4). For East Philips, the understanding between these two terms could be key to promoting the value of community driven proposals for the site. The proposal of the city can in some ways be understood as being justified as an act of placemaking; reinvesting in the infrastructure of the community to improve the services of the city. However, when considering placekeeping, the urban farm proposal takes precedence under this same justification. The community proposal for affordable housing, gathering space, and urban farming is also reinvesting in the public services of the community while underlining 'the need to preserve a place's existing community and cultural assets while working to improve its condition' (Welch, 2021, p.92).

Additionally, uplifting, and empowering youth voices has been a powerful tool in other local environmental justice campaigns such as Stop Line 3, one of the most prominent and pressing environmental injustices facing the state (Mark-Ng, 2021, p.76). By connecting young people from across the cities and surrounding area, gaps in environmental action that exist can be bridged and contextualised intersectionally.

Another technique of connection making has been Jennifer Nguyen Moore's way to centre environmental justice in her work within governmental structures. Through their positionality as a community activist and government employee they aim 'to be the bridge between community and government agencies' (Hrycyna, 2021, p.174). Finding connections between individuals in governments priorities and environmental justice is what 'will help us come together to make the world a more just and sustainable place' (Moore qtd. Hrycyna, 2021, p.175). When examining state or private entity partnership with grassroots activism, it is important to remain vigilant. A cautionary sentiment is important to highlight when considering potential collaboration with NGOs or larger activist organizations. Local activist Heidi Affi details how the Non-Profit Industial Complex in the Twin Cities stilts change through state co-option of advocacy groups to maintain systems of power and control which fosters burnout and prevents strides of true mass-based organization and

change by favouring performative incrementalism (Rafferty, 2021). With the highest per capita rate nationally of Fortune 500 companies based in Minnesota (DEED, n.d.), the intense concentration of corporate control – coupled with the 'dangerous, harmful, and parasitic' underpinnings of Western colonial capitalist thinking that permeate local initiatives – can create complex and obtrusive obstacles towards achieving environmental justice (Rafferty, 2021, p.49).

A common thread across the testimony of environmental justice activists is the need for wellness to contribute sustained and meaningful work (Rafferty and Kalala, 2021). East Philips organizers have cited how it is 'demoralizing' to constantly must battle with the city through sustained grassroots activism (Epding, 2022). Affi addresses burnout as a critical issue when looking at the stilted progress of projects, especially those – like the urban farm defence – that must sustain long time frames. Self-reflection is key to both 'optimizing the change' one individual can create while also maintaining realistic expectations as to what they can achieve while still balancing personal wellness (Rafferty, 2021 p.50). Building from these sentiments, it is worthwhile to mention a local community group that works to combine environmental justice and community activism with spirituality. The New City Church centres environmental justice believing, as their director Tyler Sit explains, that 'worship without justice is self-serving and justice without worship is self-destructive' (Macy, 2021 p.84). The connection between self-reflection, personal wellness, stewardship, and environmental justice work can be found through spirituality for some in the community.

Transparency

A suppressed internal government document has also been identified that condemns the Hiawatha expansion as 'problematic' and proposes alternatives that include expanding an existing historic water treatment facility in accordance with the development plan of that neighbourhood (Minneapolis Public Works, 2021a). The report also purports that this alternative is more sustainable and cost effective than the Hiawatha expansion. East Philips community leader Dan Dovolis has called this report the 'silver bullet' of the initiative (in Healing MN, 2021b).

Public Health

The resistance against the Hiawatha expansion project is vocal and strongly rooted in the community. As explained above, this is an inherently powerful strength of the movement; the impact the save roof depot movement has on the city is essential to progress in fighting for environmental justice in public health more broadly (Murray & Prentiss, 2021 p.276). By emphasizing and expanding the connection between the Hiawatha site expansion and public health injustice, important work can supplement and aid the aims of the cause. Dr. Zeke McKinney MD advocates for looking at how the historical context has shaped present conditions. This is important as it links the historical discrimination and harm the Roof Depot site has imparted on the surrounding community and implicates that history as a public health issue further enmeshing the community's organizing in public health advocacy. (Denney & Newport, 2021 p.276)

Environmental justice in the world of public health often manifests as information accessibility which is key to both the empowerment and education of a community to make the connections between environmental hazards and health risks. Through her work in

Northern Minneapolis, Davis dedicated herself to educating primarily BIPOC, immigrant, and low-income families on the dangers of household toxicity exposure (Adams, 2021). This community was historically disenfranchised by bureaucratic systems and left without the education or resources to act. For example, to help overcome the language barrier, Davis deployed translation and visual correlation techniques to broaden the scope of her outreach. Learning from Davis's decades of important and successful work, one can better understand the processes and systematic barriers in place in East Philips that are leaving families at risk from dangerous health risks due to insufficient information channels.

Remembering the ethical obligation of health care to advocate for environmental justice, there are strong bodies of literature that indicate environmental inequity is a public health issue, a sentiment affirmed by the city in their 2040 plan (CPED, 2019 and Cook et. al., 2021). Expanding the messaging of the urban farm proposal to healthcare networks in the area as well as empowering these networks to help close information gaps by providing information literature from health care officials could help put the onus of the health of the community back onto those in power. Local branches of physician (particularly internal and paediatric medicine) associations and healthcare unions have both knowledge bases and resources that can be influential to prevent the destruction of the Roof Depot building.

Another important plank to achieving equity in public health is through diversifying health care practitioners. Empowering BIPOC - especially BIPOC women - to pursue careers as physicians is integral to fostering a health care culture that is reflective, understanding, and responsive to the multiplicity of cultures and experiences that make up the tapestry of the urban (The Importance, 2021). Finding safe spaces for potential BIPOC medical students to connect and providing resources in personal statement writing are more direct efforts to increase the diversity of future doctors (Murray & Prentiss, 2021 p.257). While this aim operates on a longer time scale than the ongoing battle to save Roof Depot, the active community engagement and empowerment such as that found in the East Philips community is essential to achieving lasting environmental justice and eliminate the structural inequities indicative of the city's proposal. As public health official Erica Chung explains, 'big changes happen slowly, but small changes can happen fast...then in time they add up into larger changes' (in Murray & Prentiss, 2021, p.258).

Finally, looking towards the structuring of the urban farm itself, Dr. Kristi White, a clinical psychologist that centres environmental justice in her research, has insights that are relevant to the long-term ethos of the project. Her experience with white superiority mindsets, gentrification, and resource appropriation can provide useful to the planning of the urban farm space to ensure that the farm benefits the community it sits in primarily and equitably (James & Hasak-Lowy, 2021 p.309). Employing the work of industry professionals like Dr. White is an example of how public health structures can be deployed across the phases of initiatives like save roof depot.

Building off the work of community leaders like Davis, Sleets, Chung, and Drs. McKinney, and White, the framing of the Hiawatha expansion as not only an environmental injustice but also a public health injustice is an important link that can be further highlighted. This is also important when emphasizing the growing call that health care professionals have an ethical obligation to advocate for environmental justice, as well as holding the city accountable for the commitments they made to address the public health inequities of the

CONCLUSION

Overall, the East Philips community has been fighting a long and difficult battle against the continued environmental racism enacted by the city in a dispute over the Hiawatha Public Works site expansion. The community desires for the existing structure to remain standing as to not release arsenic into the surrounding air, soil, and groundwater. They are proposing rehabilitating the building into an indoor urban farm and co-operative meeting and living space that directly benefits the community who would own and maintain it. Unfortunately, the city has continued to push their agenda engaging in limited dialogue with the public. This is a clear issue of environmental justice and public health inequity. By utilising the testimony from environmental activists in the surrounding community and highlighting the connections in their sentiments to the Defend East Philips Movement, I demonstrated the power of community-based action and provided avenues that can potentially bolster and empower further sustained and meaningful action in East Philips.

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On Common Ground: the issue of soil sealing and loss of green infrastructure in Munich

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INTRODUCTION

The exponential growth of urban populations and environments poses questions about land use change and the future of green infrastructure in cities (Lin, Meyers and Barnett, 2015). With most of humanity living in urban environments, finding ways to preserve urban green and the ecosystem services they provide has become one of the key challenges for creating a sustainable future for cities and their residents (Artmann and Breuste, 2015). However, the trend of soil sealing contributes to the incremental loss of urban green and blue infrastructure in many cities. In Munich, the most densely populated city in Germany, population growth and a turbo-capitalist housing market are contributing to the sealing of its soil. Soil sealing in Munich, and the incremental decline of urban green, is grounded in the foundational issues and questions connected to the distribution of space and the privatisation of urban commons, and thus, affects the whole wider community of Munich residents. This community brief will focus on illustrating the impact of soil sealing on the wider community of residents and highlighting the need to balance economic, social, and environmental interest in order to make Munich a more green, sustainable, and just city.

Positionality

I am a 4th year Sustainable Development student from the city of Munich. My first introduction to sustainability and urban green infrastructure dates to primary school. At an urban planning workshop, I distinctly remember the city planner asking us what we would do if there was an old tree on the property we would like to build upon. I was quite confident I knew the answer to that question – after all, I had witnessed how numerous old trees in my neighbourhood had been cut down to make space for new building projects. However, to my surprise, I was told that a city planner should always build around the tree and incorporate it in the design, which sounded sensible, but simply did not reflect the day-to-day reality I had experienced in Munich. Ever since then, I have been interested in learning more about the complex workings behind the changing landscape of the cities around us. This community brief gave me the opportunity to explore a sustainability challenge that is especially prevalent in Munich and captures some of the paradoxes of growing cities – soil sealing. However, as a Munich resident emotionally invested in this topic, the output of this

community brief will be biased and shaped by my personal experiences.

Soil sealing

Urban spaces globally are growing twice as fast as their populations (Seto et al., 2011) (Artmann and Breuste, 2015) and with them their characteristic 'grey infrastructure' and impervious surfaces (Artmann, 2014a) (Turok and Mykhnenko, 2007). This urban growth is inextricably linked to 'the conversion of open areas into built-up areas, including non-sealed areas such as gardens' - and thus, to the issue of soil sealing (Artmann, 2014,p.530). Soil sealing can be defined as 'the permanent covering of the land surface by buildings, infrastructures or any impermeable artificial material' (Pistocchi et al., 2015). As an overall irreversible process, it is the most intense form of land degradation(Tobias et al., 2018). The development of settlements, infrastructure – as well as commercial and industrial spaces – is mostly taking place at the expense of urban green space and open soil (Lu, Kotze and Setälä, 2020). However, green and blue infrastructure, which includes all public and private urban green, such as parks, gardens, trees, and waterbodies (WHO, 2017) provides numerous valuable ecosystem services and has important social and cultural functions (Tobias et al., 2018; Lu, Kotze and Setälä, 2020).

Temperature regulation

Green spaces and unsealed soil contribute to the regulation of the local urban climate (Linke, 2022). Soil sealing, on the other hand, promotes the so-called urban heat island effect. Sealed surfaces prevent evapotranspiration from the ground and contribute to the retention of spare heat, which is then released overnight (Parker, 2010). With climate change contributing to rising temperatures, this effect is being further exacerbated (Corburn, 2009). The build-up of heat in urban environments has severe health implications with increases in temperature being directly linked to a rise in heat deaths, especially affecting the elderly population (Heaviside, Macintyre and Vardoulakis, 2017).

Flooding

Soil sealing also leads to an increased flooding risk (Rodríguez-Rojas et al., 2018). As impermeable surfaces cannot soak up rainwater, excess stormwater can lead to the flooding of urban landscapes (Jacobson, 2011). With extreme weather events occurring more regularly due to climate change, this flooding risk is even more pronounced (Jacobson, 2011).

Carbon storage and air filtering

Green infrastructure majorly contributes to filtering air from pollutants and thus reduces the risk of respiratory diseases (Linke, 2022). Unsealed urban soil can also play a vital role in capturing and storing carbon and nitrogen which is especially important for reducing greenhouse gas emissions and mitigating climate change. However, these ecosystem services are lost when soil is sealed by grey infrastructure (Lu, Kotze and Setälä, 2020).

Biodiversity and intrinsic value of nature

Structurally diverse urban green not only contributes to biodiversity conservation but has also been shown to positively correlate with the wellbeing of urban residents (Dallimer et al., 2012). The diverse structures and living spaces of urban green serve as valuable habitat for numerous animal and plant species (Biercamp, Spreter and Wissel, 2017)(Friedman, 2016). Therefore, species richness in urban environments is often higher than in the mostly

monotonous agricultural landscape surrounding cities (Knapp et al. 2008; Werner and Zahner 2009). Most literature on urban green infrastructure focuses on the ecosystem services it provides; however, it is also essential to look beyond that anthropocentric framing and highlight the intrinsic value of nature and its right to exist (Worster, 1980).

Mental health and wellbeing

Urban green spaces contribute considerably to the wellbeing of citizens – not only do they give them in the case of parks opportunity to exercise, but they also lower stress levels and give residents the opportunity to connect with nature (WHO, 2017).

Social and cultural function

Urban green spaces play an essential role as places of social exchange and interaction. They offer everyone, independent from their financial and social background, a free way to engage with nature and other residents (Biercamp, Wissel and Spreter, 2017, p.8,). With cities increasingly turning into mere 'consumption spaces' (Friedman, 2016,p.175), preserving third places – non commercialized spaces that are also neither home nor work) (Oldenburg and Brissett, 1982) such as green spaces and parks – is essential. Although soil sealing is commonly framed as a managerial and planning problem, as an issue that is driven by 'economic motives and urban neoliberal policies,' it is grounded in much more foundational questions about the distribution of land in cities, environmental justice, and the commercialization of common land (Colding, Gren and Barthel, 2020,p.1).

ABOUT MUNICH

Munich is the capital of Bavaria, one of Germany's economically strongest and most populous federal states (Thees, Zacher and Eckert, 2020, p175). Serving as the residential city for the royalty of Bavaria over several centuries, the landscape and the development of the Munich was – similarly to many other residential cities – fundamentally shaped by aristocracy who initiated 'public greening projects with some intention to symbolise and express power over the city' (Feng and Puay Yok, 2017,p.51). These green spaces — such as Nymphenburger Park and Englischer Garten –, exist to this day and are an integral part of the landscape of Munich. During the Third Reich, Hitler's plans to make the city the 'Haupstadtadt der Bewegung,' the centre of the nationalist socialist movement, meant urban green had to make space for new infrastructure and assembly places (Krämer, 2009,p.90). While some of these sites, such as the Königsplatz, were restored to their pre-Nazi, green state, other spaces, like the Sonnenstraße, remain sealed to this day (Krämer, 2009; 'BUND', 2022)

After World War 2, Munich was rebuilt from the ground up, and, with companies, such as Siemens moving in, the city quickly prospered into a technological and economic centre (Nickels, 2020). Nowadays, Munich is an economic powerhouse with big corporations, such as BMW and Siemens, creating lots of workspace and job opportunities, and attracting new residents. With the lowest unemployment rate in the country, high living standards, and an attractive location as the gateway to the Alps, Munich has gained the image of a highly liveable city (Thees, Zacher and Eckert, 2020). Munich's popularity is reflected in the constant growth in its population size, with the number of residents expected to increase from 1.6 million now, to 1.8 million by 2040 (Stadtverwaltung, 2022). As Germany's most

densely populated city (München ist besonders dicht besiedelt, 2020), real estate and space have become rare and highly sought after. In recent years, property prices have doubled; an average square meter of land costs now around 8000 euros whereas in 2011, it was an average of 4000 euros per square meter (MZ, 2020).

SOIL SEALING IN MUNICH

In 2018, Munich made headlines as a study found it to be the most sealed city in Germany. Satellite data revealed that Munich is covered by 46% impervious surfaces. For comparison, in Berlin sealed soil makes up 35% of its area, and in Hamburg its only 30%(Geisser and Lenk, 2017, p.20). Munich's sealing gradient has increased over recent decades; districts, such as Freiham, have experienced an increase in soil cover from 10% in 1994 to 25% in 2015 (Anlauf, 2021). One of the biggest contributors to new soil sealing is the development of traffic areas which have increased by 20% in the time from 1994 to 2015 (Artmann, 2014a). Soil sealing in Munich varies between districts, with the city centre being particularly affected (Artmann, 2014b) Soil sealing is a dynamic and complex issue that impacts citizens at the micro- as well as macro-scale, and thus involves small, local communities as well as the wider community of Munich residents (Artmann, 2014b). It is important to note that this community is by no means homogenous and static but is made up of individuals with various interests and different degrees of advocacy and access to resources(Gilchrist, 2000; Barton, 2000). Soil sealing thus affects members of the wider community differently. Vulnerable groups, such as the elderly population, and communities of lower socioeconomic status are being disproportionally negatively affected (EEA, 2022), as, for example, socially deprived districts show higher degrees of soil sealing and less green areas (Biercamp, Wissel and Spreter, 2017). The negative impact of soil sealing on the community of Munich residents manifests itself in various ways around the city.

During an extreme heatwave that Munich experienced in the summer of 2022, a local environmental agency measured the temperature of varyingly sealed places in Munich. While the highly sealed Marienplatz reached 35.1 degrees Celsius, the Englischer Garten only reached 32.1 degrees Celsius (BUND, 2022). The heatwave and increased temperatures particularly affected the elderly population, with an increase in elderly emergency room patients, as well as homeless citizens, who were especially exposed to the overheated city (Wetter in Bayern: Gefährliche Rekordhitze in München, 2022). Soil sealing in Munich has contributed to an extreme decline in urban trees; about 2500 - mainly old - trees are being cut down in Munich each year to make space for building projects (BUND, 2022). While these trees are often replaced with new, young trees, the latter do not make up for the ecological and social value of the former. A study in Munich showed how canopy of old trees can make up to a 5-degree difference in local atmospheric temperature, whereas newly planted trees have no cooling effect (Linke, 2022). The loss of old trees also means the loss of important carbon storage as trees only start storing carbon when they have reached an average age of 50 years (Linke, 2022). Moreover, the loss of veteran trees in Munich has had major socio-cultural impacts; for example, the local community of Oberhaching lamented the loss of an old tree that had been used by generations of children for climbing, playing, and exploring their relationship with nature (Bauernfeind, 2017). New building projects, driven by the need for new living space and the turbo-capitalist housing market, are increasingly pushing into public green spaces in Munich. This is an especially concerning

trend as local and easily accessible green spaces are particularly important to socially and economically deprived areas (Linke, 2022). Munich has seen numerous examples of public green spaces being repurposed for building projects and developments. However, in some cases, local communities have created alliances and successfully resisted city council projects. For example, the Unnützwiese, an exceedingly popular green area that had been officially declared as common green space by the city of Munich, was supposed to be turned into a new building project. However, within a few days, community members formed an alliance and successfully stopped the project. The alliance, called Grünflächen erhalten (Preserving green spaces), exists to this day and is at the forefront of pushing for legal protection of urban green spaces in Munich (Grünflächen erhalten, 2022).

CURRENT POLICY AND POLICY ANALYSIS

After the topic of soil and the need for preserving its invaluable services had for long been neglected and ignored by policymakers and the public (Who benefits from nature in cities? Social inequalities in access to urban green and blue spaces across Europe — European Environment Agency, no date) it is now garnering international attention and gaining momentum (Artmann, 2014a). In Germany, a national target was formulated, which recommends the decrease of daily land take from 77 to 30 ha (Artmann, 2014a). However, this is only a recommendation and decisions about city planning and development are made by the individual municipal authorities. In Munich, the Baureferrat (building authority), the Referat für Klima und Umweltschutz (department for climate and environmental protection) and the city council have the main authority (Artmann, 2014a).

As the city of Munich has made commitments to become climate neutral by 2035, the city council is investing in various urban sustainability projects. One of these is the mitigation of soil sealing. Through the city council, citizens can get subsidies and grants for implementing compensation measures such as green roofs and walls and pervious surface (Artmann and Breuste, 2015). While this might seem like a practical and effective measure to planning authorities, it does not take into account that firstly, not many citizens are aware of soil sealing and the subsidiary program in the first place (Artmann and Breuste, 2015) (; and secondly, that this measure does not help to address the issue of soil sealing for residents who do not own a private home or garden, and are dependent on public green spaces – which is the majority of Munich residents.

Moreover, despite the city council's awareness of the issue of soil sealing, the seemingly small, individual decisions being made on a rolling basis about public green spaces do not necessarily reflect their intention to preserve green spaces (Grünflächen erhalten', 2022). This 'tyranny of small decisions' (p.23) leads to an overall recession in urban green (Kahn, 1966) What is more, despite the efforts of initiatives, such as Grünflächen erhalten – and numerous members of the urban community fighting for the preservation of urban green – green areas are still not legally protected. The same goes for urban trees, which have also no legal protection and fall under the law of 'Baurecht schlägt Baumrecht' – meaning that building rights beat tree rights (Bauernfeind, 2017). Finding compromises between soil sealing and creating new living space and infrastructure is a 'wicked' problem (Artmann, 2015). Finding solutions that balance economic, social, and environmental interest is challenging. However, the current inertia of the municipal authorities cannot only be

explained by the complexity of the challenge, but also by what seem to be internal struggles of conflict of interest within the authorities (Baugenehmigung in München und Oberbayern, 2022). To illustrate this, this summer the city council member Hans Hammer ordered a re-evaluation of the data on soil sealing in Munich. After the parameters were changed, the soil sealing gradient of Munich appeared to be much smaller than previously anticipated (Faktenfuchs, 2022). The city council member and his faction declared the 'myth' of soil sealing of Munich as finally dispelled; it is important to note that Hammer owns a private building company in Munich (Faktenfuchs, 2022). Overall, the current policy is highly conflicted and, in many ways, falls short on considering the various needs of all citizens. Finding a more holistic approach to tackling soil sealing and the housing crisis is thus essential for creating a more sustainable and just city for all.

RECOMMENDATIONS

Information

An essential step towards mitigating the loss of green infrastructure and tackling soil sealing in Munich would be to make information about the topic more widely accessible to the urban community. While soil sealing has gained much attention in the field of academic research and policy making, the meaning of the term and its impact on the provision of ecosystem services is still often unknown to residents (Artmann and Breuste, 2015). This means that although community members might suffer from the negative impact of soil sealing, they might not be able to link this to soil sealing, and thus cannot act against it in their own communities. An important aspect of making information accessible would be to create a comprehensible overview and summary of soil sealing in Munich; for instance, in the form of a webpage that combines different resources, such as an interactive map, contacts to local groups, and access to legal documents. Currently, information about soil sealing in Munich is spread out over the internet, with both the official website of the city council and the websites of initiatives, such as Grünflächen erhalten (preserve greenspaces), providing only limited information. Thus, a more comprehensive resource could solve the issue of information inaccessibility. This could be supplemented by informing citizens about the personal action they can take to mitigate soil sealing through compensatory measures such as wall and roof greening, and the funds and financial support that are available to them for these (Artmann and Breuste, 2015). The information campaigns could be organised by local initiatives (such as Grünflächen erhalten) and be employed via the internet and social media, as well as through other non-digital methods, such as public events, flyers, and post, to make sure that residents with no internet access can also be reached.

Discussion

As the current policy and situation in Munich illustrates, there is a lack of communication and discussion about the wider implications of soil sealing and its connection to questions regarding the distribution of space and the privatisation of urban commons. At the moment, soil sealing is framed as a mainly managerial and planning issue that is caused by the growth in population and demands for new living space and infrastructure. However, as illustrated before, while this is partly true, the problem is also caused by neoliberal policies and a turbo-capitalist housing market that is only focused on profit maximization. It is therefore essential to widen the discussion around soil sealing and the loss of urban green,

and to reframe it as a socio-political issue. To practically start this process, open forums could be created, where community members, policy makers, investors, and other stakeholders could come together to discuss and debate these issues. Through these forums, a wider, holistic, and long-sighted vision for the city could be created that mitigates the 'tyranny of small decisions' (Kahn, 1966)

Action

As the example of the Unnützwiese has shown, alliances of residents can be effective drivers of change. Therefore, another aspect of mitigating the loss of urban green and soil sealing is community action and protest. The power of community protest could be enhanced by the various alliances working more closely together by connecting microscale groups and activists. For example, the push for legally protecting green areas of Grünflächen erhalten would majorly benefit from support and action from other groups, such as environmental initiatives and affordable housing campaigns. Another aspect of community action and grass-root activism could include actively resisting the system and creating self-ruled green spaces. Examples from other cities could serve as inspiration for this, namely Navarino Park in Athens. This self-ruled park was created by the communal action of residents from various districts of the city, in order to create a space for collective co-existence that is free from commercialisation and social hierarchies (Navarino Park, 2022). Although cities will always have their distinct contexts and dynamics that make examples like these not directly transferable, they could still serve as inspiration to facilitate rethinking the common ground of cities and break the boundaries that are often dictated by politics and the economy. Although there are many laudable initiatives and support schemes that the city provides to support a greener Munich, it would be important to encourage more self-determination and participation of residents.

CONCLUSION

Soil sealing is a wicked problem that affects a wide community in Munich. Despite the increasing demand for housing and infrastructure, there is also a major need for urban green and the services it provides. Overcoming the turbo-capitalist housing crisis and the commercialization of the city to find solutions that include and benefit all members of society is essential for changing the city and ensuring a fair and sustainable Munich for all.

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Low-Income Migrant Workers and the Mula-Mutha Riverfront Development in Pune, India

Sofie Brøgger



INTRODUCTION

In 2016, I moved to the Western Ghats of India, where I spent two years completing my high school education. The campus overlooked the Mulshi Valley, where the Mula River carves its way through the landscape. The Mulshi Dam is a reminder that, through infrastructure, the rural landscape and its inhabitants are connected with the urban communities in Mumbai, who depend on the electricity generated by the dam 170 kilometres away. Along its banks, all the way to the city, the Mula is a nodal point for communities. Some sixty kilometres downstream from the dam, the Mula merges with the Mutha River in Pune, a rapidly growing city, home to about 5 million people. With rapid urbanisation, the city of Pune faces a multitude of interconnected sustainable development (SD) challenges, and, in an attempt to address some of these, the Pune Municipal Corporation initiated the Mula-Mutha Riverfront Development in 2015 (Magar, 2020).

The project aims to rejuvenate the rivers and transform forty-four kilometres of urban waterfronts into public spaces for social, cultural, and recreational activities (Patil et al., 2019). However, the project has faced public scrutiny and is criticised widely for not following correct legal and 'Environmental Impact Assessment' procedures, worsening flood risks by concretisation of the riverbank, commercialisation, insufficient public consultation, a lack of transparency, and for being nothing but a 'beautification project' (Goyal, 2022; Punekar News, 2022; Pune Mirror Bureau, 2021; Thomas, 2021; SANDRP, 2019; GSAPP, 2019). While claiming to serve Punekars with public green spaces, many urban communities will be affected negatively by the project in a number of ways, and there is a real concern that the project will not solve the challenges it initially set out to. Additionally, there are issues of justice, access, and participation where the low-income migrant workers inhabiting the banks of the river will be the first affected as they will suffer from displacement.

In this briefing, I will first elaborate on my positionality in researching this topic. Second, I will define the primary affected community – low-income migrant workers inhabiting the riverbanks – in an attempt to better understand and convey the complex circumstances, present and past, under which the community is affected by the riverfront development.

Third, I will describe the Mula-Mutha Riverfront Development, the SD and environmental justice issues implicated by this initiative, focusing, to the best of my ability, on the effects for low-income migrant workers who live along the river in informal settlements. Finally, I will offer two specific suggestions for how these challenges can be addressed: a) community-led resettlement in collaboration with local NGOs and b) via partnerships and joint activism with other urban communities in Pune. While these community-driven solutions are essential to ensuring empowerment, representation, and participation, in the case of large-scale infrastructure developments, good governance and government-led solutions are crucial to ensuring the ethos of environmental justice and SD for the Mula-Mutha project. This community briefing is therefore intended both to inspire action at the community level, and to encourage the Pune Municipal Government to take onboard and support these and other inclusive solutions.

POSITIONALITY

Although I have lived in India and frequently spent longer periods of time in Pune, I have undeniably had a very different experience of the city than the subjects of this briefing. The opportunities afforded to me by my privilege and identity as a white foreigner in an Indian context are many, and I neither claim to fully understand the complexities that shape the experience of low-income workers inhabiting the banks of the Mula-Mutha River nor to comprehend their lived experiences as farmers and migrants. However, with my foundational knowledge of the Indian context and as a student of SD and International Relations who has an interest in environmental justice, urban development, and infrastructure, I wish to explore these topics further. I engaged with them in an Indian context before, for example when interviewing communities affected by the socioenvironmental issues of the Mula Dam and when speaking to activists protesting hydroelectricity on the Narmada River in Madhya Pradesh. While each challenge is unique and should be treated as such, I wish to deepen my understanding of the Mula-Mutha project by asking who the project excludes. With my positionality in mind, I hope that this briefing also widens and deepens the reader's understanding of the complexities of urban environmental injustice and provides an insight into how large-scale urban infrastructure projects can impact the most vulnerable and marginalised communities in our cities.

THE COMMUNITY

The primary community focused on in this briefing are the low-income migrant workers living in informal housing on the banks of the Mula-Mutha River in the city of Pune. Intensified by the 2018 droughts across Maharashtra, many farmers from the countryside near Pune have come to the city to seek employment (100 RC et al., 2019). Nearly all of these farmers-turned-migrants are men seeking seasonal employment. Apart from within Maharashtra, they also arrive from other states across India, in many cases the poorest ones, and therefore often represent the lowest economic and social strata of Indian society, which is generally also associated with caste (Keshri and Bhagat, 2012). As farmers, these migrant workers have already experienced immense hardships. Farmers across India have been suffering from poverty cycles, created and maintained often by a free-market economy favouring the profit interests of large MNCs rather than small-scale farmers. These poverty

cycles have caused unprecedented suicide rates among Indian farmers, which have been linked with the business models of biotechnology companies such as Monsanto (Sandri, 2017). Low-income migrant workers are therefore already socio-economically deprived and vulnerable to caste-based discrimination prior to arriving in Pune.

Upon arrival, the workers do not have access to affordable housing and, as a result, will often settle down in informal housing communities, particularly on public land along the Mula-Mutha River. These housing settlements lack basic amenities, such as access to clean water and sanitation, and are unprotected against floodings during the monsoon season whose effects are increasingly exacerbated by climate change (Sandri, 2017). The living conditions in the settlements have also been worsened by the COVID-19 pandemic, where migrant workers suffered further and disproportionately, as they had no support systems to rely on in an alien city (Kalhan et al., 2020). For these – and likely other reasons that I am unaware of – this community of low-income migrant workers is disproportionately vulnerable to displacement due to the Mula-Mutha project, which would further entrench socio-economic inequalities.

THE CHALLENGE

The City of Pune, or Poona, located in the state of Maharashtra in Western India, is part of the biodiverse Western Ghats region. It is a rapidly growing city with an estimated 300 families arriving by train each day (100RC, 2019, p.4). As mentioned, many of these newly arrived families are unable to find affordable and safe housing. Migrant workers in particular end up settling in slums (i.e., informal settlements) on the riverbanks, including those of the Mula-Mutha River. Living in this type of informal housing, the migrants experience a lack of sufficient water, sanitation and waste management infrastructures – resulting in water pollution and biodiversity loss in the city's river ecosystems (Magar, 2020, p.14677). Living on the riverbanks, low-income migrant workers are also more likely to be affected by floods, which, according to experts, will be worsened by the current proposed Mula-Mutha Riverfront Development. The project is therefore at the nexus of many SD challenges and interconnected risks including (100RC, 2019, p.10; Patil et al., 2019):

- Climate change and adaptation
- Water management and sanitation
- Waste management and pollution
- Biodiversity conservation
- Affordable and safe housing
- Gentrification
- Socio-economic inequality
- Mobility and transport
- Migration
- Heritage conservation
- Religion and tradition

Precisely because of the interconnectedness of the many SD challenges associated with the river and its use, it is imperative that any urban planning solution be holistic and inclusive in its nature. Campbell discusses sustainability and social justice in the context of urban planning and argues that 'middle-class environmental interests typically trump the interests of the poor and marginalized, too often leading to an exclusionary sustainability of privilege rather than a sustainability of inclusion' (2013, p.75). When the proclaimed goals of the Mula-Mutha Riverfront Development are sustainability-oriented to 'create a public realm along the river and provide Pune with a vital riverfront that enriches life in the city,' it becomes vital to critically examine these claims and consider notions of social and environmental justice, access, and participation (Thomas, 2021). In the context of a rapidly urbanising city, like Pune, I do this by applying critical urban theory to understand the challenges for low-income migrant workers, who will suffer from displacement as a direct result of this mega-infrastructure project seeking to transform the Mula-Mutha River.

The Mula-Mutha project is an example of an urban greening and urban infrastructure project that has complex environmental justice consequences, such as displacement, gentrification, and worsened socio-economic inequalities. Firstly, one challenge of the Mula-Mutha project for low-income migrant workers is the fact that there is no resettlement plan in place. This means that they will be displaced and forced to find housing elsewhere, which is likely to be of even worse quality than the slums on the riverbanks. As such, the project directly exacerbates social inequalities. Secondly, returning to Campbell's discussion of urban planning, sustainability, and social justice, it is clear that – as many of the main criticisms of the project stress – the main beneficiaries of the development project will be the middle- and upper-class Punekars (2013). Not only will they now have access to more public green spaces (without compromising on their own housing), but property owners nearby the river will also directly benefit economically from rising property values, propelled by the increase in green spaces (Wolch et al., 2014). This creates gentrification, furthers environmental injustice, and entrenches socio-economic inequalities, unless an inclusive approach is adopted to protect vulnerable communities (Wolch et al., 2014; Ghertner, 2014). Finally, the Mula-Mutha project highlights the complexities of urban greening projects because vulnerable communities – such as the low-income migrant community described in this briefing – also suffer from a lack of access to green spaces, which has positive health and wellbeing effects (Ghertner, 2014). Urban greening projects are therefore needed to combat environmental injustice. However, unless done carefully and inclusively, they risk worsening the situation for already vulnerable communities.

Environmental injustice can also be explored further by looking at the community's risk of being affected by natural disasters, such as floodings, both before and after the riverfront development is completed. Since it is common for informal housing to be situated on riverbanks, which are susceptible to floods, this compounds the environmental injustices experienced by vulnerable communities (Cronin & Guthrie, 2011). This environmental injustice existed prior to the Mula-Mutha redevelopment project, because, as Cronin and Guthrie states, 'the urban poor are often the most vulnerable to natural disasters as they inhabit overcrowded, marginal, unstable and dangerous land with no financial cushion or security' (2011, p.310). Furthermore, as criticisms of the project have highlighted, claims of mitigating flood risks have been deemed severely insufficient. After the Mula-Mutha project, with worsening climate change, the element of urban environmental injustice caused by flood risks would not have been eliminated.

These issues of environmental justice bring up questions about access to the city and urban justice in general. To ensure urban justice, it is essential to recognise historical injustices and ensure procedural justice in decision-making processes. In the context of urban infrastructure projects, this must be done by listening to and including marginalised voices in the decision-making and design process of developing new infrastructures – both of which have been absent for the low-income migrant workers in the case of the Mula-Mutha project (Broto & Westman, 2019, 151). Infrastructure and, in particular, mega-infrastructure projects, such as the Mula-Mutha Riverfront Development, are unique in their nature as they are manifestations of the meeting between the state and its citizens. Therefore, it is crucial that infrastructures be inclusive for all citizens in their design and implementation processes. With the heavy criticisms for a lack of both transparency and inclusion, the Mula-Mutha Riverfront Development neither recognises historical injustice, nor has it ensured procedural justice in the decision-making and design process.

By adopting a community-centric strategy, it is possible to address compounding challenges, because community-led solutions often offer a holistic, long-term approach that could address multiple problems at once. Often, policy-based and government-led solutions (due to funding buckets and bureaucracies) address challenges in isolation. However, due to the interconnectedness and general nature of the issues related to large-scale infrastructure projects, this urban challenge cannot be solved by the community alone. The recommendations explored in the next section therefore include partnerships with NGOs and educational institutions and is an encouragement for the local government in Pune, the Pune Municipal Corporation, to adopt a more inclusive and holistic approach in this and future infrastructure development processes, to ensure true urban sustainable development for Pune.

RECOMMENDATIONS

Community-led Resettlement

"Shelter Associates told us that if we wanted a house on an alternate site, then we should start saving. But we could not trust anybody because so many had made false promises in the past. We went to Shelter's office one day and over the months Shelter helped us earn our livelihood from making saree bags and then build our home in Hadapsar. In our new home we have a toilet, bathroom, kitchen, loft, and a big hall. There is a lot of space for us to live comfortably."

- Chaya Chandee, Beneficiary of Kamgar Putala rehabilitation project

To address the urgent need for housing as a result of displacement, low-income migrant workers could consider a community-led resettlement in partnership with influential and experienced local NGOs. While government intervention and targeted policies are essential to solve the general problem of affordable and safe housing in Pune, the community-led partnership approach offers one actionable pathway for this community (Cronin & Guthrie, 2011). This solution is feasible as it has already been done in Pune, one example being in 2004 when the Kamgar Putala slum community – which was heavily affected by floods on the banks of the Mutha River – took action to find resettlement options for safe, affordable, and sustainable housing (Cronin & Guthrie, 2011; Shelter Associates 2022). Marrying an

empowered community with an influential local NGO, in this case Shelter Associates, proved successful for the Kamgar Putala slum's community as they were able to resettle to newly constructed housing, elsewhere in Pune. Such a community-led partnership approach would therefore be ideal to address the immediate need for safe and affordable housing at the very least. Additionally, the project also helped address poverty for the Kamgar Putala community. The approach involved community mobilisation, where the NGO provided support for sustainable livelihoods, encouraged saving schemes, and community meetings, which eventually led to the formation of the community-led organisation Baandhani. Led by women, the community spoke up through their organisation and demanded that they be considered as key stakeholders of river infrastructure projects and that they be included in the consultations. While waiting for potential resettlement, they began saving up money for down payments and trying to amplify their voices at a political level. Eventually, they succeeded, and 152 families relocated to safer homes. Six years later, an evaluation of the project concluded that 'not one resident was found to have moved from their new home, sold up [or] moved elsewhere,' – hence proving the long-term efficacy of such a solution (Cronin & Guthrie, 2011, p.320). Other benefits found in the review were a sense of ownership, community cohesion, and safe water and sanitation infrastructures. This sense of ownership experienced by the community members speaks to the need for selfdetermination and sense of home, which are often not considered relevant in the built environment context (Soleimani & Gharehbaglou, 2021). These are important learnings and sources of inspiration for the low-income migrant workers who have the potential to do something similar to the Kampar Putala community and pursue community-led resettlement by increasing their voice in local governance and planning in collaboration with an NGO, like Shelter Associates.

Community Partnership & Activism

"If Pune can grow ecological awareness, equitably manage water and provide safe housing and infrastructure for all its people, it can serve as a model of responsible urban growth for cities throughout South Asia." (100RC, 2019, p.4).

Low-income migrant workers could create community partnerships with other interest groups and engage with activism. A unique solution is available for this specific urban challenge as the Mula-Mutha Riverfront Development has been picked up by students at the Columbia University Graduate School of Architecture, Planning and Preservation (GSAPP) in their Global Cities & Climate Change Studio (Spring 2019) in a collaborative project titled 'Resilience Accelerator', a partnership with 100 Resilient Cities (100RC) and the Center for Resilient Cities and Landscapes (CRCL) – also at Columbia University. The 'Resilience Accelerator,'

Connects cities with design expertise and a global network of practitioners and researchers to expand the resilience value of projects, generate investment opportunities, deeper relationships between project teams across sectors, and accelerate implementation strategies (100RC, 2019, p.2).

In 2019, the students went to Pune to engage with local stakeholders, assess the current Mula-Mutha project proposal, and propose a comprehensive vision for the City's waterways. The design projects, published by the initiative, offer alternative urban design and planning

solutions for the Mula-Mutha Riverfront Development with an increased emphasis on inclusion, ecological rejuvenation and climate resilience.

The projects and urban design principles proposed by Columbia students clearly show the weaknesses of the current Mula-Mutha project and crucially give suggestions for transformational improvements. For example, one design proposes a series of multifunctional spaces along the river with an integration of public toilets, a neighbourhood playground in the dry season, and a wetland filtration landscape in the monsoon season. Similarly, another space is suggested for farmland use in the dry season. The vision of the students is to 'design a Bio-Park that gives room to the river, rain, and plants in the monsoon season while giving the room [to] people and animals in the dry season' (GSAPP, 2019).

In these design proposals, low-income migrants with a farming background – which is a large proportion of the community – could, if enabled by the right structures, be able to farm again and feel as if the project also benefited them by providing sustainable livelihoods. Additionally, they would also benefit from initiatives, such as public toilets for enhanced sanitation and wetlands that enable proper water management to avoid floodings. This is but one example of a project proposal, but many others are included in the GSAPP Studio with efforts to save a bird sanctuary and integrate nature-based solutions for increased climate resilience, and enriched biodiversity.

The low-income migrant community therefore has an opportunity to partner with local environmental and other organisations who have an interest in stopping the current project and demanding an inclusive and participatory design process – thus ensuring procedural justice. For example, the NGO 'Vasundhara Abhiyan' works for biodiversity conservation. While, perhaps, overwhelming at first, the many urban challenges that are addressed in the Resilience Accelerator proposals make them a real asset to the low-income migrant workers, because it means that they are not alone in wanting to change and improve the Mula-Mutha project – there are many stakeholders. These student proposals are excellent resources as they visualise alternative suggestions for a more ambitious and holistic project, and they can be leveraged to convince more people to join their cause. The second recommendation is therefore to partner with other urban communities in Pune and jointly protest the development while also negotiating with and lobbying the Pune Municipal Corporation to adopt a more holistic and inclusive design process for this urban mega-infrastructure project that affects the lives of all Punekars, not just the ones who already have a voice. It is, however, important to note that displacement would still be an issue even if these proposals were to be implemented; therefore, both recommendations would be ideal to pursue in tandem.

CONCLUSION

In this community briefing, I outlined the challenges faced by the low-income migrant worker community who currently inhabit the banks of the Mula-Mutha River in Pune, India, and who will be displaced by the Mula-Mutha Riverfront Development. I presented my understanding of the migrant worker community and the drivers that led them to the city and outlined the interconnected SD issues that make up the complex urban challenge the migrants face, as well as those SD challenges that existed prior to their arrival. In doing

so, I highlighted how, in an attempt to respond to some of these overall SD challenges, the city of Pune is looking to transform its riverfronts – but questioned whose interests are reflected in the project. I discussed sustainability and social justice in an urban planning context, examined notions of urban and environmental justice and access to the city, concluding that a people-centric and inclusive approach is essential to ensure equitable benefits of the Mula-Mutha project. I then offered two community-led solutions: a community-led resettlement, and a community partnership and activism approach, and encouraged that they go hand in hand to address the urgent need for housing while working on ensuring procedural and environmental justice. While community-driven solutions to urban challenges are essential to ensure participation and find truly holistic and inclusive solutions, the nature of this particular urban challenge limits what the community, given their vulnerability, can do on their own. To drive forward the large-scale change needed to solve the many sustainable development and environmental justice issues related to the Mula-Mutha Riverfront Development, government support and implementation is also needed.

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Water Scarcity, Water Poverty and Water Crisis in Enugu State, Nigeria: Recommendations for citizens in claiming their water rights.

Winifred Maduko



INTRODUCTION

Water scarcity occasioned by insufficient supply of safe water, inadequate water infrastructure, weak institutional capacity and difficult geology for accessing groundwater, is a perennial challenge in Enugu State, South-eastern Nigeria.

Presently, 89% (4,097,384) of persons living in Enugu State do not have access to safely managed drinking water services (Federal Ministry of Water Resources et al., 2021; National Population Commission, 2020). This means 9 out of every 10 persons in Enugu State are denied their basic human right to water. This human right to water and sanitation was explicitly recognized by the United Nations General Assembly and Human Rights Council in 2010 and 2015. Enugu State is completely off-track and is unlikely to achieve the Sustainable Development Goals (SDG) target 6.1, which is universal and equitable access to safe and affordable water for all by 2030.

Access to safely managed water and sanitation is essential for good health, welfare, and productivity, and is critical for socio-economic development of a prosperous society (NBS and UNICEF, 2022). Sadly, some countries in the global South are challenged, not only with poor access to safely managed drinking water, but also with poor drinking water quality due to growth in population, improper waste disposal and industrialization among numerous other factors (Mohsin et al., 2013). Data from the Federal Ministry of Water Resources et al. shows that 70% of households in Nigeria – and 74% of Households in Enugu State – drink water contaminated with Escherichia coli (E.Coli) in their homes (2021).

This essay focuses on the water crisis in Enugu State, and how residents cope with water scarcity. The essay examines government policies developed to solve the problem of water scarcity and water poverty in Enugu State. This perennial water crisis triggers poor sanitation and hygiene and creates significant suffering for the residents, which disproportionately impacts women and girls. It is important for communities to know how to claim their water rights. The final part of this essay includes actionable recommendations for community members to implement towards ensuring improved access to safe water in the State.

ABOUT ENUGU STATE

Enugu State is in South-eastern Nigeria. It was created as a sub-national unit of government on August 27, 1991. The State covers 7,161 km2 (2,765sq miles), and ranks 29th out of the 36 States of Nigeria in terms of land area. The State has a total number of 17 Local Council Areas with the capital of the State also called Enugu (Enugu State Government, 2019). The projected population of Enugu State for 2021 is 4,603,802 (National Population Commission, 2020).

Enugu derives its name from the topography of the area. Enugu means hilltop, as it is situated on top of a hill. The hilly surroundings of Enugu and the underlying geologic formations contribute to the water crisis because it is difficult and almost impossible to access groundwater due to the exceptionally low water table and impermeable rocks. Past governments in the State have held onto this for years when there are alternative solutions to the city's water crisis.

POSITIONALITY

I lived in Enugu State for the past twenty-two years. I grew up to hear the popular saying that "water is life." Every single day in those twenty-two years of living in Enugu State, access to safe water was a challenge – and sadly, it is still a very big challenge.

If we try to imagine how humans would cope without any means of accessing safe water, we will discover that it is a nightmare that no one should ever have to face. I remember the days we had to fetch dirty water from groundwater sources referred to as "hand dug wells." The sad thing about fetching water from the hand dug wells is that we had to pay for the dirty water. There were days people ration the insufficient water, allocating specific quantities to different families in my neighbourhood. This rationing made people decide to bath once within a certain number of days, people stopped flushing their toilets after use because they were trying to conserve the little water they have and some resorted to open defecation which leads to transmission of faecal-oral diseases which has widespread negative health and economic impacts on the population.

Nigeria currently ranks number one globally in open defecation with 48.6 million persons (23% of the population) practising open defecation. This motivated the Nigerian Government to launch the "Open Defecation Free Road Map" in order to get the country Open Defecation Free by 2025. In Enugu State 1.9 million persons (48% of the population) practice open defecation (Federal Government of Nigeria & UNICEF, 2016; Federal Ministry of Water Resources et al. 2021).

Access to adequate quantities of safe water is not only a basic human need, but also a basic human right, and every government is duty-bound to ensure its citizens have unhindered access all year round.

WATER SCARCITY, WATER POVERTY AND WATER CRISIS IN ENUGU STATE, NIGERIA

According to UN Water, there are several reasons for water scarcity including the demand for water exceeding supply, inadequate infrastructure, and weak institutions. Other reasons include population growth which increases demand and climate change which diminishes terrestrial water storage (in soil, snow, and ice).

Poverty is often referred to as a state where resources are scarce or underprovided. Water poverty in this context is a situation where the populace does not have access to adequate quantities of safe water due to scarcity. According to Feitelson et al., Water poverty is a condition where an authority is unable to afford the cost of improved, sustainable and good quality water to the populace (2002).

According to Katie, issues like the challenge of water poverty become too critical as a result of increase in population and fewer resources (2009). Urban water utilities in Enugu State managed by the Enugu State Water Corporation (ESWC) currently operate at 16% of the design/installed capacity, producing just 24,000m3 of water daily, while to design/installed capacity is 150,500m3 per day. Major challenges faced by the ESWC include the frequent breakdown of aged infrastructure, the non-payment of tariff by government institutions, the inadequate supply of energy from the national grid, staff shortages and technical capacity gaps to manage modern technologies (Enugu State Water Corporation, 2022).

The Rural Water Supply and Sanitation Agency (RUWASSA) oversees provision of water supply services in rural areas, with most water schemes being dysfunctional in their current state (see Figure 1). Other options include private service providers who sell water to endusers, and self-supply, where those who can afford construct, their personal shallow hand dug wells or deep wells.

As prescribed by the Sphere Standards, during emergencies, the minimum per capita requirement for water is 15 litres per day for drinking and domestic hygiene (Sphere Association, 2018). This translates to a daily minimum requirement of 61,500m3 for the population of Enugu State in case of emergency. Obviously, the daily production capacity of government water utilities at 24,000m3 is not enough to meet half of the minimum requirement for water in emergencies. The Federal Ministry of Water Resources, et al puts the volume of water available per capita per day in Enugu State at 8 litres (2021). Considering inequalities across wealth quintiles and urban/rural dwellers, there could be a significant number of underserved populations who may not be able to access even the 8 litres per capita per day.

According to Iredia, T. (2021) and Agbo, D. (2021), with national minimum wage of \$2.3USD per day, Mr. Onodougu, a civil servant who resides in an area of the Enugu metropolis called Trans-Ekulu, with a family of 7 dependents, spends a minimum of \$1.5 per day on purchasing water for the family. Residents who cannot afford this cost, depend on surface water sources which are not only polluted but are also close to dump sites and open defecation sites (Ajala, 2022). Residents undergo extreme pain and financial cost to access water. Households in Enugu wake up as early as 5am daily to take a long walk to dirty streams to fetch water for their daily use, this water is not clean, and in most cases, residents pay for the dirty water.

Successive governments have grappled with the perennial challenge of water scarcity, also citing the State's topography and geology, which makes it difficult to access groundwater. Nonetheless, Enugu State has surface water sources like springs, rivers, which can be harnessed, treated, and supplied to households. Other challenges that impact on the quality of surface water are poor waste management practices, like indiscriminate disposal of wastes by the residents, turning water bodies into dumpsites and contaminating the water sources available to them.

This scenario of inadequate public water supply – and the inability of residents to access or afford adequate quantities of safe water in Enugu State – is not just water scarcity or water poverty, but a water crisis. This has significant health and economic implications. The State government needs to prioritise and accelerate the provision of adequate, safe water to residents of the State which will guarantee good health, wellbeing, and socio-economic development.

WHAT HAS THE GOVERNMENT DONE?

The government of Enugu State has taken some actions to establish partnerships and mobilise resources to increase access to water supply services in the urban settlements in Enugu State. While the present government has continually emphasised that the water crisis in Enugu is a perennial challenge they inherited from previous governments, it is important to highlight that government is a continuum, hence the present government shunting blame is of limiting productivity.

In 2020, the Enugu State Government, through the Federal Government of Nigeria – with funding from the Agence Française de Developpment (AFD) – enrolled and commenced work on the "Third National Urban Water Sector Reform Project." The main objective of this project is to increase access to improved water supply, improve the financial viability of the water utilities and strengthen the investment planning capacity of Enugu State (The World Bank, 2022).

To achieve this objective, the project is hinged on two major pillars. The first pillar is the rehabilitation, upgrade and expansion of existing water supply infrastructure; which includes production boreholes, laboratories and treatment plants, reservoirs, transmission pipelines and distribution networks, water metres, and office buildings. The second pillar is the design and implementation of reforms in water sector governance, strengthening water sector institutions and developing human capital (The World Bank, 2022).

The Governor outlined the implementation plan, and gave progress update of the project to include: the rehabilitation of Oji, Ajali and 9th mile water schemes, replacement of dilapidated water distribution pipelines in Enugu metropolis, construction of additional boreholes in Nsukka to improve water supply in Nsukka urban, connection of unserved neighbourhoods to the public water supply system, and strengthening the capacity of Enugu State Water Corporation by providing a competent, adequately equipped and highly motivated workforce (Vanguard, 2021a).

In August 2021, the current Enugu State Governor assented to the State Water Law after the

Dysfunctional water supply systems in Enugu State. Photo by Author





legislative house passed the bill, which provides the legislative framework to 'harmonise the functions of government agencies in charge of generating water, and community involvement in maintenance of water infrastructure' (2021). The law outlines the role of government and citizens in achieving sustainable water for all in Enugu State. A coalition of civil society organisations in the State met on 17 August 2022 to seek the full participation of every stakeholder and the government towards ensuring adequate implementation of the Water Law in the Enugu State (Vanguard, 2021b & Njoku, 2022).

While the government has taken significant action to address the water crisis with huge financial investment, most of the effort seems to be focused on the urban settlements, with little or no mention of rural water supply. This does not reflect a holistic approach to solving the water crisis across the entire State. It is also worrisome, that despite the enormous resources committed to addressing the urban water supply needs, much of the urban populace still grapples with the unending water crisis.

HOW HAVE COMMUNITIES COPED WITH WATER CRISIS IN ENUGU STATE FOR SEVERAL YEARS NOW

Many homes have resorted to alternative means of sourcing their domestic water supply as public water supply from the government is not reliable. Surface water sources like streams have become the mainstay of some communities where the luxury of streams exist. Some households construct shallow hand dug wells, while others construct deep wells where their resources and the topography/geology permit. These privileged few are in the minority; additionally, hand dug wells do not guarantee clean water. The water from hand dug wells is usually dirty and during the dry season and harmattan season in Nigeria from November to March, the water in the hand dug well dries up.

Some other households construct reservoirs with PVC tanks and buy water in bulk from water tankers to fill these reservoirs. Water trucking and sale of water using tankers is quite common in urban settlements in Enugu State. There is also the option of buying packaged water, usually referred to as sachet water or bottled water. These are all expensive options which most residents cannot afford. For those who cannot afford these options, they must wake up incredibly early in morning and trek long distances to surface water sources,

which are in most cases dirty, to get their supply of water for domestic use.

People living in some major urban areas in the city, like New Haven and Independence layout, have experienced epileptic water supply from the State Water Corporation, which is usually followed by huge water bills. They frown at these bills because of the intermittent water supply. Adeiye reports that people living in Enugu go extra miles to manage water; these residents search for water in the most unexpected places (2022). While expressing concern about the public water supply, one of the urban residents mentioned that the city's water plan is ineffective and not serving the people. Most urban residents in Enugu, complain about water supply and water scarcity. (Adeiye, 2022).

RECOMMENDATIONS FOR COMMUNITY ACTION

To claim our right to the city, we must recognize the power we possess towards shaping a city that fits our needs, expectations, and growth (Harvey, 2003; Harvey, 2016). There is currently an online campaign on Twitter, focusing attention on the water crisis in Enugu. This campaign was initiated by youths on twitter when they began an outcry over water scarcity in the city. The twitter campaign uses the hashtags: #waterscarcityinenugu, #claimyourwaterrights, #nowaterinenugu. To help amplify this campaign and stop the perennial water scarcity, especially during the dry season, this campaign needs to be sustained and organised to enlist the support and participation of every Enugu citizen and other stakeholders like the civil society and the media. Citizens have a right to demand for services from the government, especially their human right to water and sanitation. To complement the ongoing online campaigns by the people, the following are actions communities can implement:

Establish Community Water Management Group:

Communities need to prioritise the effective management of their existing water resources and develop plans to articulate and meet their water supply needs. To achieve this, communities need to collectively establish community management teams for water and allied needs like hygiene and sanitation. These community management teams should have specific roles and responsibilities to lead the community to identify water and allied needs, identify key stakeholders, develop holistic plans, mobilise resources and champion advocacy efforts.

Develop Community Water Safety Plans

Communities need to take proactive steps to protect their existing water sources from contamination. Poor waste disposal practices and open defecation pose a serious threat to the contamination of surface water bodies.

Communities need to collectively agree on measures to prevent contamination of water sources, and explore simple, affordable household level technologies to treat water for drinking while ensuring that water at the household is not re-contaminated. The process of putting these measures together is known as the development of the CWSP or Community Water Safety Plan (Centre for Disease Control and Prevention, 2022). Taking it a step further, communities can also use simple technologies like Hydrogen Sulphide (H2S) vials to check the microbiological quality of their drinking water. When the CWSP is developed, every

community member should be encouraged to faithfully implement it at a community and household level. Communities can decide to set up a fine payment system as a deterrent, where defaulters are subjected to pay, the money generated can be used to further develop water sources for the community.

Engage in Sanitation and Hygiene Promotion

Communities need to educate members on the dangers of poor waste management and open defecation. Communities need to agree on appropriate, alternative waste disposal measures and monitor them effectively to ensure compliance. This includes actions to end open defecation. Where this is done effectively, it is called Community Led Total Sanitation (CLTS).

Adopt effective Water Facility Management Models

Where communities have existing, communal and higher quality water sources like deep water wells, the community should ensure there is an effective management model for the water facility. This includes the engagement of dedicated, trained facility caretaker(s), technicians to periodically maintain electrical and mechanical parts, a tariff system to ensure funds are available to take care of operation and maintenance needs, etc. Where such a management system is in place, it ensures the continued functionality and sustainability of the water facility.

Advocate for and adopt greener, cost-effective technologies

Community driven water supply systems are usually burdened with heavy operation and maintenance costs associated with the use of fossil fuels for power generation to abstract water. Apart from the fact that fossil fuels contribute to greenhouse gas emissions, which is not good for the environment, they also are expensive, hence some communities are unable to power their water systems.

A shift to technology options like solar powered water systems will not only reduce environment pollution, but also reduce overall operation and maintenance cost in the long run. Communities and governments usually worry about the initial high capital cost of solar power generation; however, a cost-benefit analysis can help point them in the right direction as it is cheaper in the long run.

Explore alternative water supply technologies

Community members can be taught on how to construct, operate and maintain alternative, cost-effective, and environmentally friendly, alternative water supply technologies like rainwater harvesting and groundwater harvesting.

Rainwater harvesting is a positive and practical way of sourcing water that has less negative impact to the environment. It decreases the need to pump groundwater or divert ecological flows. Rainwater harvesting can help decrease pressure on ecosystems. This system has worked effectively in India (Cain, 2014). Groundwater harvesting through dams, wells, cisterns and aquifers, and storage for future use can be explored by communities (Egbo et.al., 2022).

Claim Your Water Right with Your Election Vote:

The general elections to vote for leaders and representatives at various levels of government

comes up every four years in Nigeria. The next election is in 2023. It is a golden opportunity for community members to engage political parties and their candidates vying for various elective positions, bringing the crisis to the forefront of political discourse. Citizens must use their vote to demand for their water rights. Community members must realise that when they vote right, they are voting for safe drinking water, good health, and sustainable development.

Citizens must stop selling their votes to politicians that come to them with false pretence. Now is the time to carefully elect politicians that will help alleviate the water crisis in the State. Voting for leaders that have the conscience to listen and capacity to act, to tackle the lingering water crisis in Enugu State, is key to any long lasting and effective development.

Establish Accountability and Advocacy Groups for Access to Safe Water Community members, community leaders and civil society organisations should collaborate to establish mechanisms to hold political leaders accountable to their election promises and generate manifestos in the area of access to safe water. Such should include a core group of well-meaning opinion leaders who will mobilise the citizens to sustain their demand for their water rights and ensure accountability, credibility, and good governance in the water sector.

CONCLUSION

The perennial water crisis in Enugu has lasted for several decades. Efforts by the government have not translated into meaningful solutions for this intractable crisis. Residents have adopted different coping mechanisms; however, the crisis has multiple socio-economic and health impacts on the population.

This water crisis requires inclusive, holistic, and pragmatic solutions that cuts across urban and rural settings, with multi-stakeholder involvement, especially through the empowerment of community voices. Community-driven solutions will ensure ownership and sustainability of the water systems while the government takes centre-stage as the duty bearers. The recommendations in this community briefing intend to awaken the interest of community members in taking their water rights and highlighting their roles in achieving good water governance and accessing water.

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Combatting the Mental Health Crisis in London Through Community Led Recommendations

Theo Clark



INTRODUCTION

London has been my home all my life. In this time, I have interacted and experienced the city in many ways. A particularly poignant one of these experiences was becoming a National Health Service (NHS) healthcare worker at the height of the pandemic. Upon starting this role, I was surprised at the large proportion of patients across varied socioeconomic backgrounds in London's diverse population who were on some form of antidepressant medication. During my continued work, I witnessed first-hand the immense pressure that the NHS was facing at the hands of government budget cuts, chronic understaffing, and employee burnout, and, subsequently, the implications this had on patient access to formal mental health support services. This experience has led me to choose the urban mental health crisis as my topic to address. To appropriately explore and generate recommendations for this urban challenge, it is first important for me to disclose that I personally have no experience of seeking any form of treatment for mental health related concerns, and that my experience comes from working in healthcare where I interacted with those seeking help and the system which is there to serve them.

There are many mental ill-health conditions that exist, and at varying degrees of severity. This briefing however will focus on the mitigation and treatment of the two main conditions that anti-depressants are taken for in the United Kingdom. These being clinical depression and generalised anxiety disorder (NHS Inform, 2022). In this community briefing, I will first begin by exploring the importance and context of the urban mental health challenge by breaking down the contributing factors that arise from the city environment. Secondly, the briefing will break down the incidence of the challenge in the London context with disparities between different London boroughs and the services available to them and how this contributes to the challenge. Thirdly, I will evaluate and reflect on how the current management from different levels of governance and their service-providers in the city are falling short with their chosen modus operandi on treating mental health issues. Finally leading me to lay out a series of recommendations at the community level that set a basis to approach treating and benefiting the mental health of the London population with new, more equal and holistic methods, in both pre-emptive and complimentary ways to the current approaches adopted by the city.

THE URBAN CHALLENGE

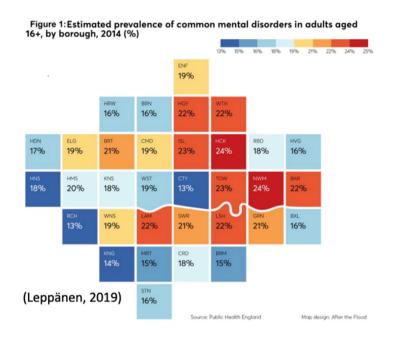
Cities are widely perceived to be the key in achieving a more sustainable future, due to over 50% of the world's population living in urban areas (Chatterton, 2019: 2). This is on account of there being the potential to enact positive change on a large scale in a relatively compact area (Chatterton, 2019: 2). The importance of paying attention to mental health as an aspect of sustainability is reflected in UN Sustainable Development Goal (SDG) 3, 'good health and wellbeing' where specifically 'target 3.4' focuses on the promotion of good mental health (United Nations, 2015). The role of combatting the challenge in the global sustainability effort is vital on the social aspect given their interdependent links with other SDGs. These particularly lie within the realms of social justice, due to poor mental health incidence being in correlation with higher poverty levels, education rates and access to green spaces (De Roode Jauregui, 2022). As a result, it is well-informed to comment that it is impossible to begin to perceive the idea of a city being truly 'sustainable' without first addressing the emotional state of those who reside in urban areas.

The early foundation of cities was grounded in the attraction of an easier life in group living (Mumford, 1938). In more modern times, there has been an alternative transformation that has resulted from the stressors and consequences of high-density habitation. Cities are becoming more greatly associated with higher levels of dissatisfaction amongst residents, and this is particularly reflected within the urban population of countries in the Global North (Burger et al, 2020: 75). Global data shows that the risk of developing depression is 20% higher in those who live in cities as opposed to those who do not, and for anxiety the figure stands at a 21% increased risk (Mechelli, 2019). This begs the question: what is causing these trends in our cities? Research into the epidemiology of depression and anxiety has found multiple factors of urban life that contribute significantly. Environmentally, these are problems, such as high air and noise pollution, lack of green space, and overcrowding (Mechelli, 2019). While on the social and economic aspect there are rampant inequalities such as access to healthcare and education, income gaps, but also factors such as chronic loneliness and high crime rates that are exacerbated by the urban environment (Mechelli, 2019). It is also important to recognise the recent role of the Covid-19 pandemic in heightening these inequalities and societal problems, and their subsequent implications on global mental-wellbeing. Whilst these factors themselves are also significant urban challenges, it is their very interrelated nature that provides an exciting opportunity for new initiatives to be widespread in their efficacy when focusing on combatting anxiety and depression in London.

THE SITUATION IN LONDON

London follows suit in global trends, with roughly 914,300 working-age adults experiencing formally diagnosed anxiety and depression, and just under half the city's total population reporting anxious feelings, and a third low happiness (Mental Health Report, 2014: 6). This translates to London being negatively above the national average on both measures. In addition, the economic repercussions from treatment costs (£7.5 billion), loss of productivity from employment absences, and implications such as increased crime rates on mentally vulnerable individuals are valued at a total of £26 billion a year (Mental Health Report, 2014: 6). Despite the large government spending on mental health annually in the city, there

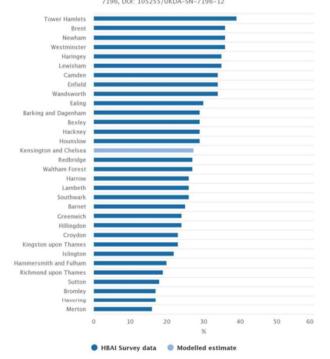
are visible differences in mental wellbeing amongst London's 32 boroughs that infer underlying inequalities in different areas with their disparities of living conditions and available treatment that affect their quality of life. Figure 1 shows that three of the five boroughs with the highest poverty rates (Tower Hamlets, Newham, and Haringey), all have a percentage prevalence of 22% and over of common mental health disorders.



Estimated prevalance of common mental disorders in adults 16+, by borough, 2014.

Figure 2: Poverty rates by London borough (2019/20)

Data source: Office for National Statistics, Social and Vital Statistics Division, NatCen Social Research, Department for Work and Pensions (2021) Family Resources Survey, 2005/06–2019/20, Households Below Average Income, 1994/95–2019/20 and Pensioners' Income, 2007/08–2019/20: Safe Room Access (data collection) 11th Edition UK Data Service SN: 7196, DOI: 105255/UKDA-SN-7196-12



Poverty rates by London borough (2019/20)

Furthermore, when more broadly cross examined with the poverty rates depicted in figure 2, there is an evident overall trend of common mental health disorders being overrepresented amongst these low-income communities. Therefore, it is vital in putting forth community recommendations that they serve to provide and be accessible to this demographic that are suffering from the urban challenge the most — a fact recently amplified by the 'cost of living crisis' that is felt the most by those from low-income households.

Poverty rates also play a significant role amongst mental health in children, where in the UK the poorest 20% of households have quadruple the chance of developing serious mental health conditions by the age of 11 in comparison to those in the top 20% (Watkins, 2022). Additionally, a paper by Samaan (2000) looks at the influences of race, ethnicity, and poverty on the mental health of adolescents. The author's work coincides with the trend put forward by Watkins (2022) regarding children from low-income backgrounds. However, he also explains his findings of an underlying ethnic aspect to consider, as he found that those from non-white ethnic backgrounds were less likely to report issues and seek formal treatment, due to both cultural beliefs surrounding the sourcing of support, and feelings of distrust towards the formal healthcare system (Samaan, 2000: 108). These findings are extremely important when looking to propose community led recommendations given that 41% of Londoners are from a black, Asian, or ethnic minority (BAME) background, and poverty rates are 39% higher among this demographic in London (Trust for London, 2021). Accordingly, the vital role of community led recommendations is also heightened as it provides an opportunity to reach these specific demographics in a new way by delivering methods to positively mitigate or treat mental health problems outside of conventional

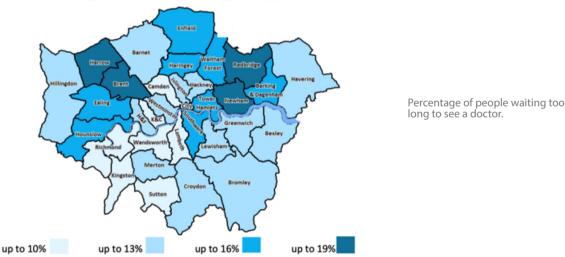


Figure 3: Percentage number of people waiting too long to see a doctor

biomedicine, while doing so in an environment with less stigmatised attachments. Furthermore, it is evident that young people are more vulnerable to developing mental health conditions from increased risk factors that are out of their control (Watkins, 2022). As a result, the role of the community provides a unique opportunity create a positive impact during this fundamental time of vulnerable children's lives, which has the potential to influence a whole mentally healthier next generation in London.

The scale of biomedical treatment in London is vast, as reflected by the prescription of

antidepressants, where in 2018 a total of 5,285,347 prescriptions were issued (Pennington, 2021). However, there are large access inequalities to formal healthcare services. Figure 3 created by NHS England illustrates how wait times to access a 'general practitioner' (GP) in London is typically faster in higher income boroughs due to better salaries attracting the already too few GPs to those areas. Consequently, London residents who are the most in need of mental health related appointments struggle to receive the support they need. This also means that referrals made by a GP for a patient to NHS' secondary care mental health specialists takes longer, for they, too, are already overstretched. As a result, GPs are faced with having to treat patients within their (often insufficient) levels of expertise and not being able to dedicate enough time, or even assure continuity of care (London Health Committee: 2018: 6). This leaves them without many options besides starting patients on standard medication. Additionally, these areas are even more disadvantaged due to not necessarily being able to access private treatment, as opposed to residents in other areas who can afford private consultations, which only serves to reduce the strain on that area's NHS provisions. Therefore, those in more disadvantaged areas are entrapped in a cycle of increased risk-factors on their mental health, while being unable to receive a concordant level of support that matches their needs.

EVALUATING PAST AND CURRENT APPROACHES

Due to the increasing prevalence of mental health conditions in London as outlined above, the government is investing heavily in positive mental health schemes within the city. However, regardless of their efforts, they have self-branded their current direction as unsustainable with the £7.5 billion spent each year in tackling mental ill-health and these costs predicted to only increase over the next two decades (Mental Health Report, 2014: 5). Already during the Covid-19 Pandemic, the cost of anti-depressants increased nation-wide by £139 million in 2020 compared to the year before (Robinson, 2021). So, what are the current approaches and where are they going wrong?

London, across all levels of its governance on mental health policies, takes a fixative approach to the crisis with an emphasis on treatment once mental health problems have emerged. This has resulted in the level of medicating detailed previously, and further a societal attitude of seeking a 'quicker' chemically induced 'fix' as opposed to alternative methods (London Health Committee: 2018: 6). Whilst the importance of the role of anti-depressants is undeniable in their benefit on many patients lives, the London Mayor's report detailing the unsustainability of the current direction, along with the systemic challenges, infers the need to urgently start transitioning away from this kind of treatment where possible to achieve equal or better patient care and outcomes.

'Thrive LDN' is a Mayor of London- and London Health Board-backed scheme that is currently running in different areas across London. As the largest mental health initiative, their work focuses on training young people in schools as mental health first aiders and providing education in communities around how they recognise mental health concerns, with the aim of supporting those who are particularly vulnerable across London's population (Thrive LDN, 2022). This is an extremely positive example of the use of a top-level governance-backed scheme being implemented at community levels. Their work, however, largely focuses on education for recognising mental health issues and encouraging

the seeking of formal help. As a result, it is not self-sustainable in treating depression and anxiety on the community level. Although it is provided with funding, unfortunately it fails to bring in experienced professionals who can provide support and manage alternative treatment plans that also fights against the ever-present access disparities. This, therefore, highlights the need for community level trained professionals who can cater to the varied needs of London's population, but also remain outside of the formal NHS system to remain accessible in community specific environments.

Increasing green spaces initiatives in London, such as the 'Rewild London Fund' and the 'Grow Back Greener Fund', are multi-million-pound initiatives to provide Londoners with greater nature connection within their urban environments, whilst also increasing the city's resilience to the effects of climate change (Mayor of London, 2021). Research has shown positive correlations between the amount of greenspace in communities and mental wellbeing, with reduced levels of depression and anxiety stemming from the relationship between spending time in nature and having positive mental experiences (Barton and Rogerson, 2017). The quantifiable results shows that people who use greenspaces for exercise at least once a week have just under a 50% less chance of developing poor mental health, and multiple uses a week adds a further 6% (Barton and Rogerson, 2017). The steps taken towards urban greening provides an exciting opportunity for Londoners across all boroughs to reap the human benefits, alongside the environmental. Despite these efforts, it is important to recognise the flaws in the approach, as the greatest challenge lies in getting community members to engage with greenspaces in practical ways. Simply relying on their presence is not enough to combat systemic crises of this scale, especially given that social withdrawal and inactivity are common symptoms of anxiety and depression (Soong, 2021). Correspondingly, this leads onto the first community recommendation for the city.

RECOMMENDATIONS:

Community led green social prescribing

Whilst combatting the mental health crisis does require positive implementations from the highest levels of London's governance, there are community level initiatives that can go a long way in making a difference. The first recommendation proposed in this briefing is the setting up of community-led 'green social prescribing' (GSP) initiatives. GSP is method of aiding individuals to participate in nature-based interventions, to positively benefit their mental health (Natural England, 2022). As figure 4 visually demonstrates, GSP works by using a variety of activities to engage three distinct aspects of an individual's mental health so that they can form new and positive connections with themselves and the world around them (Leavell et al, 2019: 299). Ba contrast, when used as a preventative tool, this can lead to such positive outcomes that were previously stated by Barton and Rogerson (2017) in their study of the effects of nature engagement on mental health. An example of this working in practice elsewhere in the UK is a group called 'The Conservation Volunteers' who have set up the initiative, called 'The Green Gym'. The initiative helps to create and connect people to environmental projects, where they can exercise both their body and mind through engagement in nature conservation. Applied in the London context, this initiative could work with current urban greening schemes and provide increased participation for those in need. Alternatively, it could pre-emptively reduce the risk of Londoners developing mental health conditions, such as anxiety and depression, by engaging those vulnerable to

mental health issues — an approach that is not taken into sufficient consideration in London. In addition, the scheme has great potential to be referrable to by NHS services, such as GPs, thereby providing them with alternative signposting options outside of their overstretched system. This becomes particularly beneficial, since formal GSP has struggled to be adopted with only 29% of the London regional Clinical Commissioning Groups adopting it into their budgets. Additionally, it is present mainly in the wealthiest of boroughs with the lowest number incidences, further increasing inequalities (Healthy London Partnership, 2018: 17).

Internal community based mental-health nurses

This recommendation takes inspiration from a World Health Organisation scheme, called the 'Mental Health Gap Action Programme' that is currently being implemented in Sierra Leone. The programme works to provide low-income communities, who do not have access to formal mental-health services, with the training of psychiatric nurses (paid and volunteering), who can provide primary diagnosis, treatment, and ongoing management for those in need and otherwise unreachable (WHO Africa, 2012). In many ways, the underlying contexts that the scheme was designed for bear resemblance to the inequalities found amongst London boroughs and the issues surrounding access. I suggest that the training of such community-based experts in the London context would not only temporally increase accessibility to those in need, but also, having trained professionals within smaller community organisational levels, such as local recreational spaces, clubs, or faith centres, would also do positive work in challenging stigmatisation. Embedding professionals on this level could work towards gaining trust amongst the diverse population of the city, particularly in high-incidence BAME communities, challenging the conceptions previously highlighted in Samaan's (2000) article. Furthermore, it is important to recognise that the needs of different communities vary. Having more tailored knowledge, as opposed to onesize-fits-all approaches, can work more effectively in maximising the efficiency of outcomes in respect to treating and mitigating depression and anxiety.

Promoting community peer-support

The final recommendation of this brief focuses on striving for a more self-resilient urban population that, in the long term would reduce the impact that the strain of the city has on its populations' mental health. Thus, in contribution with other community schemes and higher governance policy implementations, it could reduce the risk of developing depression and anxiety. Whilst this is a broad aim, there are specific ways in which this could be attained. The concept revolves around two main aspects: 1) de-stigmatising discussion around mental health concerns and 2) being able to turn to the members of one's own community for support. The importance of adopting this recommendation lies in the intrinsic link between loneliness and severity of depressive symptoms; in the UK in 2021, 1 in 5 cases of depression was linked to feelings of isolation (Lewis, 2021). Examples of implementing this recommendation include ideas, such as the creation of events within different London communities, like mental health information talks and hosting discussions and support groups. These events would serve as the foundation for educating the city dwellers and creating a new support network within an urban space that creates supportive relationships both between groups and individuals, thereby creating spaces, where people can freely share their problems and seek help and advice. A similar example is the mental health charity, 'Mind' that provide local wellbeing services, including group talks and therapy sessions, which are both NHS- and charity-funded (Mind, 2022). Although this is a

great resource available to London citizens, a re-worked method that uses local community organisations as facilitators and stakeholders for these networks could attain higher levels of outreach. This could result in more frequent social interactions and a stronger sense belonging, both being key elements of the diagram in figure 4 to achieving good mental health. Concurrently, this could also relieve the pressure on NHS services by shifting societal conceptions of where quality support might come from.

LOOKING FORWARD:

At a time, when the NHS itself is suffering a mental health crisis, with over 21% of staff reporting high levels of depression resulting from working conditions and having no shortor long-term solution in sight (Edwards and Cowper, 2022), there is now a greater need than ever for initiatives to emerge from within London's communities that support and complement the ways in which the city treats its two most significant mental health issues. The recommendations put forward in this briefing outline a) the exciting opportunities that London has, to both mitigate and treat poor mental health, and b) its potential scope to concurrently tackle systemic issues of social justice and inequality. When envisioning and pursuing a more sustainable city, the mental health of its residents is proving to be an essential factor with both the social and economic ramifications being indisputably too great to ignore. The current situation demonstrates clearly how financial investment is simply not enough and how tackling this urban challenge requires a more holistic approach that can only be achieved through community engagement. While it is London's dynamic and diverse population that creates so many of these challenges alongside the systemic problems, it is also those very same attributes that, when engaged in the right way, will allow London and its inhabitants to effectively tackle the widespread challenges to their mental health.

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Addressing Well-being Inequality of Elderly Migrants Community in Shanghai, China

Can Li



ELDERLY MIGRANTS IN THE CHINESE SOCIAL CONTEXT

The hukou system is a unique household registration scheme introduced in the 1950s, aiming at maintaining social order in cities and allocate human resources under a centralised governmental plan by restricting rural-urban migration (Liu, 2005). Individuals are restricted to one place by residence registration. It is ascribed at birth and is usually based on guardians' hukou status. The transition from planned to market-oriented economy in China has led to massive changes to political philosophy and institutional systems (Liu et al., 2016). While the hukou system was once associated with the centralised government to plan and deliver state-provided welfare packages, it has now become an institutional barrier to achieving social justice. It shaped the two-class urban society, separating local residents and migrants (Li and Huang, 2007). Without a local hukou, migrants are excluded from full citizenship and local social benefits and other services. Being a migrant with local hukou is possible, depending on the migration policies of each province or municipality. The ease of the hukou policy is commonly used as a way to attract investments and skilled labour. Shanghai is not only a major migrant destination, with 42.1% of the population being migrants according to the 2020 Census, but also the place with the most rigid hukou policy (SSO, 2021b). In this community briefing, 'migrants' will refer to those without hukou in Shanghai, also called as 'floating population' and 'temporary migrants'.

Migrants move to big cities like Shanghai for many reasons, but mainly for more job opportunities, higher income, and better living standards. The 2020 National Census has provided reliable demographic data for analysis (SSO, 2021b). Surprisingly, a new group of migrants aiming at taking care of grandchildren count for 3.55% of the total migrant population. It seems like a small proportion of the population, however, considering the vast migration population in Shanghai (10,479,652 people), this group is substantial. Among them, the ratio of elderly (defined as 60-year-old and above) is 61.7%, with a total of 229,577 people. Unlike individualist Western societies, Chinese society remains collectivist, due to continued adherence to traditional Confucian values (Liu et al., 2016). Family harmony and close interpersonal relations are essential according to Chinese social norm. Increasing elderly migrants to help their children in the city, taking care of grandchildren has become a new trend to fill the shortage of social support for childcare after the cancellation of the

one-child policy. This community briefing explicitly targets the elderly migrants (60+) moving to care for grandchildren.

SOCIAL EXCLUSION AND WELL-BEING INEQUALITY FACED BY ELDERLY MIGRANTS IN SHANGHAI

Measuring social exclusion was adopted to reshape the linear measurement of poverty when examining social disadvantages (Gore et al., 1995). Other political, social, and cultural factors can also cause social inequality issues (Tong et al., 2011). Social exclusion, therefore, involves not only a lack of access to primary resources, such as urban infrastructure, but also the inability to fully engage with society – in other words: the lack of rights to the city. Senior citizens face higher risks of social exclusion due to economic-structural exclusion, such as lower income and socio-cultural exclusion, and lower levels of civic participation (Tong et al., 2011). There is a clear relationship between social exclusion and the well-being issue of the elderly (Podnieks, 2006). Shanghai's population was one of the first to be classified 'ageing', as early as 1979, and pioneering elderly care projects to reduce social exclusion among cities in China (Wang, 2019). However, due to the social segregation created by the hukou system, plans to combat age-related exclusion were mainly based on the need assessment of the elderly population with Shanghai hukou, which further disadvantaged elderly migrants.

Economic-structural exclusion

The hukou system also impacts the pension system, with pension being based on recipients' registered geographic location. Elderly migrants' group in Shanghai usually face higher financial pressure with lower pension levels than the local elderly, and higher living costs in Shanghai compared to where they are originally from. Even though this group of the elderly migrants tends to have relatively smaller financial pressure on daily household costs, the change in consumption patterns and the feeling of economic dependence on children can potentially lead to a higher level of mental stress. Compared to local Shanghainese, senior migrants face a higher risk of well-being infringement from a financial perspective.

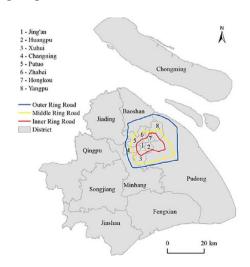


Figure 1: Administrative division map of Shanghai, Li et al., 2022

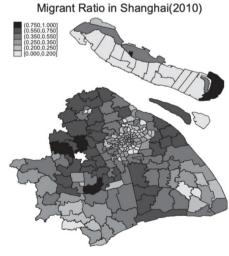


Figure 2: Migrant Ratio in Shanghai 2010, (Liu et al., 2019)

Back in the times of planned economy, housing in Shanghai was arranged for citizens based on their work units. This resulted in the concentrated local population living in the inner part, where urbanisation took place first. Now, with a market-oriented economy, housing prices are much higher in the inner city due to its higher accessibility to facilities and jobs. For these reasons, migrants generally tend to live in the outer city, where housing is more affordable and available. Figure 2 shows the spatial distribution of migrants in Shanghai based on the 2010 Census, with a clear trend of higher migrant concentration in the outer city (Liu et al., 2019). Elderly migrants would no doubt follow the trend with a higher density in the outer city by living with their child. Living farther from the city centre means less accessibility to high-quality recourses and more time needed for commuting.

Even in the inner-city part, elderly migrants are more scattered and tend to expand to the edge with lower-priced commercial and marginalised housing areas compared to a more concentrated local elderly living in traditional housing and work units shown in Figure 3 below (Liu et al., 2014). Both Figure 2 and Figure 3 indicate that the city centre is more dominated by the local elderly, allowing them to acquire advantages in accessing abundant physical and social resources over elderly migrants.

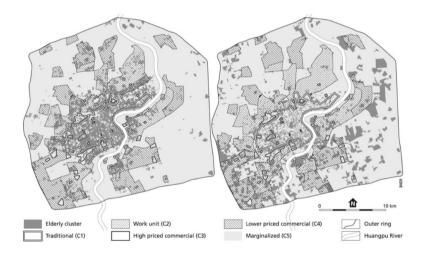


Figure 3: Local (left) and migrant (right) elderly clusters in the inner city (Liu et al., 2014)

Socio-cultural exclusion

The economic-structural exclusion attributed to housing distribution could be an accelerator of social-cultural exclusion — the traditional housing area and work units, where local elderly live, have a better sense of community. Lifestyles in cities are fast-paced and often highly impersonal. In commercial housing areas, the more concentrated migrant population reflect fewer social connections among neighbours. The scatter pattern of elderly migrants highlights their difficulty in approaching and interacting with other seniors. Urban life in Shanghai is substantially more advanced compared to most other places in China: modern buildings, fancy shopping malls, fast digital payment, and 20 underground lines covering almost the entire city. Everything seems convenient — however, for elderly migrants, the burgeoning 'unknowns' pose a serious barrier. People now barely use cash or even card in cities like Shanghai, where digital payments, such as Alipay, dominate the market. The elderly, in general, are marginalised when facing the transition to a digital world. Among

elderly migrants, only 12.13% have completed higher education (SSO, 2021a). While educational background does not reflect the whole picture, it indicates the various supports needed to help this group to keep up with rapid digitalisation. Even language can be a barrier, for elderly migrants usually speak dialects other than Shanghainese and standard Mandarin, thus daily communication itself can be an unexpected problem. Learning and adapting to such a completely different lifestyle is not easy for the elderly. For this reason, many migrants choose to stay in the same locale, even though their mobility is not physically challenged. The loss of a sense of belonging is commonly found among the leading causes of loneliness, even when people are not physically isolated.

'Fallen leaves return to their roots' is an old saying in China, demonstrating the social norm of returning home in old age. Elderly migrants experience the opposite of this, causing social insecurity. Where a family reunion should combat the insecurity, however, moving to Shanghai disrupts both friendships and family relationships from home. 67.8% of elderly migrants are female, since women are expected to be more experienced in childcare (SSO, 2021a). As a result, a part of elderly women is separated from their partner and move to the city alone, further intensifying feelings of loneliness. While loneliness is a common issue among senior citizens causing well-being issues, elderly migrants are proportionally more disadvantaged.

In addition to loneliness, pressure within the family further worsens their well-being. Conflicts between grandparents and parents regarding children's education and daily care has been another main contributing issue. Unlike most of the local elderly who enjoy a comfortable life while being cared for by their children, senior migrants have jobs to do and responsibilities to fulfil. Caring for the young is never easy work, and it needs enormous time commitments. During the Covid-19 Pandemic, the shutdown of children's day-care and strict lockdowns further exacerbated these pressures. Elderly migrants often choose not to leave, even under high pressure because of selfless love for children and families as per Chinese social norms. In this situation, an urgent call for action is to solve the well-being inequality faced by the elderly migrants due to social exclusion.

FROM TOP-DOWN: CURRENT POLICIES AND THE GAP IN BETWEEN

The Shanghai government has started to gradually relax its hukou system. The permanent Shanghai Residence Card (SRC) is designed for migrants to get full 'citizenship', identical to that of locals with hukou, through a 120-point system. However, wealthy or well-educated migrants enjoy a much higher chance of getting an SRC, further intensifying the social inequality within the city (Liu et al., 2014). Elderly migrants are not qualified for SRC, since only migrants employed for over six months can get into the point system. While these institutional barriers remain rigid, the government has implemented other actions to provide essential services targeting and including elderly migrants.

The accessibility of healthcare to migrants is also segregated due to the hukou system. Regional governments have worked together to make basic medical insurance more convenient for migrants, by allowing payments across the registered residential locations. However, unlike locals who can pay directly through their insurance schemes, migrants must undergo a complicated reimbursement process via the place where their hukou is registered. Even though

basic medical insurance covers up to 85% of the financial costs, this administrative barrier still prevents senior migrants from fully enjoying this benefit. According to the 2020 Census, 97.1% of elderly migrants are in healthy and enjoy relatively good physical conditions (SSO, 2021b). However, the problem could be amplified in the future when they get older and need more medical support. Social exclusion in healthcare has been targeted but not actually solved. Elderly migrants are still unable to access healthcare as easily as locals, leading to a heightened sense of insecurity. Elderly migrants are concerned about being ill for the potentially high financial cost, placing extra stress both on themselves and their children. Limited mental health services are another general flaw in the Chinese healthcare system and people commonly focus on physical illness, which further limits the well-being support for marginalised elderly migrants.

To combat the mounting social pressure of ageing population, the Shanghai government has introduced a so-called '90-7-3 framework', where 90% of the elderly are home-cared, 7% receive community care, and only 3% live in nursing homes. This distribution is not only adopted because of the shortage in nursing homes, but also due to the traditional Chinese prejudice that only the childless elderly end up in nursing homes (Krings, 2022). Home care does not solely rely on family. Infrastructure, including home doctors, is provided by the government. Community-care — where the local government cooperates with NGOs to provide elderly daycare services and social activities in the community — is also increasingly in demand (Yu and Su, 2021). According to the national elderly plan, local governments are responsible for providing senior education and recreation facilities (sports fields, parks, green spaces, and recreational locations) to promote healthy ageing (Krings, 2022). By the end of 2021, Shanghai built 371 comprehensive community service centres for the elderly; fifty more were set to be constructed in 2022 (People's Daily, 2022). The building of 15-minute urban community circles has become one of the main focuses of urban planning in Shanghai following new guidelines issued by the National General Office of the Ministry of Commerce. Following the guidelines, urban planners seek to ensure that communities have access to all services and facilities for daily necessities within a 15-minute walking radius, thus aiming at improving quality of life and social inclusion. Such infrastructure improvements and services will benefit all, regardless of local or migrant hukou. However, constructing and providing these do not mean that the accessibility issue is solved. Similarly to the case of basic health insurance, elderly migrants are still hindered from these community facilities due to other barriers, such as insufficient information.

FROM THE BOTTOM UP - COMMUNITY BASED RECOMMENDATIONS

To summarise the previous sections, the main reason causing well-being inequality of elderly migrants are:

- 1. Financial pressure
- 2. Challenges in adapting to an entirely new environment and lifestyle due to language and technological barriers, resulting in the loss of a sense of belonging
- 3. Weak interpersonal connections within communities and disconnection from family and friends at home, resulting in heightened sense of loneliness
- 4. Pressure and potential conflicts within families due to heavy burdens of childcarerelated responsibilities
- 5. Limited access to infrastructure and services

It is challenging to improve the structural economic exclusion, due to the rigid social segregation, as long as the hukou system remains in place. However, there are potential community solutions that could target socio-cultural exclusion to reduce well-being inequality faced by the elderly migrants.

Recommendation 1: Hometown Association

Immigrants in large cities in the United States tend to cluster in communities with people of similar backgrounds, forming migrant-concentrated neighbourhoods, such as Chinatowns (Liu, 2009). A social network connecting newcomers to the compatriots who settled down earlier could improve flow of information, helping them to find jobs and adapt to the new environment quicker and better (Liu et al., 2019). While the situation of elderly migrants in Shanghai is more scattered in terms of spatial distribution in the inner city, there is still a high potential to connect elderly migrants from similar origins in the outer city area, in order to rebuild social connections.

According to the 2020 Shanghai Census, Anhui Province, Jiangsu Province, and Henan Province had the highest rates of their population migrating to Shanghai. Migrants from the same area will generally have smaller language barriers and their similar social backgrounds allow to reconnect and form social connections more efficiently. Creating hometown associations does not mean starting up a new organisation, but simply gathering people together on a community level; for instance, it could be an extension of existing joboriented fellowship groups. Providing comfort zone for the elderly, where they could find a sense of belonging and regain social connectedness would increase their well-being. Community gathering activities would also reduce loneliness issues. Considering that the majority of elderly migrants have the same reason to be where they are — i.e., to take care of grandchildren —, community-based gatherings would also help release childcare-related pressures when talking to others with a similar tasks and daily routine.

Recommendation 2: Elderly Buddy System

Similarly to the 'Hometown Association', the 'Elderly Buddy System' would focus more on migrant's current geographic distribution. A community committee (juweihui) is a government-supported grassroots organisation per 350 households on average, aimed at helping to better support and facilitate residents' life. While it could be argued that community committees remain too close to the government and it is hard to label them as being 100% autonomous, they are designed to serve the residents. An 'Elderly Buddy System' could be realised with the help of community committees, by matching up seniors with their nearest elderly neighbours. Local or elderly migrants who have settled down earlier could participate in the buddy system as volunteers, helping newcomers to adapt to their new lives and making communities more accessible. It could be a win-win solution to tackle the general social exclusion of the elderly while participating in volunteer work that positively affects well-being (Jiang et. al, 2022).

Recommendation 3: Senior Education

With solid existing facilities (community service centres) to deliver senior education, language and technological barriers could be tackled. A more specific course targeting elderly migrants should be designed and delivered. As previously mentioned, education levels of elderly migrants are relatively low. Consequently, the course needs to be slower-paced and focus more on practical knowledge, such as the use of digital payment methods

or how to use the subway system. Instead of learning only in the classroom, practical experience accessing city facilities could be delivered in real-life situations. With increasing knowledge, elderly migrants will be able to access more facilities and fill in the gaps of the top-down method. Childcare responsibilities must be considered when initiating educational programmes. While whole-day childcare might not be feasible, temporary childcare of around 30-60 minutes, provided by volunteers in community service centres, would allow elderly migrants to take classes. More elderly migrants would be attracted to participate in senior education programs when class time is a break from childcare. Having courses in a group is also a way to build new social connections and form networks where they can meet other seniors in a similar situation in their neighbourhoods, in addition to people from the same hometown and current geographic distribution.

Recommendation 4: Seeding Garden - Natural-based solution

Seeding Garden is an ongoing large community garden project in Shanghai, initiated by Clover Nature School – a not-for-profit social organisation focusing on producing naturebased public spaces, where the wider public can participate directly. With a vision to 'build and share an urban paradise on the doorstep of everyone', Clover Nature School has created over 200 community gardens and supported more than 900 mini-garden projects, selfgoverned by local residents (Ling, 2022). While aiming at exploring ways of combining public participation and urban regeneration, the Seeding Garden project also has high potential to support elderly migrants' well-being by increasing social engagement, without the need to travel and can also bring children together. Lady Lang, an elderly migrant, who moved to Shanghai five years ago, started gardening in a small plot by gate of her building. She found that living in apartments in a big city like Shanghai was lonely with neighbours barely communicating and decided to make changes by continuing her former gardening hobby. Today, Sanlin community, where Lady Lang lives, has over 20 mini gardens initiated by local residents, providing comfortable spaces for the elderly to engage and network (Clover Nature School, 2022a). Another community garden in Jiading District also engaged children in the garden's construction, providing social activities and nature-focused education for whole families. The garden door made from recycled PVC tubes was an idea from a local elderly, demonstrating the wisdom and power within the community (Clover Nature School, 2022b).

The Seeding Project was highly beneficial during the Covid-19 Pandemic. The Chinese government implemented a strict zero-covid policy, where during city lockdowns residents had to stay within their neighbourhood area. A mini community garden around the corner was one of the very few solutions to combat the well-being issues, when other infrastructures, like community service centres, and potential indoor gathering activities were completely shut down and banned.

POTENTIAL CHALLENGES OF THE COMMUNITY-BASED SOLUTIONS

All these community-based solutions can effectively reduce social exclusion and well-being inequality, provided that there is sufficient information flow that reaches elderly migrants. While they might have barriers to obtaining information proactively, community committees and volunteers should work more on delivering up-to-date information. The easiest and most effective way I would recommend is simply knocking on doors or have a conversation

with elderly migrants, face to face.

The Covid-19 Pandemic disrupted people's mobility and everyday life, causing adverse mental health and well-being issues. Finding a way to recover from pandemic-induced difficulties in the post-Covid era is a new challenge. When the elderly and children are vulnerable to Covid-19, to what extent community activities are safe must be evaluated carefully when implementing community-based solutions. Fear of contracting Covid is still bound to reduce participation in community activities, even when only few new cases exist. However, it is worth noticing that interpersonal relationships between the neighbours get closer, and community communication on online platforms, such as WeChat, was more frequent during lockdowns. This could be a good sign of higher social inclusion and a solid base for better information flow in the post-pandemic era.

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Social Exclusion in Leith and the Power of Community Action

Samantha Sinclair



INTRODUCTION

The City of Edinburgh's story is one of Scottish grandeur steeped in history. The city boasts incredible architecture with quaint clusters of cobbled streets looked over by the fortress of Edinburgh Castle, attracting more than 24-million visitors over the year (The Edinburgh Collection, 2022; Visit Scotland, 2022). In Scots slang it is 'a bonnie place to have a blether at the pub, grab some hearty scran and go fae a donder up Arthur's Seat'. However, to create the beauty, culture, and opulence of the inner city, social problems have been pushed to the peripheries, specifically towards Leith (Welsh, 2005). Leith is located in the north-east of Edinburgh and faces issues of spatial, social, and economic exclusion and marginalisation. Marginalised groups are prevented from engaging in regular societal activities due to patterns of discrimination, poverty, and structural disadvantages. These inequalities have affected the community for decades, yet powers of authority have continuously disregarded and neglected the concerns of Leith locals. From past processes of deindustrialisation and privatisation to contemporary patterns of gentrification, the impacts are becoming more prevalent, yet it seems that the voices of Leith remain unheard.

This report will firstly provide a contextual overview of Leith exploring its history and the impacts of deindustrialisation and Thatcherism (BBC, 2013) in the 1980s on the local community. Then, a summary of Leith's current situation will be given with reference to local gentrification and its impact on the residents of Leith. Following this, two primary case studies of current contested developments in Leith will be examined: the Western Harbour waterfront and Stead's Place. These examples will demonstrate the social inequalities and issues that Leith faces, but also highlight the potential power of community action. In response to these examples, community recommendations will be offered in an attempt to amplify the voices of Leith and suggest ground-up approaches towards a more equal and sustainable community. Throughout this report, I would like to acknowledge the community with respect and consideration that this is not a complete representation of the Leith community nor of the developments occurring in the area. For this reason, further readings have been offered to provide additional information and examples to support the suggestions and propositions made in this report.



HISTORY OF LEITH

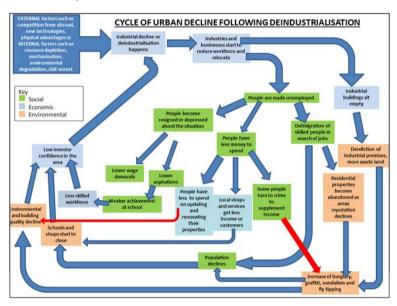
'Seems like a good place for ays tae start, 1920: the great betrayal' (Welsh, 1993). This quote refers to the amalgamation of Leith and the City of Edinburgh in 1920. This union ended 87 years of Leith's independence, despite clear opposition from the Leith Town Council (Leith Local History Society, 2012). Leith continued to operate primarily as an industrial docks and maritime shipbuilding area as shown in Figure 1. The docks provided a historical space for residents as a place of social identity and a centre of employment, including Henry Robb Ltd shipyard (Matthews, et al., 2007). Established following the First World War, Robb's became one of the largest yards boasting nine building berths and five dry docks, providing hundreds of local jobs (Mclean, 2014). After years of success, the Great Depression and World War 2 caused shipbuilding in Leith to decline. Despite months of fierce protest marches by a 400-strong workforce (see Figure 2), Robb's shipyard was forced to close in 1984 (Mclean, 2014).



Image of a protest to save the Henry Robb shipyard, 1983. (McLean, 2020)

A major reason for this was the appointment of Margaret Thatcher as Prime Minister of the United Kingdom (UK) in 1979 and the introduction of a more neoliberal political system (Briand-Boyd, 2021). The government's privatisation of industries, selling of council housing, and its abandonment of state welfare (BBC, 2013) caused extensive deterioration throughout industrial and maritime communities, especially in Leith. The Thatcher era increasingly stigmatised and disregarded working-class communities, further dividing an already unequal society, causing considerable unemployment and social deprivation (Briand-Boyd, 2021).

The figure below shows the cycle of urban decline following deindustrialisation with reference to social, economic, and environmental impacts (Friedrichs, 1993). It is evident that Leith has followed a similar, significant decline, gaining a reputation for substance abuse, gripping poverty, and petty crime (Briand-Boyd, 2021). These problems were later brought to mainstream view in Irvine Welsh's Trainspotting saga, which further emphasises the everyday difficulties of living in a post-industrial, derelict, and poor community (Welsh, 1993). The history of failed protests, social exclusion, urban decline, and the disregard for local community needs demonstrates the necessity for grassroots development and community action.



Model of the cycle of urban decline following deindustrialisation (Friedrichs, 1993)

CONTEMPORARY LEITH

Nowadays, Leith is portrayed as a trendy, cultural hotspot, being voted as one of the 'top 5 coolest neighbourhoods' in the world in 2021 (Clark, 2021). The development of Ocean Terminal (a large shopping centre), as well as the emergence of up-market Michelin-starred restaurants along the Shore, and the presence of the Royal Yacht Britannia all contribute to the creation of a unique and lively atmosphere. Furthermore, Leith has gained more positive attention in mainstream media following the release of 'Sunshine on Leith' in 2013. Although Leith has made good progress, it has been unevenly distributed with major pockets of deprivation, environmental degradation, and social issues still existing throughout the community. The landscape of old warehouses, industrial buildings and port structures

Map of the Scottish Index of Multiple Deprivation showing the 20% most deprived of Edinburgh



have become derelict abandoned spaces, reducing the environmental quality of the area (Depel, 2019).

Furthermore, data from the Scottish Index of Multiple Deprivation (see Figure 4) show Leith as one of the most deprived areas in Edinburgh, scoring the lowest on employment, health, education, housing, and crime indicators (SIMD, 2020). Yet, there are other areas of Leith, such as the Shore and the Western Harbour waterfront, that score highly on most of the demographic indicators. This local disparity has become even more unequal due to increasing patterns of gentrification. Gentrification can be defined as the process whereby poor urban areas experience an influx of renovation and regeneration led by wealthier actors to create a more middle-class space (Merriam-Webster, 2022). Although the history of urban decline suggests that regeneration was necessary for the community, the gentrification process has had negative consequences for locals, including rising property prices, displacement, and social exclusion from development discourses. Furthermore, former Leith resident Irvine Welsh (2018) suggests that the crass exploitation of property developers threatens the future cultural and social prosperity of the community. By looking simultaneously at Leith's history and its contemporary situation, the continuation of fundamental problems of social marginalisation, exclusion, and inequality become apparent, which, without action, will likely lead to an unsustainable and unequitable community in the future. The following case studies will demonstrate these issues in more detail and emphasise the need for greater community integration in development and planning discourses.

WESTERN HARBOUR

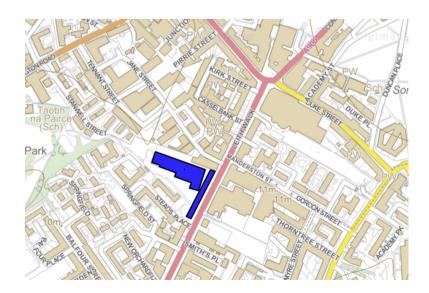
Northern Leith has undergone extensive regeneration with the development of modern residential properties along Western Harbour. Three residential development projects have already been completed, as shown in Figure 5. However, due to the increased prices, high

Aerial image of Western Harbour waterfront properties. (Google Earth, 2022)



rateable values and high council tax values of theses properties, locals cannot afford to benefit from this development. An average 2-bed flat in one of these new residential properties costs roughly £300,000 to purchase, which is unaffordable for most locals (Zoopla, 2022).

This particular regeneration project has already resulted in a lack of opportunity for social, spatial, and economic mobility, highlighting the issues of gentrification, spatial displacement, and social exclusion throughout Leith. The long-term masterplan is to develop the entire Western Harbour, contributing towards 50,000 affordable homes in line with the commitments of the Scottish Government to create a new sustainable community (Landscape Institute, 2019). From this, the question of who these projects are for, what is considered 'affordable', and who is being excluded from the sustainable development discourse are bound to arise. In planning, for example, there are various levels of power and authority, with some suggesting that large-private sector developments can 'ride-roughshod' over the wishes of local communities (Matthews, et al., 2007). Although large-scale construction has yet to commence, the type of regeneration is likely to cause disruption — and, therefore,



Map highlighting the proposed developments of Stead's Place and Leith Walk (Digimaps, 2022).

some level of social segregation —, as the influx of capital to create middle-class neighbourhoods may force locals further to the peripheries of society. So far, there is not enough evidence to determine the potential positive or negative impacts of this regeneration project on the local community.

STEAD'S PLACE AND LEITH WALK

City Plan 2030 was established as a roadmap for the City of Edinburgh with the aim to reduce poverty and inequalities, increase employment, and enhance prosperity (The City of Edinburgh Council, 2021), amongst other environmental and social improvements. This plan specifically outlines the redevelopment of Stead's Place in Leith, shown by the blue shaded area in Figure 6. The initial 2.9-acre site transformation, led by the Drum Property Group, aimed to provide 471 student bedrooms, a 56-bedroom hotel, and 53 affordable homes (Drum Property Group, 2022). This redevelopment would supply additional purpose-built student accommodation (PBSA) to satisfy the constantly growing number of students in higher education in Edinburgh (Kallin, et al., 2019). However, the proposal would involve the removal of existing industrial units and the demolition of the two-storey sandstone buildings fronting onto Leith Walk (The City of Edinburgh Council, 2021). Furthermore, the focus on single-occupancy, transient, and 'affordable' housing is not what the local community needs. From this, a vigorous grassroots public campaign to 'Save Leith Walk' was established by a group of locals to voice their concerns regarding the proposed development (Save Leith Walk, 2019). This community-led movement included various scales of action, such as fundraisers in collaboration with local businesses, drop-in discussion sessions, and more serious meetings with local government officials. One of the most successful endeavours of the campaign was its Community Planning Workshop in 2019, which invited the community to develop alternative versions for the land on Stead's Place and Leith Walk. The organisers stated that 'this event was an opportunity for the community of Leith to voice their wishes and needs in regards to development'. The community produced three conceptual designs, which included social housing, community garden spaces, and even a 'Local History Centre Celebrating Leith' (Save Leith Walk, 2019). From this campaign, it is clear that Leith locals are engaged and proud of their community, taking thoughtful and considerate action to have their voices heard and overcome their history of social marginalisation. 'Save Leith Walk' was so successful that it resulted in the complete restructuring of the initial redevelopment proposal, in order to preserve the red sandstone buildings along Leith Walk and provide a more integrated mixed-housing development. The developments started in July 2022 and are set to be completed by Spring 2024 (Drum Property Group, 2022). This case study shows the clear strength of community action and the positive possibilities of future community integration in development proposals.

Both case studies offer an insight into the issues of decision-making processes in regeneration and new developments. It is clear that planners need to embrace communities and make community participation more meaningful in their proposals as they can lead to successful, positive and sustainable outcomes (Matthews, et al., 2007). However, Leith still faces issues of social marginalisation and, with more developments emerging, the community must take action to achieve the most sustainable and socially inclusive results. The following section will offer some recommendations for the community to harness social enterprise, enhance community support, and collaborate with other actors to reduce inequalities and amplify their voices.

COMMUNITY ACTION

Irvine Welsh (2005) stated that 'despite all of our escalating problems, there is almost zero action on social marginalisation'. This section will suggest both direct and indirect methods of improving social inclusion and encourage alternative platforms for community engagement.

Direct Community Action Groups

This approach is a direct type of grassroots innovation, which involves communities generating bottom-up solutions for sustainable development in their area. These solutions respond to the local situation and directly contribute to the interests and values of the community (Seyfang, et al., 2007). Leith residents have already proven through their 'Save Leith Walk' initiative that this type of action can be successful in voicing the needs of locals and establishing a more dominant position in planning discourses. Leith has demonstrated other successful community action groups, such as '£eith (Leith) Chooses', an organisation that collaborates with various actors and stakeholders to provide grants for community projects (£eith Chooses, 2022). In 2018, awards were given as small (up to £500), medium (up to £5,000), or large (up to £10,000) grants towards environmental and social enterprises led by the community. Examples include clean-up initiatives, educational summer programmes, and extensive improvements in sports facilities, such as the Leith DIY Skatepark (£eith Chooses, 2022). These projects will have both intrinsic and extrinsic benefits for the community and its surrounding areas (Seyfang, et al., 2007).

To create a more sustainable and equitable community, we can recommend that more specific community action groups be established with key social, environmental, and economic indicators. Having numerous groups can create a dynamic force throughout the community. However, it is important that these campaigns have succinct goals, as well as sufficient endorsements, so that they can be successful.

Community Engagement on Social Media

Whilst researching the positions of Leith locals in response to the capital developments in the area, evidence showed that most residents openly voiced their opinions through private social media groups. For example, 'Oldleithers Reunited' is a private Facebook group with 3.7 thousand members who share a nostalgia for the maritime past of Leith, whilst discussing the contemporary development processes around the community (Facebook, 2022). The following quotes are more critical comments of Leith locals taken from this Facebook page:

'No imagination from councillors and planners over the years. They have destroyed communities.' – Facebook User, 2020

'The council have ripped the heart out of Leith' – Facebook User, 2022

"Make it a place affordable to ordinary working class people." – Facebook User, 2022

The comments clearly show the opinions of the older demographic of Leith locals. In addition, another social media platform led by young adults recognises the concerns of the community, whilst celebrating the pride of Leith. 'Living Leith' is a podcast that shares 'stories about Leith from the people of Leith' (Living Leith, 2022). This social enterprise

initiative has hosted a variety of guests, including local authors, writers, business-owners, and the MSP (member of Scottish Parliament) for Edinburgh Northern and Leith (Living Leith, 2022). This positive and youthful platform has the potential to enhance community integration and reduce social marginalisation by empowering the local voices of Leith.

From these observations, we can recommend two primary forms of social media engagement. Firstly, Leith residents should create public groups or forums that can be seen by local government officials, planners, and various other stakeholders. It is important that locals continue to comment with the same honesty and transparency so that positive actions can be taken to include these community concerns. Secondly, community enhancement through social media could be an energetic force to improve social cohesion and inclusion. By sharing and posting local businesses and community initiatives on social media, they would gain more attention, leverage, and support.

CONCLUSION

This report has uncovered the pride and distinction that Leith locals uphold. Following a complex and somewhat adverse history, Leith has emerged to become a cultural hotspot with a real sense of community togetherness. Like any other community, it has faced its own set of challenges, specifically the increase in gentrification projects, coupled with the continuous disregard of community voices by planning and developing officials. However, this report has also unveiled the advancing strength and position of the Leith community as shown in their successful campaigns and positive protests. The community actions, grassroots initiatives, and social pathways suggested in this report are multifaceted and can produce extensive environmental, social, and economic benefits. These proposed recommendations are not required courses of action but instead suggested pathways that Leith locals can build on in practice or use in the development of alternative sustainable development narratives and discourses.

Sustainable development requires the collaboration and partnership of a variety of stakeholders across temporal and spatial scales. It is important to note that the residents of Leith are empowering their community in a positive and uplifting way, and therefore gaining the support and assistance of other stakeholders. It is this vitalistic force that Leith should harness to further make their voices heard and create a sustainable, just, and inclusive community for future generations. A final word to the proud people of Leith: 'Lang May yer lum reek'.

FURTHER READINGS

This report is not a complete study of the developments in Leith nor of the community and for that reason, these additional readings may provide a more comprehensive understanding of the situation in Leith and alternative sustainable development discourses.

 'City Plan 2030' as a developmental report put forward by The City of Edinburgh Council (2021). This report provides an in-depth sustainability roadmap for Edinburgh, presenting detailed reviews of planning permissions and development principles of places in Leith and surrounding areas.

- Trams to Newhaven website (2022). This extension will offer an alternative transport link to and from the inner city and Leith. The mega-project has the capacity to reduce spatial exclusion and create closer relationships, yet the concern over the necessity of the extension and its disruptive construction has been apparent.
- Doucet's (2009) "Living through gentrification" article. This article explores the subjective experiences of local residents in Leith living through the process of gentrification, suggesting that many locals are not overly critical to the process but instead hold a 'not for us' sentiment.
- Kallin & Shaw's (2019) article on studentification and "escaping the parasite of the student flat" in the Edinburgh Research Explorer, University of Edinburgh. Studentification is a neologism that can be closely interlinked with gentrification, especially seen in Leith and across Edinburgh. This article offers a bold alternative style of co-operative housing that has the potential to challenge the status quo and overcome social and spatial housing issues.
- Foucault's 'Discipline and Punish: The Birth of the Prison' (1975) book. For a more theoretical background, Foucault's concepts of knowledge and power can provide a deeper understanding of how power reproduces knowledge resulting in a sort of social paradigm with major and minor knowledge. In terms of sustainable development in Leith, we can see that throughout history the more powerful voices of authority were able to spread their knowledge whilst knowledge from more marginalised groups remain unheard due to their lack of mobility and power.

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Tackling the Marginalisation of LGBTQ+ People in Boston, MA

Marielle Faucher



INTRODUCTION

This community briefing aims to illuminate the ongoing history of isolation and marginalisation of lesbian, gay, bisexual, trans, queer and other (LGBTQ+) people in Boston, Massachusetts (MA). Targeting policy makers as well as members of the LGBTQ+ community, this briefing seeks to advise actions to mitigate the lack of inclusive and diverse queer spaces in the area.

Despite MA being regarded as an exceedingly LGBTQ+ friendly state — due in part to its historically vibrant LGBTQ+ nightlife scene (Yan, 2022, n.p.) and being the first US state to make gay marriage legal in 2003 (Nusser, 2010, p. 87) — today there is a tangible lack of community among LGBTQ+ people in Boston. It is because of Boston's progressive legal history that the need for queer spaces is often overlooked. This is particularly important to address and mitigate because, as an already marginalised group, any discomfort or jeopardy suffered by them 'can be even more severe due to the risk of violence and merciless harassment' (Shah 2021: n.p.). As a result, queer community spaces are vital in providing 'a safe haven' within the 'hetero-normative nature of urban areas' (Johnston, 2016, p. 671).

In this community briefing, I use the terms queer and LGBTQ+ interchangeably. I find LGBTQ+ to be a sufficient, all-encompassing term to represent the community of people who identify within the identities and sexualities which make up the acronym. On the other hand, I personally relate more to the term queer and strongly agree with Nusser (2010)'s reasoning for using the term. Primarily in the way that the word can help to better represent the 'unravelling of the binaries - man/woman, homosexual/heterosexual' and the fluidities of 'non-normative gender and sexual orientations', while also employing 'conscious power to a previously derogatory term' (Nusser, 2010, p. 11).

For spatial orientation, when speaking about Boston, I am referencing all 24 of the neighbourhoods which are included in the geographical limits of the city, such as Dorchester, Jamacia Plain, West Roxbury, Allston, etc., as well as some of the areas adjacent to these neighbourhoods, such as Cambridge and Somerville, which are technically independent cities, but are socially included within the boundaries of what is known as the Boston area.

POSITIONALITY

I grew up in a suburban town 30 minutes outside of Boston and have spent a considerable time working and socialising in the city. Additionally, as someone who identifies as part of the LGBTQ+ community, this community briefing is particularly important to me. I have a special positionality in relation to this research, as I am of a white and middle-class background, identifying as a nonbinary person, having experienced female socialisation my entire life. While being white makes it easier for me to access, feel comfortable with, or participate in certain spaces, being nonbinary results in frequent uncomfortable 'genderism', usually in the form of surprised or hostile reactions towards using the woman's toilet, when people mistake me for a man. Johnston describes this phenomenon as the 'bathroom problem', which frequently brings to light the 'consequences of binary gender norms' (2016, p. 669), perpetually replicated in venues without gender neutral toilets. I have heard personal accounts of the celebrated queer scene in Boston before the 1980s. Similarly, I have first-hand experience searching for places in the city that feel diverse and inclusive to all LGBTQ+ identities. In 2019, I remember the collective fear among queer people in the area, when the first straight pride parade was held in Boston with the approval of the city's mayor at the time. Through my experience traveling to other cities around the world, I know the joy and comfort that can come from visiting an inclusive queer venue and strongly believe that the LGBTQ+ community in Boston deserves the same. Aside from social freedom, queer people in Boston require inclusive welcoming spaces to help combat the discrimination they experience accessing education, employment, housing, and healthcare.

URBAN SUSTAINABILITY CHALLENGE

While Boston is not an anti-queer city, it does not provide many places for LGBTQ+ people to be safe, feel accepted, and foster a sense of community. Additionally, the few establishments that are still around in Boston are predominantly occupied by white, cis-gender gay men. While there may be queer spaces that welcome some, they simultaneously discriminate against transgender, racialised, and disabled bodies (Johnston, 2016, p. 671). The specific case of transphobia within the queer community dates to normalised societal gender structures. The very act of transgender people living in expression of their authentic selves 'challenges the oppressive process of gender and power processes which use gender to maintain power structures' (Johnston, 2016, p. 671). These historically intersectional power structures make scholars question whether 'inclusive queer spaces' are capable of being more than a 'theoretical concept' (Doan, 2007, p. 57). Making cities safe and accessible to queer people, besides being vital in supporting underrepresented marginalised communities, is necessary for the success of 'eradicating poverty and unemployment, reducing inequalities, establishing sustainable communities, providing quality education and healthcare for all and reducing gender discrimination' (Shah 2021: n.p.), and discouraging the continuation of ideologies of queer community spaces as nothing more than an idealistic concept. As they do not currently exist within Boston, creating inclusive community spaces for diverse queer people is vital to promoting social justice within the city.

HISTORY OF THE CHALLENGE

Historically, Boston was once full public spaces designed specifically for LGBTQ+ people. Between the 1950s and 1970s, 'Boston's gay nightlife scene was booming with bars' (Yan, 2022, n.p.). In addition to the bars and clubs, there were also daytime spaces catering for queer people, including the 'gay men's softball team, the lesbian softball team... [and] the Massachusetts Lesbian Gay Political Caucus' (Yan, 2022, n.p.). However, this celebrated time in Boston's LGBTQ+ history did not last long, largely due to the gay liberation movement in the 1970s, followed by the homophobic reactions to the AIDS crisis in the 1980s. In the 70s, during the gay liberation movement throughout the US 'gay and lesbian activists wished to present themselves as "normal" to promote the end of the social stigma and discrimination they had previously been receiving (Doan, 2007, p. 62). While this movement was essential in the fight for LGBTQ+ rights, as gay and lesbian activists put a 'much greater emphasis on gender normality', this simultaneously had a negative impact on gender variant bodies, as 'gender nonconformity also began to be suppressed' (Doan, 2007, p. 62), prompting the marginalisation of gender variant bodies from within the queer community. Throughout the city in the 1980s, in reaction to the AIDS crisis, 'public officials and the police engaged in a sweeping anti-sex campaign', abruptly closing any public places where people might go to 'seek out potentially non-normative sexual desires' (Lauder, 2022, p. 8). As a result of the combination of these two historical events, queer people were left stigmatised, without places of community or work, and the city of Boston never fully recovered back to the number of inclusive queer community spaces there existed before the '80s. Today, Boston is considered a 'civil rights paradise for queer people' and has had multiple gay mayors, which is in stark contrast with the 'rapid decrease in queer spaces since the 1990s' (Nusser, 2010, p. 89, 90).

DEVELOPMENT OF THE CHALLENGE TODAY

The situation in Boston is not unsimilar to the experience in many other urban areas around the world that have large populations of queer and BIPOC (Black, indigenous, and people of colour) residents. While separately these groups face cis-gender heteronormativity, transphobia, and racism, there are also considerable 'instances where gender, race/ethnicity, and class intersect with queer [identities] to create unique experiences', and additional struggles (Nusser, 2010, p. 11). Today, the issue of the lack of queer spaces in Boston has developed in such a way that, although there are places for LGBTQ+ people to gather and find a sense of community, these venues are predominantly catering to white, cis-gender, gay men. Spaces that are celebrated for their LGBTQ+ diversity, are exclusively 'dominated by gay men', while discriminating against women, transgender, BIPOC, and disabled queer people (Johnston, 2016, p. 671). Similar marginalisation has been researched in Brighton, England, where, despite being known as the 'gay capital of the UK', transgender people still feel unwelcome and discriminated (Johnston, 2016, p. 671). This highlights the fact that simply because a space is queer does not automatically mean that it is inclusive to all queer identities. Similar discriminatory behaviour has recently been documented within The Boston Pride Group, who organise the annual Boston pride parade. While the parade was cancelled in 2020 due to the COVID-19 Pandemic, it was cancelled again in 2021, due to intracommunity racism and transphobic tensions (Crossley, 2022, n.p.). While there was a pride parade in previous years, it was planned and run solely by 'wealthy white capitalist gays and lesbians' and turned into a corporate capitalist marketing event, more than a celebration of LGBTQ+ identities (Crossley, 2022, n.p.). In 2015, protesters demanded that the Boston Pride Group expand its leadership to include BIPOC people as well as a more diverse mix of queer identities to better represent the community and make more people feel welcome and celebrated (Crossley, 2022, n.p.). Failing to listen to years of protests, the Boston Pride Group dissolved in 2021, representing yet another loss of celebration of LGBTQ+ identities (Crossley, 2022, n.p.).

Unlike other cities — such as Toronto, New York City, or San Francisco —, Boston does not have a centralised queer area. This makes it particularly hard for queer people to find the few places in Boston that are LGBTQ+ friendly, especially for those visiting or new to the city. While there can be benefits to discrete queer spaces, including making them safer for those who are not publicly 'out' and reducing the risk of hate crimes, the lack of 'rainbow flags or other decorations that might indicate to someone that it was a gay space' makes it increasingly hard to find community for those who do not have prior experience locating them (Lauder, 2022, p. 11). The lack of a queer neighbourhood can also lead to negative perceptions of the city. For example, results from Doan's research show a statistically significant relationship between transgender people's perceptions of safety in a city and the presence of a queer area (2007, p. 65). This shows that despite most transgender respondents not living in queer neighbourhoods, the presence of a queer neighbourhoods provides an aspect of 'psychologically protective umbrella' for their mental well-being (Doan, 2007, p. 66).

Due to the lack of night-time spaces in Boston, a favourite for 20- to 30-year-old LGBTQ+ people are cafés. However, similarly to the tensions that led to the disbanding of The Boston Pride Group, popular coffee shops are, on the one hand celebrated for their aesthetic diversity, inclusive hiring regimes, and comfortable atmosphere, yet are criticised for their lack of racial diversity. The same is true for the few LGBTQ+ friendly clubs, such as Club Café in Cambridge. These spaces are accepting of queer people, but their clientele predominantly consist of white gay men, making BIPOC and non-cisgender queer people feel unwelcome and, resultingly, less likely to visit these venues.

To combat the issue of the lack of inclusive and diverse LGBTQ+ spaces in Boston, there need to be both policy and community level changes. One of the most prominent causes of this urban issue is that many of the spaces available to queer people are not actually run by members of the LGBTQ+ community. This leads to inorganic spaces, which, from personal experience, feel more like an afterthought attempt at being so-called 'LGBTQ+ friendly', rather than a comfortable acknowledgement of a queer-owned space. As 'participatory approaches have demonstrated that local communities are a reliable source of information about their priorities', increased participation from those who identify as part of the LGBTQ+ community could help foster and promote urban justice within Boston (Castán Broto and Westman, 2019, p. 169). Through increased local action, instead of creating spaces which are occasionally LGBTQ+ friendly, inclusive spaces could be owned and created by and for diverse queer Bostonians, resulting in '[increased] local ownership', as well as the ability to create more accessible, diverse, and inclusive spaces that have been lacking throughout the city (Castán Broto and Westman, 2019, p. 169).

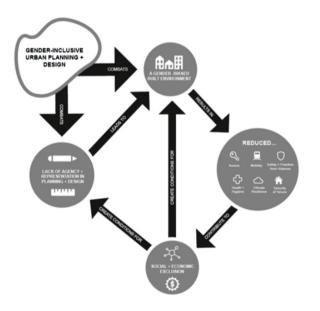
CURRENT ACTION AND RECOMMENDATIONS FOR THE FUTURE

Having queer people participate in the planning and ownership of LGBTQ+ spaces in Boston would omit the issue of 'othering' that often comes from a 'lack of recognition' of marginalised peoples (Castán Broto and Westman, 2019, p. 175). One of the most common and most dangerous ways othering manifests within community spaces is transphobia. In the US in 2021, '1 in 5 transgender people [avoided] public services due to the fear of being harassed or assaulted' (Shah 2021: n.p.). While transphobia can still occur within LGBTQ+ spaces, such as the previously described example in Brighton, the percentage of hostile and trans-exclusionary behaviour increases in spaces that are not LGBTQ+ owned. Feminist geographer Lynda Johnston writes that the politics of gender inclusivity are largely driven by the 'desire to "genderqueer" (...) geography via a critique of normative gender subjectivities, places and spaces' (2016, p. 669). It is in these normative urban spaces that 'transgender people may be simultaneously included and excluded' (Johnston, 2016, p. 669), which is why it is important to unpack the complexities of non-normative bodies existing within normative urban landscapes. For example, one initiative aiming to increase the number of queer spaces in Boston from 2007-2014 was the Guerrilla Queer Bar (GQB) (Nusser, 2010, p. 98). In operation, this group 'attempted to "take over" bars "without a gay night" on the first Friday of the month' (Nusser, 2010, p. 98). To make the venues safe for transgender people, representatives from GQB would 'educate bouncers' to make sure they were 'not harassing the trans people who [did not] look like their licenses' (Nusser, 2010, p. 101). While this is an important effort in making sure non-queer-owned spaces are not discriminating against transgender people and ensuring they do not experience transphobia or hate crimes on a night out, the GQB was unfortunately disbanded after less than a decade, due to its lack of inclusivity and permanence. In addition to being impermanent and migratory, the GQB's clientele was of the 'majority White and female' (Nusser, 2010, p. 101). By catering to a specific race and gender, tensions within the LGBTQ+ community illuminate the 'queer unwanted' (Johnston, 2016, p. 671); in this case, transgender and BIPOC bodies are going to experience marginalisation in the very spaces that should be created for them. In the case of the GQB, the effort to educate the hosting venue's bouncers about transgender people is unlikely to stop transphobia committed by other members of the LGBTQ+ community, especially if the organisers themselves are only creating spaces that include white and queer people with normative gender identities. The absence of a permanent physical space makes it hard to 'develop a regular customer base' and create a reliable sense of community, which supports queer 'connection and thriving' (Nusser, 2010, p. 111).

Cultural diversity and inclusion are imperative to making sure that BIPOC queer people feel welcome and accepted in community spaces. For example, if BIPOC queer people had been included in The Boston Pride Group, the racist tensions inevitably leading to the demise of Boston's pride parade could potentially have been avoided. In the unique case of The Boston Pride Group, Black Lives Matter (BLM) protesters actively tried to get the group to expand their leadership and include the participation of BIPOC community members, but the group refused to listen (Crossley, 2022, n.p.). June's pride month typically marks a joyous time of celebration for queer people all over the world; the lack of a parade in Boston has resulted in a palpable disjointed lost sense of community throughout the Boston area. The inclusion of marginalised identities, such as Transgender and BIPOC people, is 'integral to the leadership and participation' when rebuilding the next chapter of The Boston Pride

Group (Crossley, 2022, n.p.), as well as any other queer community initiatives.

The issue of the lack of diverse and inclusive queer spaces within Boston is rooted in heteronormative urban planning. As visually represented by Shah's graphic (Figure 2), historical 'gender-based built [environments]' result in reduced access, mobility, safety, health and sanitation, climate resilience, and tenure security among LGBTQ+ people (2021: n.p.). These limitations then contribute to socioeconomic exclusion, which create the conditions for both a gender-based built environment, and the lack of agency, representation and participation within urban planning and design (Shah 2021: n.p.). Without 'genderinclusive urban planning [and] design' (Shah 2021: n.p.), all these socioeconomic determinants will continue to perpetuate current cycles of inequality. For Boston, this gender-inclusive planning to combat these inequality cycles can manifest in a variety of community- and policy-level actions. One way this could be achieved is through increased participation of queer architects who have the LGBTQ+ community in mind in the planning and designing of new spaces within the city. Additionally, if not being the architects themselves, queer people need to be included in the planning of new urban spaces. By giving a voice to queer people (BIPOC, in particular) in planning their future environments in Boston, individuals could 'contribute towards repairing the decades of discrimination and decreased opportunities' (Shah 2021: n.p.) within the LGBTQ+ community, while advocating for the types of spaces and socioeconomic inclusion they would like to see and deserve.



Visual representation of the effects of non-gender-inclusive urban planning (Shah, 2021)

On the policymaking level, there also needs to be more queer inclusion and participation within governmental positions of power. While the strong queer representation in Boston's politics have driven up the numbers of queer people who live in the city, if that representation is solely performative and there is still discrimination, transphobia, and misogyny throughout the city, then the government is failing in protecting all of its citizens. Recently, there has been promising development in Boston's governing realm in the form of the Office of LGBTQ+ Advancement. This office claims that it will work towards 'the empowering,

protecting and promoting [of] the rights, dignity, and advancement of Boston's LGBTQ+ residents' (LGBTQ+ Advancement, 2022, n.p.). The Office of LGBTQ+ Advancement will ideally work alongside Boston's Mayor, Michelle Wu, in 'developing policy, community orientated programming, and provide resources for the city's multiracial, multigenerational, multicultural and multilingual LGBTQ+ community' (LGBTQ+ Advancement, 2022, n.p.). Additionally, they maintain that the new office will ensure and protect the rights and dignity of queer Bostonians, with a pledge to centre the office around the 'lived experiences of queer, trans BIPOC residents' (LGBTQ+ Advancement, 2022, n.p.). To do this, the Office needs to meet with diverse queer representatives from across the community to have an accurate representation of the needs of the entire community. While it is still too early to comment on the follow-through of this new office, it represents a vital step towards the interdisciplinary, policy-level work that is necessary to ensure that the needs of queer people (BIPOC, in particular) are met within the city. Currently, the Office of LGBTQ+ Advancement only has an Executive Director and a Chief of Staff. However, to achieve comprehensive LGBTQ+ inclusion and safety, as they insist they would, there need to be separate members of staff to address specific queer disparities — such as discrimination within healthcare access, systems of education, public transportation, and community spaces —, as well as different diverse LGBTQ+ representatives on the board of members in order to accurately represent the entirety of the community and their separate needs within different gender expressions, sexual orientations, and ethnicities, as well as the intricate synergies between them.

CONCLUSION

In summary, for Boston to be truly inclusive towards the LGBTQ+ community, it must be accessible, well connected, safe, and promote resilient futures. To achieve this, there need to be increased LGBTQ+ friendly community centres that are reliable, inclusive, and diverse. Nusser describes this as a 'destination where when you walk through the door... there [is not] going to be any question in your mind that [you will] be 100% welcome no matter what' (2010, p. 112). With the lack of a queer village, these community centres would act as queer-owned daytime spaces for the LGBTQ+ people dispersed throughout Boston. Ideally, with the help of the Office of LGBTQ+ Advancement, these places would be multigenerational and multiracial support systems, where people can foster a long overdue sense of community. Additionally, to compensate for the lack of inclusive night-time spaces, more queer people need to be included in the urban planning of clubs and bars.

As the remaining restrictions from the COVID-19 Pandemic cease to exist, now is the ideal time to create new queer hotspots to replace those that did not make it through lockdown, without a steady source of income. Including, ideally BIPOC, members of the LGBTQ+community in urban planning is going to be vital to the safety, diversity, and inclusion of these new queer spaces. Over time, through participatory non-heteronormative urban planning, the increased presence of queer community centres within a spatiality could create a queer village in Boston. While the development of a queer village in Boston would create a neighbourhood for the safe expression and livelihood of non-normative gender expression and sexual orientation, without the inclusion of other marginalised identities, such as BIPOC and queer people with disabilities, these queer villages risk perpetuating the same exclusionary behaviour that marginalises them from the hetero-normative society.

However, when done thoughtfully and inclusively, the creation of diverse and inclusive queer spaces could promote agency, representation, participation, and social justice within the city of Boston, which would result in extensive rippling effects all throughout urban sustainability, affecting areas such as health, employment, housing, and education equalities.

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Community Briefing on how Child Poverty Relates to Social Exclusion

Judith Hendry



INTRODUCTION

This community briefing is addressed to the social work department of Dundee, as well as the headteachers of schools in each area, aiming to provide feedback in both directions. This is vital, for without information from those with involvement in child poverty and social exclusion, only assumptions can be made as to who is affected by the two issues and their intersection. It is imperative that one looks beyond Dundee and observe the successes and failures of other cities both in Scotland and globally and learn from their strategies. Writing this community briefing, my hope is that by way of building strategies to mitigate issues related to child poverty not only could happy and fulfilling childhood be ensured for all children, but issues — such as drug abuse, post-traumatic stress disorder (PTSD) — that childhood trauma has been proven to lead to in later life could also be tackled.

While a great amount of interest will be directed at children already on the 'at risk' spectrum, it is vital that there be consideration for children who are not but live in low-income households, for not all children at risk are recognised as being so. With the currently ongoing cost-of-living crisis, many families are struggling, and it is crucial that their children are not falling through the system's cracks, as has happened before, with often tragic consequences.

Though simple, the key findings of this brief can be effective when implemented properly, without fear of judgement from those offering the additional help.

SOCIAL EXCLUSION AND FOODBANK USE IN DUNDEE

Prior to the COVID-19 pandemic, Dundee had a massive use in the uptake of the use of local foodbanks, along with community larders. The benefit of the community larders is that people can benefit from their use without a government referral – and some, if not many, could potentially be struggling, regardless of whether they are on benefits or not. UK-wide figures prior to the pandemic show that there was a massive increase in use of foodbanks: '1,084,604 people — including 396,997 children – in the UK received three days' worth of food from the Trussell Trust's network of over 400 foodbanks in 2014/15, compared

with 913,138 in 2013/14. This is an increase of 19 percent' (Dundee City Council, Page 1, 2015). The use of foodbanks, therefore, has been an ongoing issue that cannot solely be blamed on the COVID-19 pandemic, which has only enhanced the issue. Early findings of the pandemic impact showed that there was a likely rise;

'in levels of destitution in the UK by the end of the year, and at least an extra 300,000 emergency food parcels are likely to be distributed by food banks in the Trussell Trust network in the last quarter of 2020 – an increase of 61% compared to the previous year. The modelling shows that – depending on factors like the strength of the economy and a second wave of Covid-19 – levels of need could be even higher.' (Trussell Trust, 2020).

What is clearly shown by the increase in figures is that this is a continual growth of dependency, feelings of social inadequacy and social exclusion for some who have no option but to depend on these referrals. The COVID-19 Pandemic also added extra pressure to the already stretched foodbanks due to 'other hurdles [that] include quarantining stock handed in by the public for 72 hours to ensure it is safe to hand out' (Keith, 2020). The same article also quoted 'drivers delivered an "unprecedented" 2,300 parcels to homes in the four months from the start of April to the end of July as job losses and wage cuts hit many. The figure is just short of the 3000 normally sent out in a whole year'. This is yet another demonstration of how COVID-19 impacted families in many ways and not just the stigmatised drug addicts and unemployed.

Dundee City Council, along with the Trussell Trust, lists common factors of dependency on food banks, including the 'experience of living in the particular local area, including lack of access to jobs, shops and services, impact of physical and mental illness on individuals and the wider household, with illness and/or caring responsibilities affecting not only ability to work but also capacity to deal with other crises, difficulty obtaining or proving educational qualifications or skills Problems with housing, isolation or lack of family support, large debt repayments which reduce disposable income at source and potentially lead to spiralling financial difficulties' (Dundee City Council, 2015).

SOCIAL EXCLUSION FOR THE USE OF FOODBANKS

There is a common stigma and assumption that it is mostly habitual drug users who depend on foodbanks, however, this is proven to be an inaccurate misconception, that stems from stereotypical discrimination. From the reports from the Trussell Trust, with many of the reasons why people need to use foodbanks listed in the paragraph above. The biggest issue about this is fear of social exclusion and degradation can be the main reason that those who do need this help, are reluctant to seek it.

An article (Bruckner et al, 2021) does great work in investigating people's feelings of inadequacy and shame in having to use these with one user advising "The stress and emotional anxiety about not being able to get behind the red tape and structural limitations that centre around time constraints manifest themselves for this participant as an emotional response of humiliation, shame and mental exhaustion" (Bruckner, et al, 2021). What this clearly demonstrates, is that even without outside intervention, such as bullying, whether, this be in person, or on social media, the very need to have to use these facilities is forcing

people to socially exclude themselves.

Another issue is the shame with even requesting the food as "The way food insecure people feel that lack of trust, or humiliation, results in the synergistic effect of the structural barriers and the relational barriers" (Bruckner et all, 2021). What this is demonstrating again is a case of self-isolation, of shame and self-degradation. The report goes on to advise "study participants express feeling judged. There is a real, expressed sentiment of class difference, and a distinct resentment for feeling under surveillance, from an upper or middle-class food bank volunteer or employee: "Yeah. And I'm sure it's probably the reason why a lot of the people don't want to [use the food bank]. They don't want some soft budded, middle-class snot looking down their noses at them from their umpteen thousand-dollar job with their brand-new Prius." What this suggests is that those people in need of food banks are unfortunately even feeling judged and stigmatised, even by the very people who are trying to help. Although it cannot be confirmed that these feelings are truly justified, or is a self-sabotaging feeling of shame, there must be work done to try and negate these feelings to ensure those who need the help, are less reluctant to seek the help.

LIMITATIONS TO THOSE SUFFERING FROM SOCIAL EXCLUSION DUE TO POVERTY AND USE OF FOODBANKS

While we are now living in an ever-increasing world of little to no personal privacy due to social media, people, especially children, are becoming ever more vulnerable to being preyed upon by bullies and social exclusion. The growth in the use of social media, even when the children are not of the legal age to use some of these, means that there is little to no escape from this. There have even been events witnessed of people taking videos of those waiting in foodbank queues and posting these on social media as reported in the Big Issue. The picture taken and shared in the publication stated as to show "A shocking photo showing more than 200 people queuing in the snow for food at a soup kitchen just yards from Glasgow's city chambers has been blasted as "an indictment of national failure". The image of queues for Kindness Homeless Street Team's soup kitchen in Glasgow's George Square has been shared thousands of times on social media after the community group revealed 220 people braved snow and sub-zero temperatures for help on Monday. Social media users branded the photo "shocking and humiliating" while some compared it to Soviet Union in the 1930s. (Gergahty, 2021). The harsh reality is that although the reasoning behind posting this picture could be considered a valuable reason as to highlight the issue, this should be a private process, something which people should be able to use within fear of being photographed and filmed, to thus again avoid the feelings of shame and social exclusion. At the time of writing this community briefing, I was unable find similar instances in Dundee, however it could be easily expected to be repeated behaviour throughout the country.

Poverty amongst children can also lead to social exclusion with parents not being able to afford things like school trips, not being able to afford the most popular school wear items, nor being able to afford regular weekend excursions. There have also been studies done which demonstrate what impact child poverty can have later in life. A recent study this year (although in England, this could easily be assumed to represent the behaviour of people worldwide), showed that child poverty in early life, can lead to impulsive behaviour

as an adult. It is the absence of self-gratification, enjoyable and plentiful food, can often lead to "people from poorer backgrounds are more likely to be overweight, and be dependent on tobacco or alcohol". This suggests that the environmental component of impulsivity might be related to economic circumstances and the availability of resources. This paper provides evidence that children aged 4 to 12 from the most deprived areas in England show greater impulsivity in the form of delay discounting than do children from the least deprived areas. The data are discussed with reference to scarcity-based models of decision-making and to public health inequalities." (Tunney, 2022). What this demonstrates is that it is the regression of fear of not knowing when one will have access to food again, that can lead to poor choices for health. The report later goes on to state "Early experience of relative deprivation, economic uncertainty, or food scarcity could result in a shift in choice parameters to generally prefer smaller sooner rather than larger later rewards. If this shift becomes stable, then it may result in overconsumption and unhealthy behaviours and a risk of developing dependencies and addictions throughout life. Since 2010 the number of families in poverty in the United Kingdom has increased. Relative poverty in the UK has essentially unchanged in from 2007 to 2020 at around 22% of households. However, relative child poverty has continued to increase to around 700,000. Between 2020 and 2021, the UKs largest network of food banks distributed 2.5 million emergency food parcels to people in crisis, a 33% increase the number of parcels and a 53% increase in the volume of parcels on the previous year." (Tunney, 2021). These figures are staggering, and a harsh reality, one which is shameful of what is supposed to be considered a developed country and more must be done to prevent this happening at the source.

The social exclusion which one can face as a child due to poverty, can also manifest itself later in life. Feelings of inadequacy while the brain is still in development can have an effect on all parts of someone's life, whether this be university applications, job applications, friendships and even relationships. This is why research and strategies into dealing with child poverty are so vital, to negate the problem and fix it at the source, to break the cycle and to try and lesson, if not fully stop child poverty for good.

IDEAS FOR CHANGE

Better training and wages for those working in foodbanks

Although the majority of those working in foodbanks are volunteers, it is paramount that the government investigate if this is detrimental to the cause. Although volunteers are gratefully accepted, from the paragraph in this briefing which discusses how people feel they are being judged by some staff working there, it could be suggested that those volunteers, could have feelings of superiority for the very fact that they are giving up their time for free. Even a set wage per day, or token gesture, could perhaps mitigate these feelings, however, the legal ramifications of minimum wages would need to be investigated prior to any decisions being made.

It is also vital that even if we remain with volunteer status at the foodbanks, there must be some degree of training in empathy, social etiquette and how to speak to those being referred to the scheme. The main aim for this community briefing is to avoid the feelings of social exclusion and it is vital that this is done at the source, rather than as damage control once people have experienced this. It could be argued that it is actually extremely

irresponsible to have people working as volunteers at foodbanks without any formal training, based on the variety of people that they may be dealing with on a regular occurrence. To have training may also encourage people to volunteer on a regular basis, rather than attending once and not feeling mentally prepared to return again. Support for staff is also vital to ensure that they are not negatively impacted by the harsh realities of how difficult some people they are dealing with may be and this is true of any organisation.

Education at school/university level

Teaching in schools about the ways in which some people end up with the necessity of foodbanks. By educating people that this is not simply a situation used by "drug addicts", it could happen to anyone at any time, due to a variety of reasons which have already been discussed previously in this briefing. Education could go further through television and radio broadcasts, thus helping the general public understand the magnitude of the situation and learn to develop more empathy towards those in this situation. This may also help to increase donations to foodbanks, which is also another issue which must be looked at.

Education in foodbanks

Education for volunteers at foodbanks is also vital. Although volunteering is of course an act of grace and selflessness, it could be considered detrimental to the mental health of those using the foodbanks if they feel they are being judged by the very people they are asking for help from.

Government funding

Government funding for training and education in foodbanks is vital. Although many supermarkets such as Asda, Lidl and Tesco are already being a massive help towards foodbanks, with daily donations, the Government is essentially the ones responsible for ensuring people have enough to eat. Perhaps some form of tax break for donations from large supermarket chains, would make it more affordable for them to donate items with more of a shelf life, rather than just unsold perishable items at the close of shift.

Wage increases

A staggering reason as to why many are living in the poverty line, regardless of working full time, even in a two-parent household, is the fact that the minimum wage, does not even closely match the cost-of-living increases. It could be considered unfathomable as to why the government has announced a living wage. What the government deems the very minimum payment someone must make to live a healthy and enjoyable lifestyle, yet the minimum wage which businesses have to pay their staff is different. It could also be argued that the fact that the minimum wage differs dependent on wage, regardless of if someone has children and/or their own home to pay for must also be questioned. It could be suggested that this is outright discrimination, to pay someone less for doing the same job as someone else, unless there is a valid reason for this, such as more experience. People's wages simply must be increased, in order to hopefully prevent the dependence on foodbanks, however, this is an issue that must be addressed at a national level, this is something which the social work department must continue to raise with our council representatives.

American strategies

While America has vastly more issues with food shortages due to higher demands, due to

the sheer size of the country, there has been many strategies that their governments have tried to implement, "We argue that a visceral geography focuses our attention to an ontological openness of understanding how, and what neoliberal subjectivities are articulated in specific places, and the types of subjectivities that are encouraged, or discouraged, by neoliberal stigma in practice. Thus, while food assistance programs may rarely be framed as addressing the root causes of food insecurity, practices which encourage, or actively stave off, neoliberal stigmatization hold implications in promoting or inhibiting (food) activism." (Bruckner, et al, 2021). What this strategy helps to demonstrate is dealing with the root causes of food poverty, rather than simply providing food for those who need it. A similar strategy like this may prove useful in the United Kingdom, however, again, research would be required at a much higher level in order for this to be implemented properly.

Child rights to access foodbanks

Although it may be considered unfathomable that a child may need to request the use of a foodbank themselves. It could, with further research into the dangers and the potential successes of this, is to allow children of a certain age, to access food from foodbanks, with anonymity. This would allow the child to ensure that they always have a safe haven to go to, should they not be getting enough sustenance at home, to at least have somewhere to go to get fed at night, without fear of reprisal or recrimination. This strategy of course would require full training for those volunteering in foodbanks, as to ways to spot a child who is at risk of actual harm, or simply one from a home that is struggling for some time.

CONCLUSIONS AND FURTHER RESEARCH

In conclusion, throughout this briefing, it can be easily determined that child poverty is a vicious cycle, one which cannot be blamed on just one factor, of poor parenting, education or poor circumstances. It has been proven throughout the literature cited that there a vast array of issues contributing to this. This was already a massive issue prior to the COVID-19 pandemic, so it would be of no use the pandemic as a scapegoat for the ever-growing problem, which we have seen happening in other agencies and companies. While it would be ridiculous to suggest that the pandemic did not increase the issue, the problem was there long before.

What we must learn now, is to publish more information for all the reasons as to why people have no option but to use foodbanks. Whether this be down to drug addiction, unemployment, low salary, loss of a partner, or any other reason is not something that should matter. The right to food is a basic human right, and therefore, there should be no judgement on anyone for how they must source this. The real aim should be for nobody to need foodbanks; however, this is a high-end strategy and one which needs addressed at a much higher level and would also require much further research, planning and development as to how this could go from a national plan to a reality for all. It is the hope that the research gained and potential strategies put forward from this community briefing, can then be presented to the higher echelons who actually have the power to implement change. Without their help, encouragement and funding, there is a great limit to what we can do as a community to help with the issue. It is the aim that this community briefing can help strategise a way to stop the social exclusion of those who need to use foodbanks at the very

source, rather than waiting until this becomes an emergency situation.

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Reducing Food Insecurity in the City of Glasgow

Sky McMahon



INTRODUCTION

This community briefing focuses on the post-industrial city of Glasgow, Scotland. The city has a long history of inequality but in recent times the urban environmental sustainability challenges that it faces have become more prominent than ever. In this report, I will outline the poverty crisis that Glasgow has been facing, catalysed by austerity measures put in place by the UK Government. The economic disparities in Glasgow come to light and show the extent that the city is struggling with the issue of food insecurity. The actions of the local council and government have not been sufficient to efficiently address the struggles of individuals and families who are living in food poverty, which has caused communities to band together and form groups and organisations to try mitigating the effects of poverty on food security.

I have lived in Scotland my entire life and have seen first-hand the impacts poverty can have on health and wellbeing. My positionality as an undergraduate student who is not a resident of Glasgow needs to be acknowledged as I put forward recommendations to aid the community in furthering the current actions to reduce food insecurity. I outline three realistic recommendations, a collaborative public campaign with different community groups and actors, empowering the community through increasing self-reliance and finally, expanding workshops to cover improving economic activity and income. My intentions are not to tell the community of Glasgow to follow my recommendations, but possibly to use them to realistically continue discussions regarding reducing food insecurity to hopefully make change within the community.

FOOD POVERTY, INSECURITY AND JUSTICE

Food poverty can be defined as 'the inability to acquire or eat an adequate quality or sufficient quantity of food in socially acceptable ways (or the uncertainty of being able to do so)' (Dowler & O'Connor, 2012). Through this definition one can understand the clear link between poverty and being food insecure. There are many factors that can put an individual at higher risk of food insecurity, such as income loss, low incomes, and unreliable and

insecure incomes (Loopstra et al, 2018). Food poverty can contribute to health inequalities as food and nutrition is key in maintaining a healthy diet and lifestyle (Dowler & O'Connor, 2012). The city of Glasgow has extremely high rates of deprivation and inequality. As of 2020, 44% of Glasgow's residents live in the 20% of the most deprived areas across the whole of Scotland (Understanding Glasgow, 2022). The issue of food insecurity has been confronted by the local community through foodbanks, community cafes, fridges, shops, soup kitchens, and gardens (Interfaith Food Justice Network Glasgow, 2022). Focusing on the demands of their local community, these community groups work with a needs-based approach to food justice in the city.

Food Justice and Environmental Justice can be significant ideals when it comes to creating change in communities that are in need. When reflecting on the wider discourse of Sustainable Development and where food justice is positioned within, it is helpful to reflect on the United Nations Sustainable Development Goals (SDGs). The main relevant SDG to the issue that this community brief focus on is 'SDG 2 – end hunger, achieve food security, and improve nutrition and promote sustainable agriculture' (United Nations, 2015). The goal is useful in inspiring discussion about the future and what a more sustainable food system may look like in Glasgow and the wider UK.

The political space that is created by food justice can be used as a tool for creating more cohesive strategies across a multi-scalar network (Wekerle, 2004). The political space also aids in facilitating change through the local projects and initiatives in place to help inform and guide policy change (Wekerle, 2004). Showing that local action in the form of community can be useful in tackling issues and aiding the transformation of structures and furthering efforts to reduce food insecurity.

THE RELATIONSHIP BETWEEN POVERTY AND GLASGOW

'Food banks may be a last resort, rather than a solution to rising issues of food insecurity' (Mcleod, Curl & Kearns, 2019).

Glasgow is the largest and most populated city in Scotland, wherefore it comes as no surprise that the population faces many inequalities. The city of Glasgow has a long history of social division, poverty and inequalities that have not been address as needed (Mooney, 2004). The austerity agenda that the UK Government adopted after the 2008 financial crash cut the budgets of public services and created reform to the social security system (Mcleod, Curl & Kearns, 2019). Those who live in towns and cities are more likely to be disadvantaged and are more susceptible to the harmful effects of welfare reform, economic restructuring, and poor urban policies (Pacione, 2004).

Since the year 2009, the UK has seen a growth in the sanctions applied to unemployment insurance claims, from the agenda of austerity after the financial crash (Loopstra et al, 2018). The Government applied over a million sanctions in 2013, which halted benefit payments for a minimum of 4 weeks, rendering individuals and families without an income to provide food and other necessities (Loopstra et al, 2018). This aspect of welfare reform has impacted large numbers of the population, increasing, and worsening economic hardships, which has, in turn, driven many to turn to food banks, in order to feed themselves and their

families (Loopstra et al, 2018). The change to benefits has impacted Glasgow significantly with a large population claiming Universal Credit. From January 2021, Glasgow saw a 115% absolute increase in the number of residents who claim Universal Credit in the city (Scottish Government, 2021). The effects of austerity measures are still severely affecting vulnerable individuals economically and socially in Glasgow.

Food insecurity has been growing since 2008 with food prices being unpredictable and susceptible to change, specifically increasing in price (Dowler & O'Connor, 2012). Poverty is a direct link to food insecurity; however, it is not as simple as it seems. Food insecurity can be viewed as being a spectrum, it is more than just not having enough food to eat (Marshall & Cook, 2019). Not having enough food, not being able to eat the quantity, quality, and variety of food needed, skipping meals due to lack of food, running out of food regularly, and going hungry; these can all be defined as states of food insecurity (Marshall & Cook, 2019). Glasgow City Council states that in 2017, 11% of residents in Glasgow had encountered a minimum of one event that indicated food poverty and insecurity (Glasgow City Council, 2018).

In 2018, 26% of households in Glasgow had no adults in employment, the highest figure out of all UK cities reviewed (Understanding Glasgow, 2020). In addition, out of those in Glasgow's working age population in 2018-2019, 30% of them were economically inactive, which was found to be significantly higher than the rest of Scotland (Understanding Glasgow, 2020). This only highlights the fact that economic inequalities are rife in the city which have considerable effects on the wellbeing of the population.

POLICY AND GOVERNMENT/COUNCIL ACTION

In the literature – such as Jenkins et al. (2021) identifies a link between austerity measures in place and the increased number of people experiencing food insecurity, Jenkins et al, states that the welfare reform has created holes in the safety nets in place when facing inequalities. This shows that poverty and food insecurity is exacerbated by the governing bodies and their deficient efforts to reduce inequalities among the population.

The Scottish Government acknowledges that UK Government policies and Universal Credit have led to thousands of the population facing severe financial difficulties, ultimately leading to a rise in the Scottish population who have needed to find food aid in past years (Scottish Gov, 2021). Despite these efforts, the Scottish Government does not have the power to fully alleviate the issue of poverty and food insecurity. The Scottish Government has attempted to improve food security in the country, alongside scrutinizing and bringing concerns regarding the issue to the attention of UK Ministers (Scottish Gov, 2016).

In 2021, the Scottish Government invested £10 million into supporting families during school holidays to offer free holiday childcare, activities, and food. Local authorities have also been given £21 million for the payments, vouchers, and meals offered to children during school holidays, provided that they were eligible for free school meals (Scottish Gov, 2021). This shows that the Scottish Government is attempting to tackle food poverty within families.

In 2016, the 'Independent Working Group on Food Poverty' came up with the recommendation of transitioning actions and responses regarding food insecurity from charitable responses to a more rights-based, and more dignified approach (Scottish Gov, 2021). This is reflected in the community actions and recommendations that are covered later in this report — to start a transition away from food banks and other forms of emergency food donations. The Scottish Government has promoted a 'cash first' approach to preventing and improving food insecurity through increasing incomes (Scottish Gov, 2021).

EMERGENCY FOOD AID IN GLASGOW

When reflecting on food insecurity and tackling the issue, one of the first things that may come to mind is food banks. Large numbers of the population of Glasgow use or have used food banks, and the numbers have progressively increased over the past years. From April 2014 to March 2015, a total of 17,815 food parcels were given out in Glasgow, compared to 29,809 parcels from April 2021 to March 2022 (Trussell Trust, 2022).

A quantitative study carried out by Mcleod, Curl & Kearns in 2015 (published in 2019), which focused on 15 deprived areas of Glasgow, looked at the scale of food bank usage and socio-demographic, health, and financial variables. The results found that there were extremely low frequencies of food bank usage among those who were struggling to afford food. Even if an individual regularly struggles to afford food, they will not necessarily go to food banks, as they view it as a last resort (Mcleod, Curl & Kearns, 2019). Many may still view using food banks as a taboo topic, which highlights the urgent need to destigmatise food bank use. This low figure could also be influenced by the fact that, in order to use a Trussell Trust food bank as well as many non-Trussell Trust food banks in Glasgow, one is required to have a referral, typically from a social worker, housing officer, or a general practitioner (GP) (Macleod, 2015). Operating under a referral policy only creates another challenge for those who need food aid, and the referral may not even be fully accurate and cover the true extent of an individual's situation, meaning that they may not get the support needed (Macleod, 2015).

The rising number of food banks and those who utilise the service may hide the real extent of food insecurity in Glasgow and the wider population. This shows that food insecurity and food bank usage is much more complex than it may seem on the surface, highlighting the need for change in how food insecurity is approached in policymaking. Said study also concludes that the factors that push people to use food banks may not solely be financial, but also connected to individuals' wellbeing (Mcleod, Curl & Kearns, 2019). This helps to acknowledge that the current food systems that are in place need reform.

COMMUNITY ACTION

Before moving onto the recommendations of this community brief, it is of paramount importance to reflect on the current initiatives and actions that the local community engages in to create food justice in Glasgow. Throughout the city, there are many community groups, organisations, and charities that focus on helping to improve food security in Glasgow. I will briefly reflect on two different community groups in Glasgow to explore what actions

have been taken by the community to address and help with food poverty. However, it is important to note that what is covered in this report does not show the true extent and range of projects and initiatives that are carried out in Glasgow by the community.

Community-based food security efforts and initiatives help to integrate efforts towards addressing hunger, sustainable food production, and developing a local market for more sustainably produced food and products (Heynen et al, 2012). Community groups have been extremely influential in shifting the environmental movement to help uncover and address disparities and link smaller scale community issues within the wider system for change. However, local community food organisations and groups have struggled to empower, create social change, and position themselves alongside the other varied food community groups (Gottlieb & Joshi, 2010). This helps situate the local community Glasgow groups who are fighting to reduce food insecurity in the wider system.

The 'North Glasgow Community Food Initiative' (NGCFI) is a non-profit that started in 2001, founded by students from the University of Glasgow; it was set up in response to the 'Glasgow Asylum Rights Campaign'. The campaign highlighted a need within the community to improve access to cheap and fresh fruit and vegetables. Their goal is

'to empower individuals and communities to lead practical and sustainable food related activities that improve health and well-being and which helps build stronger, more cohesive communities' (North Glasgow Community Food Initiative, 2022).

The initiative delivers fruits and vegetables to different local organisations, with the goal to help feed and empower the community with access to fresh produce. The NGCFI also runs a food cooperative pantry in Royston, Glasgow. The community pantry offers a weekly shop worth £20-25 for a £3 membership payment and have the option to pay £3.50 per shop — if they can — to help fund subsidised memberships (North Glasgow Community Food Initiative, 2022). They run workshops and events to educate on food alongside increase the time spent outdoors. Cooking classes are held for those who wish to improve their skills in the kitchen and their diets. The classes offer budgeting tips, ideas for healthy meals, reducing food waste and education on nutrition.

'Urban Roots Glasgow' work with groups across the southern side of the city, focusing on projects to help inspire people in the community to take strides towards improving their environment and quality of life. They support the development of the community by utilising food and green spaces, in order to bring people together through community cooking and gardening (Urban Roots Glasgow, 2022). Like the 'North Glasgow Community Food Initiative', 'Urban Roots Glasgow' offers a cookery programme, called 'Great Grubs' and workshops to learn and share knowledge on health, nutrition, and food (Urban Roots Glasgow, 2022).

It is severely problematic that these community groups are having to do work to help the local community access food and resources due to the inaction of the government (Wekerle, 2004). Although, tackling the issue from the bottom up is beneficial in informing policy of the needs of those in a certain locale like Glasgow (Wekerle, 2004). Showing that focusing on a needs basis is of the upmost importance, doing so brings the community together to address social issues that are prevalent in their area and communicating the need for policy change.

RECOMMENDATIONS

The recommendations put forward below are brief and aim to help guide and aid the on-going projects and initiatives ran by the current community organisation that are already established in Glasgow. These recommendations do not claim to 'fix' the issue of food insecurity in Glasgow, but, hopefully, they can open a wider dialogue and help to promote and encourage changes in the local area and wider food system.

The first recommendation focuses on policy and action plans for Glasgow alongside the rest of Scotland. The community groups should continue to lobby for policy reform as the current action and food systems in place are not effectively meeting the needs of the people. The organisations in the city — charities, community groups, and third-party organisations — should collaborate and participate with one another through a public campaign to bring more awareness to the issue of food insecurity in Glasgow. Collaborating with different stakeholders and agencies helps to create better connections, which drives new solutions and pushes the council and the government to make and implement practical change (Marshall & Cook, 2019). The distribution of inequality is a consequence of the lack of participation of marginalised groups, their voices help to build and create a more equitable food system (Loo, 2014). As the food system in Glasgow is extremely dynamic, action and funding are required from the council and Government to continue to address the needs of the community. Perusing the council and UK and Scottish Government to initiate genuine change, get more funding, and remove austerity measures is a tall task. However, a collaborative public effort may be able to pressure them into acting.

Another recommendation is to build on the work already done by groups such as 'Urban Roots Glasgow' and 'North Glasgow Community Food Initiatives' through participation in initiatives and projects to empower residents to make individual change. Providing these resources in more communities across Glasgow will assist and hopefully empower and inspire individuals to join community gardens, cook and improve their wellbeing through their diet and nutrition with the food they have available. Offering resources that meet the needs of the community through projects and supporting them through their struggles is beneficial in achieving food justice. Increasing self-reliance and empowering individuals through these community projects can improve individuals' abilities and enable them to become community actors that can aid in meeting the food needs of themselves and their community. These help facilities to move away from the dependency on external sources, such as food banks and emergency food parcels (Gottlieb & Fischer, 2000). Utilising green spaces — e.g., community gardens — for community movements can help facilitate action learning and empower individuals when it comes to urban food security and improving the health and wellbeing of the residents of Glasgow (White & Bunn, 2017). Empowering individuals within the community can help give them a sense of control, which may have been affected by austerity, their economic situation, and the lack of direct assistance and resources offered by the council and Government.

Food banks are a useful short-term solution, but long-term reliance on the system simply highlights the Governments failures in providing adequate funding and effective policy. However, it is important to recognise that food banks are key to many individuals in temporarily accessing emergency food in the city, and that the transition away from using them will not happen overnight. Therefore, supporting food banks and destignatising

them is still in the best interest of the community, council, and Government to ensure that those who need emergency food support feel comfortable to get and accept it. Bettering local responses to food insecurity through education and sharing knowledge — whether it be cooking classes or learning how to garden — is an incredibly useful tool (Marshall & Cook, 2019). This recommendation is to offer an extension of the current workshop initiatives in place but focusing on improving economic activity and household income. The workshops will cover the concept of a 'cash first' approach, which is seen as a more dignified way to support individuals struggling financially which has been promoted by the Scottish Government (Scottish Gov, 2021). The workshops will help to share knowledge on the different pathways and resources available to those who need extra income to help with buying food, such as the Scottish Welfare Fund and other discretionary funds available (Scottish Gov, 2021). Those in the community may not know that these options are available to them and educating and assisting individuals and families on these grants can help to reduce and prevent future economic uncertainty leading to food insecurity. Showing that getting individuals to make more active changes to their financial situation and their wellbeing is a positive step when it comes to tackling poverty. I acknowledge that there are other external resources out there for this — such as the 'Citizens Advice Bureaux' — but holding session in a local community setting may put people more at ease and make them more inclined to attend as they feel more comfortable.

CONCLUSION

Overall, the City of Glasgow faces many inequalities including food insecurity. Policy and initiatives have been implemented to mitigate the effects of low incomes on wellbeing; however, it is not working as effectively as it should be. Therefore, it is essential to continue the great work that the Glasgow community groups and charities are doing, in order to create the change they wish to see on a smaller scale in the city, while also advocating for a structural rethinking of the broader food system (Gottlieb & Joshi, 2010). Empowering the community and giving them back a sense of control through self-reliance, lobbying for policy change by collaborating with the varied community organisations. and improving financial income will feasibly improve the food security of some residents of Glasgow. By putting forward the recommendations, I hope the community will reflect on them and hopefully utilise in some way, whether it be furthering discussions or implementing them within the city.

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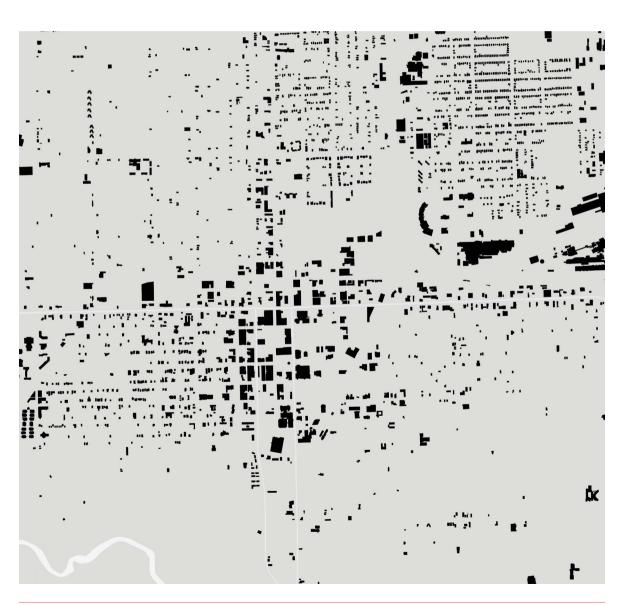
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Tackling Decatur's Declining Population

Ava Rawson



INTRODUCTION

Understanding the Report

The purpose of the report is to provide Decatur residents with resources, support, and solutions to combat the city's declining population in an accessible and informative way. Two sets of solutions will be outlined below, highlighting their strengths and limitations, as recommendations to the community. None of the presented solutions are perfect, they are put forward to begin conversations about why the population is declining and what can be done through community action to combat it. When it comes to localised solutions, it should be acknowledged that this is effectively a call for the affected community to also take on the burden of generating a solution. Whether or not it is ethical to expect affected communities to take on this additional labor is deeply contextual. Despite this, it is important that localised solutions be generated to combat the challenges that they understand better than external actors. To ease the burden inherent to creating and implementing solutions, while still receiving the benefits of community place-based solutions, these solutions should be received from an empowered perspective, one that acknowledges the agency of community members and the transformative power that collective action can have on both individuals and their environment.

Overview

The closure of the Firestone Factory in 2001 directly resulted in the loss of 2,000 jobs. Decatur's current largest employer, the Archer-Daniels-Midland Company (ADM), recently announced that it would be moving its headquarters out of Decatur and into the suburbs of Chicago. The city's population decline has been linked to the loss of such employment opportunities in Decatur by news outlets, and it is an acknowledged feature of academic papers on the topic that the insecurity brought on by job loss often leads to feelings of disconnection from the wider community (Pappas, 1989). Jobs, particularly within goods-producing industries, like manufacturing, have been linked to increased resilience within towns and cities (Peters, 2019). It is the loss of this connection, in addition to the material security that stable employment brings, that contributes to individuals and families' understanding of how they belong to a city as contributing members of its community. And it is this connection that is severed with the loss of employment.

CONTEXT AND HISTORY

In a history and guidebook of the town from 1871, nearly $\frac{1}{5}$ of the pages were dedicated to outlining the wide variety of Decatur's manufacturers (Wiggins & Co., 1871), showing that the it has a strong and proud history of serving as a hub for manufacturing in the region. Although many factories have come and gone since the publishing of 'The History of Decatur, Illinois,' there have been a significant number of factories closed and relocated in recent years. Within the last 40 years, Decatur has cumulatively lost nearly 5,000 jobs in the manufacturing industry alone.



Repairing roads means that people can get to work easier, investing in the cities plumbing system also positively affects the plumbing in the factory itself, even the non-infrastructure projects, investing in schools, are to establish a 'strong workforce pipeline' (Mercer and O'Connor, 2013) for the benefit of the company.

CURRENT SOLUTIONS

There have been a plethora of development initiatives in Decatur since 2010, with only a few of them being community-driven. The vast majority of projects have been funded externally by manufacturing companies, who employ a large portion of Decatur's residents. The difference in the types of projects that are prioritised and funded, based on the primary stakeholders engaged, exhibits an interesting contrast between the two types of development mechanisms. The majority of company-driven initiatives focus on infrastructure that benefits the community, while also allows the company to run more efficiently. Whereas, community-driven project are aimed at rebuilding, reinforcing, and revitalising housing in Decatur, a concern not addressed by any of the externally-funded projects. Housing is not a priority to the external funders since it does not directly benefit them.

WHY COMMUNITY ACTION

The potential for viable community generated solutions within Decatur is relatively high. The generation and implementation of localised solutions is still a fairly new way to combat challenges that are unique to urban spaces (Wilhelmina et al., 2010 and Jarenko, 2013). What makes Decatur especially capable of using alternative frameworks like this, is the presence of alternative conceptualisations by individuals of what it means to be a citizen of a city. The distinction between formal or legal and informal citizenship is a key factor in

Current Company Driven Development Initiatives

ADM invested \$750,000, over a span of 3 years in collaboration with the Development Corporation of Decatur & Macon County

ADM granted the local school district \$500,000 a year over five years

ADM provided \$1 million a year in unspecified community support for at least 10 years

ADM pledged the above three after announcing that they would be moving their headquarters out of Decatur
(Mercer and O'Connor, 2013)

T/CCI invested over \$20 million to manufacture electric compressors and establish the EV innovation hub (Rchuffer, 2022)

ADM 'Water Development Program' (Plaza, 2022)

\$10 million given for infrastructure improvements to repair and replace local neighborhood streets, to fix residential sewers back-ups and a downtown development project (Althoff, 2017)

Current Community Driven Development Initiatives

A community revitalization initiative focused on housing that started in 2017, to 'rebuild, reinforce, and revitalize Decatur' (City of Decatur, IL, n.d.)

determining the viability of community-centered solutions within Decatur. Most urban spaces define formal citizenship through a state authority; even academic literature exploring what it means to be an 'informal' citizen tends to define informal citizenship through mechanisms acting parallel to or against a central authority (Brown, 1994 and Wood, 2017).

Citizenship within Decatur is not reliant on a central authority that incites a sense of belonging, the lived experience is not state-centric. Although ADM's mission was not to become this force within Decatur, it does not mean that its presence is not felt to the same capacity where the state is within other urban spaces. In an Associated Press interview after the announcement of ADM's plan to move its headquarters, Shawn Flaherty said 'right now [ADM is] the only thing going on around here'. At the time, he had been unemployed for 6 months after having worked as a contractor for ADM for 10 years (Tareen, 2013). A singular testimony describing the defining presence of the company, not the state, should not be used to make generalisations concerning the way in which individuals define their relationship to the city. What this is indicative of is that, within this context, there is a potential to define one's relationship to the city by equating it with their relationship to a company, which creates a unique launching point for community action.

In a seperate news article announcing the creation of ADM day in Decatur (September 16th) the author claims that 'the city Decatur cannot imagine life without it' (Reid, 2022a).

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RECOMMEND SOLUTIONS

Decatur's population decreased by 9% from April 2010 to July 2021 (US Census Bureau, 2021). While it might seem easy to assume that the loss of employment opportunities within the city is the principal reason behind the decline, it is important to understand how employment — or the loss thereof — affects Decatur residents' sense of belonging. To come up with a holistic and lasting solution, an equally thorough understanding of the challenge must be gained. At the most basic level, the first step in determining solutions to combat population decline is to understand why the population has started to decline in the first place, by way of conducting a city-wide survey, for instance.

Who would take part in the survey?

Decatur residents

Who would conduct the survey?

A Collaborative research project with Millikin University, dually providing research opportunities for students residing in Decatur

How would data be collected?

Face-to-face or through the mail

These two methods would best suite the population as opposed to a digital survey, which would be limited by the number of residents with internet and the lack of an email database from which to draw on

The survey could be conducted at voting polls

What would be done with the data?

The results of the survey should be made publicly available

It could be posted on the City of Decatur's blog or in a special issue of the Herald & Review

Examples of potential questions to be included:

Why do you stay in Decatur?

Would you continue living in Decatur if you lost your job?

Do you know anyone that has moved away from Decatur?

The effect of the survey:

Community involvement within the research process makes it more participatory and empowering for those involved (Kesby et al., 2007) compared to an external stakeholder managing the data

Challenges to conducting a survey:

What researchers really want to know is why people leave, but there is no way to know unless you ask the people who have left, which is not feasible for the community

Individuals should be aware that in whatever methods are being used to remember whose voice the survey does not collect and how this how influences trends in the data, and the final analysis

SOLUTIONS ADDRESSING EMPLOYMENT OPPORTUNITIES

Even without the results of the survey, many have already come to the conclusion that the reason behind the population decline in Decatur is the lack of employment opportunities within the city. The straightforward solution is to create more jobs. However, this seemingly simple solution raises a number of questions; what kinds of jobs should be created?, what positions should be prioritised?, and how many of them? Each answer to these questions needs to reflect the desires of Decatur residents. Although it does not encompass every

residents' voice, the United Automobile, Aerospace, and Agricultural Implement Workers of America (UAW) chapter in Decatur would be best suited to help determine the answers to these questions, because they have historically represented the largest percentage of workers within the city. There are two main strategies: attract businesses or grow businesses.

A way in which companies can be attracted is through collaboration with employers already present, like T/CCI and ADM's partnership in Decatur (Rchuffer, 2022). Higher education institutions can also be used to draw business to communities, as seen with Whitichta State University's collaboration with Deloitte to open the Smart Factory as part of their innovation campus. In addition, local and state governments can also utilise incentives and tax breaks

Recruiting Strategies

Higher Education Institutions Collaborations:

Wichita State University's innovation campus collaborated with Deloitte to create the Smart Factory, a think tank for cutting edge manufacturing strategies.

State and Local Government Incentives:

The City of St Cloud, Minnesota was awarded the best business recruitment award at the 2013 Excellence in Economic Development Awards for attracting Gingerhoff North America to the city.

The Illinois Incentives and Workforce Development Guide is a great resource to become aware of the state-wide incentive programs to be leveraged.

Resources for Recruiting Businesses

The World Bank's Report, Competitive Cities for Jobs and Growth: What, Who, and How

Metro Council's Business Attraction Program

Fraser Institute's guide on the right way and the wrong way to entice businesses

The Harvard Business Review's article on how to make your city look more attractive to businesses

Resources on Growing Business

The Federal Reserve Banks of Kansas City's ebook, Grow Your Own

They also have a range of guides on topics such as 'Youth Entrepreneurship' to 'Small Business of Color Recovery'

The American Independent Business Alliance

Resources consolidated and created by the Institute for Local Self Reliance

to lure businesses into a city. Community action within this strategy is not direct, and would be utilised through partnerships with the different stakeholders.

Growing businesses is a more community-centric solution. Locally 'grown' businesses return more money to the community (AMIBA, 2012). Increases in the number of small businesses in cities have such positive impacts as a lowering income disparities, a raising average income (Tolbert, 2005) and they have also been linked to greater levels of overall

population health (Blanchard, Tolbert, and Mencken, 2011). An article in the Harvard Business Review showed that 'regional economic growth is highly correlated with the presence of many small, entrepreneurial employers — not a few big ones' (Glaeser and Kerr, 2010). Growing, rather than luring businesses into Decatur ensures that residents are not bidding for jobs from external owners but rather creating stable, long-term positions for themselves.

SOLUTIONS TARGETING COMMUNITY DEVELOPMENT

A job is more than a paycheck — it influences whom one interacts with and how, how much time they spend at home and outside, etc. Likewiese, where and for whom one works, and what kind of work that is influence the way one interacts with a city. The loss of this context brings all of these interactions into chaos. The alienation that individuals and families face when losing their jobs not only affects their material stability, but the entirety of their relationship with their immediate and extended environment. Although providing more employment opportunities resolves the material instability that results from job loss, a city's propensity to remain successful in the presence of change is influenced by much more than individuals' employment status (Peters, 2019). The resilience of a city can and must also be strengthened through immaterial goals that aim at its culture and community.

CULTURAL AND COMMUNITY DEVELOPMENT

Taking Back Unused Space

The closure of the Prairie Farms Ice Cream Plant in 2022 was captured by a news headline suggesting that there would be 'one more empty building' added to the city's graveyard of unused spaces (Reid, 2022 b). While these spaces within Decatur serve as landmarks of closures and are associated with decline, there have been community initiatives elsewhere in the United States to take back similarly unused and vacant spaces. Imbuing these spaces with the values and vision of current residents could be an empowering initiative that gives community members back control over their environment. In addition, these initiatives often provide opportunities for local businesses and artisans to use space otherwise not available to them. This approach is not limited to buildings — outdoor public spaces can also be re-conceptualised in a similar fashion.

Below are several initiatives aiming at taking back vacant spaces, information on potential partnerships and strategic planning resources, as well as examples of community events that could be run in the future.

Resources for Taking Back Spaces:

Chashama: 'Chashama helps create a more diverse, equitable, and inclusive
world by partnering with property owners to transform unused real estate.
These spaces are used for artists, small businesses, and for free communitycentric art classes.' Their website contains information for both people wanting
to offer and use spaces, connecting them with each other for the benefit of the
community.

- Project Pop-Up: In 2012, in downtown Pittsburgh over 90 entrepreneurs, artistsis, and non-profit organisations submitted proposals to have the chance to occupy unused storefronts. Finalists were chosen by the local government and were given grants to occupy the vacant spaces.
- GuerillaGardening.org: They describe their mission as participating in 'a war
 against neglect and scarcity in public spaces as places to grow things'; they
 offer tips on how one can get started, a blog, newsletters, and access to a
 network of other groups and individuals across the globe participating in the
 movement to take back 'unproductive' outdoor spaces.
- De-Paving Initiatives: With the aim to 'free the soil', de-paving events are held by community members, aided by the DePave organisers, to forward their mission of urban re-greening while engaging and empowering the communities that they work with.

Partnerships and Resources for Strategic Planning:

UNESCO Creative Cities Network and their Development Plans and Strategies

The UNESCO Creative Cities Network outlines creative projects from a range
of cities from across the globe who prioritise 'placing creativity and cultural
industries at the heart of their development plans' (UNESCO, n.d.). They also
highlight case studies from cities that created development plans focusing on
creativity and cultural industries, identified their key challenges, and outlined
how they formed their strategies so that other governing bodies could learn
from them.

Burlington, Vermont's Community-Led Demonstration Project and Policy Guide

• The Burlington Vermont Department of Public Works used their own experience with 'tactical urbanism' and community-led demonstrations as inspiration to create a guide as well as resources and case studies from around the United States. As a working document, it suggests ways to test projects and collect data to inform future initiatives, widen community engagement, and deepen stakeholders' understanding of community needs, all while strengthening community relationships 'by encouraging people to work together in new ways' (Burlingtonvt.gov, n.d.).

Tactical Urbanism Guide

• The Tactical Urbanism Guide, created by the Burlington Department of Public Works, focuses on how to implement and participate in short-term projects in order to advance long-term community goals. They have also share guides created by other organisations and institutions relating to transit, resource sharing, funding, project management, and more.

Opportunities for Community Events

Firestone Workers Reunion

The town of Wheelwright, Kentucky held a successful reunion meeting, 25 years after the closure of the Inland Steel Mine, reuniting the workers who had spread out across the country to reminisce about the time that they shared during work prior to the closure. A similar event could be organized for the Firestone Factory workers, bringing them back to Decatur (Perry, 2012).

Labor Day Parade

• The town has a long history of manufacturing and maintains this identity through the presence of ADM in the city. This history should be celebrated not through its allegiance to the companies that remain, such as the creation of ADM day (Reid, 2022a), but as a tribute to the hard work of the generations of residents that came before.

Decatur Lake Water Sport Development

- Dragon Boat Racing: Decatur, Alamaba runs successful annual dragon boat races benefiting a local hospital; a similar event could be held on Lake Decatur to draw in tourists.
- Rowing Club: The city used to have a rowing club in the 1920s, which has since closed. A collective, led by athletic coordinators from local schools and universities, could lead a campaign to bring back the club. There have been recent initiatives to increase access to rowing as a sport (Clark, 2022 and Rowing in Color, n.d.), and the project would likely qualify for grants, which could decrease initial cost-related struggles. Even without the presence of a permanent boat club the lake is well situated to host regattas.

CONCLUDING REMARKS

This report is neither a call for action for community members, nor a condemnation of action taken in the past, either by community organizations, local government, or external stakeholders, such as ADM. Its aim is to help conceptualise how Decatur residents might be able to have an impact on the systems and circumstances that are causing the population to decline. This can begin by simply starting conversations, asking questions, and reflecting on how employment landscapes in particular within Decatur affect residents' lived experiences.

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Who Owns the Right to Food in the City? A Community Briefing Addressing Urban Hunger in Prague.

Julia Lurfová



I have been involved in the Prague chapter of Food not Bombs (FNB), an anarchist urban resistance movement sharing free vegetarian food in public, on and off since 2017. Over the winter and spring of 2021, I engaged with the movement more consistently – Covid-19 Pandemic restrictions meant that I was studying University remotely, from Prague. During this time, I witnessed an increasing amount of police interventions trying to stop our food-sharing under the justification that FNB's activities were unlawful and dangerous. Gathering people during an ongoing pandemic posed a public health risk, we were told. While I did not want to underplay the severity of the Covid-19 pandemic, I could not help but wonder, which 'public' was in question here? What I saw was lengthening lines of hungry people showing up for free meals, targeted by frequent police dispersal interventions. To me, their struggle for food also represented a public health concern.

Through every intervention I witnessed, the city was becoming less of an inanimate backdrop to everyday struggles, and more of an active, 'always mutating and unevenly developed landscape of regulatory reform, experimentation, circulation, failure, (re) consolidation and crisis,' reproducing these struggles (Peck, Theodore and Brenner, 2013, p. 1093). The side-lining of a certain 'public's' health and wellbeing became yet another hallmark of a 'failing neoliberal city', guided by free market logics that favour austere deregulatory reforms, privatization, and the 'inalienable' individualized right to profit (Peck, Theodore and Brenner, 2013; Harvey, 2003).

To set the scene, an encounter from one of our regular Sunday afternoon food handouts at the Winston Churchill square, in Prague's Žižkov neighbourhood, comes vividly to mind. We were approached by a law enforcement unit that was sent to stop our food sharing action. We did not have a hygiene permit, and by 'unlawfully' taking up 'public' space, we were found breaching Law n.251/2016 Sb., §5g concerning the 'destruction or unlawful occupation of public space' (MVČR, 2021). One of the police officers noting down our car's licence plate claimed that homeless people whom we share food with were bound to urinate in the square and thereby destroy 'public' space. A person who had just finished eating confronted the officer: 'How can public urination be legally forbidden, when most public toilets charge a fee? What are people without shelter or money meant to do?' The altercation had me reflect on the 'publicness' of urban space, and the logical paradoxes that characterise

it: what, if not accessible to everyone, is the 'public' in the city (Chapman, 2006)? How can you legally demand something that remains out of reach for a part of the urban population? Whose quality of life gets prioritised in the 'public'? Who, in David Harvey's words, has the right to the city; the 'right to change it after [their] heart's desire' (2003, p. 939)?

Motivated by such questions, this community briefing is conceived as a response to increasing attempts to regulate or dissolve activities of one of the fastest-growing anarchist initiatives taking root in over 60 countries (Heynen, 2010). To me, FNB represents one of the most creative efforts to politicise urban food poverty by exposing it in the 'public' realm of the city. By firstly introducing FNB's emergence in the North American context, I hope to accentuate the movement's political dimensions and introduce the challenges it poses to the neoliberal food charity enterprise. I then turn to the historical and present-day specificities of its Czech form, appreciating the 'distinctive [trajectory] of neoliberalisation in the...(post) socialist [city]' of Prague (Peck, Theodore and Brenner, 2013, p. 1093). Through Prague's case, I stress the importance of fostering neighbourhood solidarity in the face of increased institutional obstacles with the aim to empower FNB activists and other neighbourhood actors in Žižkov in their struggle against urban food injustice. The two recommendations concluding my briefing offer practical means for fighting for a more just 'urban commons, a public sphere' in which food is framed as a right for all, rather than a gift for those deemed 'deserving' (Harvey, 2003, p. 941; Heynen, 2010).

FOOD, NOT BOMBS

The context of the movement's emergence

By virtue of being a political anti-establishment collective cooking from 'waste' food, Food not Bombs has positioned itself against the state and its law enforcement systems. The movement emerged in the USA in the 1980s as an active confrontation of dominant neoliberal mitigation measures to growing domestic hunger (Riches and Silvasti, 2014). The first free public foodshare took place in Boston in 1980, during a First National Stockholders' assembly in front of which activists set up a 'mock Depression-era soup line' (Friedmann, 1982, p. S249). FNB activists criticised the government for funding military and nuclear armament over adequately feeding its people. They opposed the ongoing framing of food as 'a weapon in the US negotiation kit': 'a tool' central to binding less-wealthy countries in conditional free-market trade agreements and to containing 'publics' by repressing unrest (Earl Butz, cited in Patel, 2007b, p. 91; Friedmann, 1982). Through handing out food unconditionally, in 'public' urban spaces, FNB actively reframed food as an (unmet) basic human right (Heynen, 2010).

During the 1980s, the neoliberal US government was setting a precedent for an institutional response to domestic hunger, which was growing predominantly due to rising food prices. As part of the privatization and deregulation of welfare, the United States embraced decentralised and depoliticised emergency food aid and charitable food banks in place of offering more systemic solutions to hunger (Peck, Theodore and Brenner, 2013; Riches and Silvasti, 2014). However, refusing to give up control over the increasingly privatised antihunger enterprise, the government adopted a regulatory 'Shadow State' role (Wolch, 1990). This 'Shadow State' remained entrenched in a decentralised 'non-profit industrial complex' (Smith, 2017), binding charities in government and corporate contracts (Heynen, 2010).

The conditional, contractual, and legal intertwining of the non-governmental, the private, and the secular established what Warshawsky (2010) describes 'non-profit quietism', limiting the political agency of anti-hunger charities. In the case of neoliberalised social services, the very donations and funds on which food charities rely simultaneously become the means through which corporations write off taxes and extract value from surplus produce that would otherwise turn into unproductive waste (Parson, 2014). Neoliberal conditionality extends to those struggling with food poverty: by framing the social service of food provision as a 'gift' reserved for 'deserving publics', the food aid clientele is required to legally prove their deprivation. For the hungry, receiving institutionalised help is conditioned by acceding to the disciplinary biopolitics of authority and surveillance inherent to the neoliberal food charity enterprise (Parson, 2014; Riches and Silvasti, 2014).

FNB's resistance strategies

It is within this context that the resistance movement Food not Bombs emerged in North America. Its activists have not only condemned the neoliberal state's 'further retrenchment of social-state commitments' and the 'devolution and dumping of financial obligations' on the private and non-governmental sectors, put in charge of addressing hunger in place of state-funded social welfare interventions (Peck, Theodore and Brenner, 2013, p. 1097; Spataro, 2016; Riches and Silvasti, 2014). They have also denounced the individualisation of food poverty, framed as a result of personal failure, laziness, and individual consumers' food illiteracy (Maniates, 2001; Parson, 2014).

To actively resist this twofold depoliticization of hunger, FNB has been working to prefigure convivial alternatives to the neoliberal anti-hunger paradigm ever since the first food sharing action in 1980 (Spataro, 2016). The movement's non-violent, civil disobedient direct action, united under the slogan of cooking up mutual aid and 'solidarity, not charity' (Parson, 2014, p. 43), challenges the biopolitics of charities which require their clients to agree to the terms of disciplinary authority and surveillance before being gifted food (Parson, 2014). Rejecting the neoliberal politics of containment enforced through 'non-profit quietism' that renders food charities apolitical, FNB's mutual aid model of publicly sharing food without discrimination works to politicise food as a 'right, not a privilege' for a select few who meet the criteria of being 'deserving' of food aid (Heynen, 2010, p. 1225; Parson, 2014).

This politicisation works in two main ways. Firstly, by cooking from food designated to go to waste, FNB activists draw attention to the discrepancy between the hundreds of millions of tonnes of (often perfectly edible) food lost or wasted every year, and the over two billion people lacking access to adequate food, annually; understood as a direct result of the global food system's organisation (FAO, 2019, 2021; Patel, 2007a; Parson, 2014). Secondly, by refusing to withdraw into basements or church halls where food banks are often situated and instead organising food handouts in highly visible squares or parks, the movement reclaims – and hereby challenges the notion of – urban 'public' space. Ultimately, through making both food poverty and resistance visible, FNB aims to disrupt the mundane flow of the neoliberal city (Heynen, 2010).

Policing and clashes with the state

In many North American cities, the disruptive practices of FNB are routinely targeted by police forces. Activists have been described as 'food terrorists' by high-ranking government

officials and often face fines or detention for their involvement (Heynen, 2010; Parson, 2014; Spataro, 2016). In San Francisco or New York City, free public food distribution to the poor has been institutionalised as 'quality-of-life violations'. Subsumed under the rule of 'zero-tolerance policies', these violations encompass a whole range of prosecutable 'disruptions' to the 'public' realm of the city. From 'public drinking, sleeping, and urinating' (Spataro, 2016, p. 190), to 'panhandling or, indeed, sharing food' (Heynen, 2010, p. 1223, original emphasis), what constitutes acts of survival for certain urban publics becomes framed as violations of the life quality of 'orderly' citizens. But this 'geography of survival' is not just attacked through legal discourse. On the material level, urban design strategies such as bench removals reproduce 'public' spaces as 'spaces of exclusion' rather than as sites of 'free, unmediated interaction' which would allow for contestation (Mitchell, 2003, p. 132; Heynen, 2010).

In other US cities, FNB chapters run their foodshares without much attention or intervention from city officials (Parson, 2014). Based on my experience and accounts from elsewhere in the Czech Republic, for most of their existence, this has also been the case for Czech FNB chapters. Such discrepancies in institutional responses reflect the unevenness of neoliberal geographies, crystallising in 'local fields of difference' while embedded in 'transnational fields of power' (Peck, Theodore and Brenner, 2013, p. 1094). An embedment in global networks of power entails what Peck, Theodore, and Brenner describe a transfer of policies 'across places, territories and scales' (2013, p. 1091). However, local specificity means that while 'zero tolerance' policies have spread globally as precedents for dealing with 'unwanted publics', the intensity of their impact varies geographically (Spataro, 2016).

Antagonistic institutional attitudes towards free public food distribution, together with increasingly corporatized and institutionalised charitable food banking, have indeed been transferred to the Central European context (Riches and Silvasti, 2014). In the Czech Republic, neoliberal restructuring in favour of free market relations took off in the 1990s, after the country gained independence from the Soviet Union, influencing the country's politics for more than four decades, in 1989. The grounds for Czech(oslovak) Soviet occupation were established after the Communist Party of Czechoslovakia seized control over the government in 1948. In 1968, Soviet troops definitively invaded what was at the time Czechoslovakia to repress the Prague Spring uprising (Todorova, 2010; Parson, 2014). After the Soviet occupation had ended, neoliberal policies mirroring their North American counterparts became institutionalised in the newly established Czech Republic. For instance, the above-mentioned prohibition of 'destruction or unlawful occupation of public space' was formalised as Law no. 200/1990 in 1990 (the law's current version is a 2016 amendment; Zákony pro lidi, 2017).

In the Czech Republic, clashes between FNB's activities and the state became dramatically amplified during the Covid-19 Pandemic. Similar experiences to the one opening this briefing, set in Prague's Žižkov neighbourhood, have been documented around the country. In Ostrava, an industrial city close to the Polish border, state forces attempted to shut down FNB's foodsharing under the guise of 'protecting public space' from FNB's 'undesirable activities', criminalised as a public health risk (Food not Bombs, 2019). The pandemic as a creative crisis brought along new formations of disciplinary control, dramatically transforming the urban terrain resistance movements such as FNB are confronting (Peck, Theodore and Brenner, 2013). And while it is important to revisit the context within which

Czech FNB emerged (the following section's objective), it may also be time to review FNB's resistance strategies in the face of this ever-evolving regulatory urban landscape.

The Czech context

The first Czech FNB chapter was founded in 1998, in the early days of Prague's second historically significant squat, Milada. The movement was born out of a longstanding anarchist tradition. Anarchist organising picked up momentum in the late 1980s, during the later stages of the country's occupation by the Soviet Union. It culminated in the 1990s, in the first decade of Czech Republic's independence. In 1993, Ladronka – the first major political squat in the Czech Republic functioning for seven years to come – was founded by Czech and Slovak anarchists with links to dissident circles, who squatted an abandoned farm in Prague's Břevnov neighbourhood. Members of the Czechoslovakian Anarchist Federation founded Prague's second significant squat, Milada, in 1997. For the next twelve years, Milada was based in the Troja neighbourhood, in the vicinity of the Holešovice train station which FNB used for their food distribution. Prague's last major squat, Klinika, functioned as an autonomous social centre from 2014 to 2019 in the city's Žižkov neighbourhood, in which FNB found its second home (Novák and Kuřík, 2020).

In the Czech Republic, the 1990s were characterised by a liberal-democratic euphoria; mainstreaming of formerly dissident movements; systemic restructuring of the job market and the previously collectivist social welfare system; privatisation of properties nationalised under communism; as well as growing urbanisation — all driven by the prospect of capital accumulation. In the early 2000s, the urban space and way of living in the country's capital was becoming more and more commercialised and commodified, pushing vulnerable 'publics' out of the increasingly privatised city centre (Todorova, 2010; Novák and Kuřík, 2020). While in 2009, the economic crisis as a culmination of such trends advanced the demise of Milada, it did not dissolve FNB born out of the squat's grounds (Novák and Kuřík, 2020).

Since the late 1990s, FNB has spread to the rest of the Czech Republic as well as to other neighbourhoods in Prague. Originally, as part of reclaiming highly visible public places, squatters and activists from Milada based their foodsharing at the Holešovice train station (Novák and Kuřík, 2020). In this briefing, the chapter in question shares food at the Winston Churchill square in Žižkov, situated on the other side of the riverbank nearby Prague's Central Train Station. The Holešovice group remains active, providing food every Saturday, while the Žižkov chapter cooks every Wednesday and Sunday. Both groups source food primarily from supermarket dumpsters, or through unofficial agreements with local bakeries and other mutual-aid groups. And while so far, they have successfully resisted the infringing state regulations, it seems that in the face of new challenges introduced by the Covid-19 Pandemic, it may be worth revisiting their DIY resistance strategies to urban hunger.

RECOMMENDATIONS

This final section proposes three practical recommendations that take into consideration the historical and present-day dimensions of FNB, acknowledging both its original, North American context, and its specific shape in the Czech Republic. These recommendations are

not intended to be prescriptive. Rather, they are propositions intending to facilitate conversation among FNB activists and the wider neighbourhood in which their practices are situated.

Exploring the political dimensions of FNB

The first recommendation focuses on a simple, but crucial aspect of FNB's resistance briefly summarised in the previous section: the political framing of the movement's activities. When I first involved myself in FNB's cooking and food sharing, I mainly appreciated the material merit of our activity: sharing free hot food with the urban poor. Only through educating myself more on how the movement started (both globally and in the Czech context), as well as on how exactly it challenges neoliberal responses to urban hunger (produced by the very same systems that mitigate it), did I begin to appreciate its political potential to disrupt the way neoliberal cities, and their 'public' spaces, are organised.

I neither want to assume anyone's knowledgeability about FNB's political dimensions, nor do I want to suggest that those involved are unaware of the ways the movement challenges state-led or charitable initiatives and neoliberal spatiality. Nevertheless, I do see value in encouraging internal discussions among FNB activists about the resistance the movement tries to forge. Given that FNB emerged over four decades ago in the North American context, discussing what exactly it is trying to disrupt in the Czech Republic's post-communist urban landscape could be helpful in mobilising agency and prefiguring mutual-aid solutions to the injustices happening in the present-day shape of the city.

Building links between FNB activists and locals

My second recommendation concerns the connection between the movement and the neighbourhood it is active in. Some may view what I go on to suggest as conforming since my recommendations engage with publics whose 'quality-of-life' is routinely privileged at the expense of survival practices of others. Despite the relevance of such critiques, I view the ensuing discussion as part of a broader effort to foster solidarity in the face of a hostile neoliberal urban landscape. At the heart of my suggestion lies the following question: in the long run, who and what is meant to be disrupted by FNB's activities?

Before the pandemic, my chapter's altercations with Žižkov locals were relatively limited. However, the neighbourhood atmosphere changed in response to the Covid-19 Pandemic. The movement started facing more public and state opposition than ever before. An important realisation was that most police interventions were requested by locals, who were passing by our foodshares. Their complaints and phone calls were summoning law enforcement units. While I appreciate that disrupting the 'quality of life' of the passer-by and '[exposing] poverty to the glare of those who do not want to see it' (Heynen, 2010, p. 1229) are inherent parts of FNB's resistance, the movement is equally about '[appropriating] public space in such a way that people find themselves in a position to have discussions about the unequal distribution of resources, about food security, non-violent civil disobedience, and war' (Spataro, 2016, p. 194).

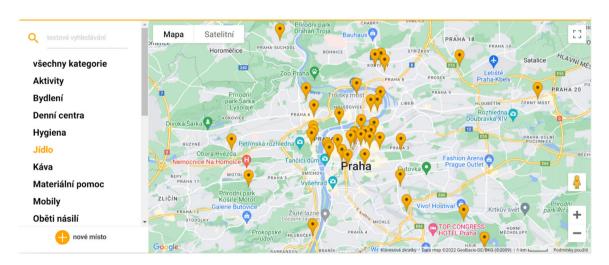
I believe that engaging with 'publics' who pass by – usually either without paying much attention or calling the police at the other extreme – should be a part of FNB's solidarity ethos. Not as a means to please these 'publics' or to conform to ideals about a harmonious public space free of contestation. Rather, to open the forum for productive discussions.

Ultimately, is not the state apparatus and its inadequate responses to hunger the movement is trying to contest? During the Pandemic, within our chapter, designated people were responsible for communicating with the police. Taking inspiration from this strategy, I propose there could be a dedicated outreach person at each food sharing action. Their responsibility would be to engage in conversations with the passers-by, communicating the political message of the movement and perhaps even building connections with potential supporters.

Engaging with neighbourhood capacities

Lastly, I suggest the movement builds further connections with like-minded organisations and businesses. Already, there are links with bakeries providing FNB Žižkov with leftover bread. To make the movement's practices even more sustainable in the long-term, I consider extending these connections an effective way of assuring there is enough food to cook with each week. If needed, such connections could provide alternatives to volatile, dumpster-dived produce.

In Prague, the movement is registered as part of Místní místním (trans. Locals to locals, 2022), a city-wide scheme for cafés, restaurants, and other establishments that provide an array of social services to people in need. Their services, such as charging a phone or taking a shower, are always free of charge. The map in Figure 1 illustrates the geographical spread of the network, while Figure 2 lists selected food-related establishments that may be useful links for FNB as they could provide food that would otherwise be wasted. In my view, working together with the neighbourhood with the aim to challenge disciplinary state control and neoliberal conditionality is not mutually exclusive with prefiguring of a mutual-aid alternative to the status quo that FNB strives for.



Map showing selected food-related mutual aid organisations and businesses.

Seznam služeb Praha: Jídlo

název	adresa
Středisko Naděje Praha Bolzanova	Bolzanova 1604/7
Armáda spásy	Tusarova 60
Azylový dům sv. Terezie	Pernerova 20
Bistro Habibi	Klapkova 1035/28
Café Therapy	Školská 1267/30
Denní centrum pro Ženy	Žitná 35
Dobrá Trafika, Korunní	Korunní 1174
Družstevní kavárna ROH	U božích bojovníků 606/3
Family coffee & bistro	Ke Stirce 564/15
Food not bombs	Vrbenského
Food not bombs	Náměstí Winstona Churchilla
Hájovna	U lesika
Hermes	Nábřeží Kapitána Jaroše
K srdci klíč	Antonína Čermáka 85/4
Knihkopec	Tusarova 1545
Komunitní centrum Husitská	Husítská 114/74, Praha 3
Kostel sv. Tomáše	Josefská 8
Maltézská pomoc	Lázeňská 285/13
Maltézská pomoc	Karmelitská 9
Mlsná kavka	Sokolovská 29
Mobilní výdejna K srdci klíč	NA VYPICHU
Muslimové rozdávají jídlo	Vrchlického sady
Potrvá	Srbská 2, 160 00 Praha 6-Dejvice
Pracovna	VIkova 36
Pražírna	Lublaňská 676
Přestupní stanice	Chelčického 890/17
Přestupní stanice	Opatovická 7
Přístav 7 / Plovárna	Jankovcova 8b
Prostor 39	Řehořova 33/39
Restaurace Střecha	Křemencova 7
Sestry Voršilky	Ostrovní 11
Středisko Naděje Praha U Bulhara	U Bulhara 46
terén Arcidiecézní charita Praha	Kobyliské náměstí
Terén Armády spásy	Výstavní, Praha
Terén Armády spásy	Nad Slávií, Praha
Terén Armády spásy	Beladova
Terén Naděje	Parkoviště u Barrandovského mostu
Terén Naděje	U Nákladového nádraží, Praha
Terénní program Křižovatka – Neposeda, z.ú.	Maňákova 743/9
Veřejná lednice	Kubatova 32/1
Veřejná lednice	Suchdolské náměstí 734/3
Veřejná lednice	Chemická 953
Výdej stravy CSS	Chodovská

List showing selected food-related mutual aid organisations and businesses.

CONCLUSION

Through this community briefing, I firstly offered an overview of FNB's emergence in the North American context before turning to its Czech form. I explored the movement's resistance strategies to dominant neoliberal mitigations of urban hunger as well as the state opposition it faces in its respective urban landscapes. Such an overview could form a basis for an internal conversation about FNB's resistance that I proposed as my first practical recommendation towards the end of my briefing. Alongside reflecting on the power landscapes that the movement emerged in, I believe it is important to stress the evolving nature of the 'neoliberal city' and what this might entail for a resistance movement challenging its terrain (Peck, Theodore and Brenner, 2013). My second and third recommendations therefore concerned extending solidarity within the neighbourhood through an outreach role and through forging links with the Místní místním network.

Prague has a history of anarchist initiatives becoming closed in, which has ultimately led to their demise. The city's original squat, Ladronka, essentially became an 'enclosed enclave', a depoliticized 'club with no rent' (Novák and Kuřík, 2020, p. 210). While Milada, Ladronka's successor, partially reclaimed anarchist politics, it withdrew in the face of encroaching neoliberalism in the first decade of the 2000s. Prague's last major squat, Klinika, put an effort in building neighbourhood relations. It became an autonomous social centre hosting free events for various publics. Despite ultimately facing eviction in 2019, the squat received considerable public and neighbourhood support and was able to run for a total of five years (Novák and Kuřík, 2020). Given this context, rather than as a co-option of FNB's values, I see greater engagement with the neighbourhood as a part of FNB's own geography of survival.

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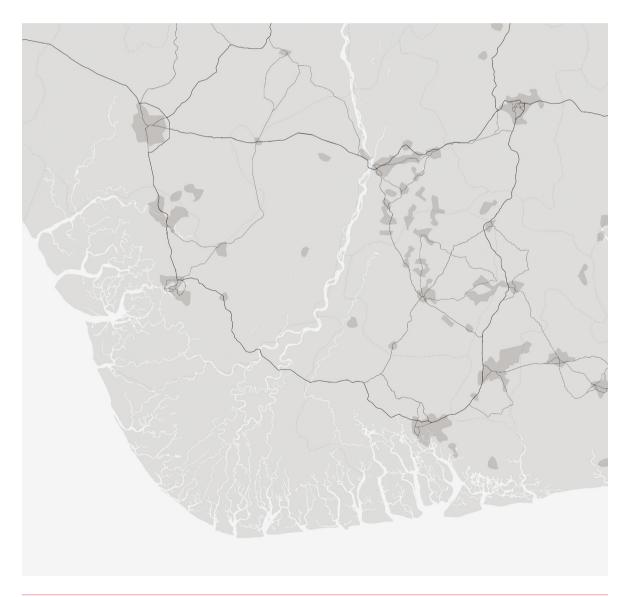
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The Effects & Impact of Environmental Justice: A Multifaceted Outlook on Environmental Sustainability Affecting Low-Income Residents of the Niger-Delta Region (Nigeria's Oil-Producing Areas).

Racheal Inegbedion



INTRODUCTION

The author is a social development professional with over nine years of experience working with and managing civil society organizations to promote inclusion and equity for vulnerable populations. Her non-governmental organization, the Special Needs Initiative for Growth, was created in response to the environmental and social injustice and exclusion that the author witnessed on a disabled young person in her community years ago. Since then, the author has dedicated her life to using advocacy for inclusion and equity to amplify the voices of marginalised groups and communities, including people with disabilities in underserved communities. This focus is reflected in the choice of topic for the community briefing, which aligns with the author's professional interests in using community-driven solutions, such as procedural justice, shared vision and goals, ownership of outcomes, relationship building, representation, and promoting social justice and transparency to achieve sustainability.

The Niger Delta region of Nigeria is home to 25% of the country's population and has the third-largest drainage area of Africa's rivers. It is a vast coastal plain in the south-eastern part of the country, consisting of multiple limestone layers running along the Niger and Benue rivers, covering an estimated 25,640 square kilometres of Nigeria's territory. Over 7 million people from ethnic groups — such as the Ijo, Urhobo, Itsekiri, Isoko, Efik, Etche, Ibibio, Igbo, Andoni, Ikwere, and Ogoni — consider this area to be their home (Versobooks. com, n.d.). The Delta is known for its rich biodiversity, but it is also a delicate ecosystem. The exploration and production of natural gas have had a significant impact on the physical environment, disproportionately affecting low-income residents and vulnerable populations, principally due to the presence of hazardous waste facilities.

This raises concerns about environmental justice, highlights the need to ensure that development practices do not harm marginalized communities, and underscores the crucial importance of sustainable development practices that balance economic growth, cultural preservation, and environmental protection while ensuring social equity.

This community briefing will examine environmental justice issues and sustainability themes in the Niger Delta region through a multidimensional framework, examining the effects of community-driven approaches on low-income residents' lives in the region's oil-producing areas. It will also explore the influence of environmental regulations on these populations and provide a global context for these issues. The briefing will conclude with key recommendations for addressing these issues at local communities, oil-producing companies, and on governmental levels.

THE PROBLEM AND IMPLICATIONS

Approximately 8 billion cubic meters of gas is flared every year at various oil production sites in the Niger Delta region of Nigeria (NOAA/GGFR satellite data) (Chuwah and Santillo, 2017). As these gases are burnt at production sites, they release airborne pollutants, such as sulphur dioxide, nitrogen oxides, heavy metals, ozone, particulate matter, and other carbon-equivalent emissions into the atmosphere, causing severe air pollution (Anaejionu et al., 2015, p. 118). Research has shown that high concentrations of fine particulates (PM2.5) can lead to respiratory problems, cerebrovascular disease, ischemic heart disease, and lung cancer (Burnett et al., 2014, p. 112). Cerebrovascular disease, which can cause symptoms, such as visual impairment, limb weakness, and cognitive deficiencies, is a leading cause of disability in Nigeria. Ogbodo-Isiokpo is a populous and large village of the Isiokpo Clan of the Ikwerre ethnic group in the Niger Delta region. It is an agricultural community depending on wetlands that are used for hunting. In 1972, Shell Petroleum Development Company (SPDC) discovered large quantities of oil in the area. An apt illustration of the negative health effects of gas flaring in some parts of the Niger Delta region is a June 2001 oil spill in the Ogbodo-Isiokpo area that contaminated the only source of drinking water for 150,000 people and caused skin and eye problems for children who swam in the oilcontaminated river. Additionally, some of these health issues were accompanied by hearing difficulties (due to noise pollution), sleep disturbances, low birth rates, and stomach ulcers.

Gas flaring in the Niger Delta has been reported to trigger acid rain. Reports show that the levels of sulphur dioxide and nitrous oxide emitted are sufficient to produce acid rain, which can cause skin and lung cancer (Obi, N et al. 2021, p.190). Unfortunately, many of the gas-flaring areas in the Niger Delta are located near the homes of community members. This seems to suggest a deliberate act by oil-producing companies to have community members relocate or be displaced from their homes due to the gas flaring and pollution. The effects of gas flaring have led to subpar crop and vegetation development, a rapid decline in the nutritive value of harvested crops, and land use burdens that quickly deteriorate plant life while also contributing to global warming. In addition, fish that is contaminated by oil and other toxins also pose significant health risks for local populations (Fentiman, 1996, p.23). The loss of important biodiversity (Adekola and Mitchell, 2011; Ugochukwu and Ertel, 2008, p.26; Omofonmwan and Odia, 2009, p.26; Phil-Eze and Okoro, 2009, p.18), including medicinal flora and fauna (Ndukwu and Ben-Nwadibia, 2005), has left low-income and vulnerable community members disadvantaged, with a range of impacts (both direct and indirect) with significant health implications (Omofonmwan and Odia, 2009, p.26; Phil-Eze and Okoro, 2009, p.18).

The Millennium Ecosystem Assessment (MEA) was a worldwide effort that assessed the

condition and functioning of various ecosystems around the globe. It analysed factors that contributed to ecosystem changes and their effects on human well-being (Assessment, 2005). The report was published in 2005, following an evaluation conducted by a group of more than 1,300 experts from 95 countries (Assessment, 2005). One of the significant points made in the MEA report is that the preservation of ecosystem services plays a crucial role in supporting human well-being, and there is a need for enhanced ecosystem management and governance to ensure their sustainability.

The analysis of the 2005 MEA with the present case study confirms the negative impact of environmental changes on the wetlands of the Niger Delta region, which ultimately affects the well-being of the area's low-income residents (Ecosystems AND HUMAN WELL-BEING Synthesis, n.d.). Therefore, it is vital to understand the impact of environmental changes on the well-being of the people in the region and work towards sustainable and equitable solutions that promote both ecological and social well-being.

Despite the commitment of the Federal Republic of Nigeria to end gas flaring and impose fines on oil-producing and exploration companies, these companies continue to do business as usual, thereby threatening the lives, health, and livelihoods of local community members. Some of the environmental consequences of gas flaring and pollution in the Niger Delta have included natural disasters, such as extreme flooding in the Delta region, forcing thousands of businesses, families, and community members to relocate to other states, leading to overpopulation, or migration to other countries in search of a better life and prosperity. This highlights the conflict between economic development and environmental sustainability, as oil companies prioritise profits over the protection of the environment and the well-being of local communities. Additionally, it raises questions about the effectiveness of government policies and regulations in addressing environmental challenges and promoting sustainable development in the region. This underscores the interconnectedness of environmental and social issues and the need for a holistic approach to sustainable development that considers the interests of all stakeholders.

The loss of health-giving species — plants, animals, and microorganisms that contribute to ecosystem services, such as air and water purification, soil fertility, pollination, and food production — exposes the inhabitants of the Delta to health risks, with low-income residents often bearing the brunt of these risks more than wealthier urban residents, who have other means to earn their livelihoods. This situation exacerbates inequality as low-income community members in rural parts of the Niger Delta are exposed to oil rigging activities that are far from urban areas. According to a 2019 Guardian report titled 'This place used to be green: The brutal impact of oil in the Niger Delta', Shell, one of the international oil companies operating in the region, claims that oil spills are caused by deliberate damage, oil theft, and illicit refining by some community members in the region. Udengs Eradiri, state commissioner for the Environment in Bayelsa state (located in the Niger Delta regions), corroborated the report, stating that community members sometimes do engage in illegal activities to survive. The reason for this is that three-quarters of the 2 million people who live in the Niger Delta region of Bayelsa State rely on fishing, hunting, farming, and ferry logistics for their livelihoods, and much of their lands and waters have been degraded. This has resulted in severe environmental injustices — such as job loss, increased poverty, reduced infrastructure, decreased civic participation, heightened insecurity, and deteriorating biodiversity and tree canopy -, leaving them with no choice but to find other

ways to survive (Pearsall and Pierce, 2010, p.574).

Corporate-community relations in Nigeria's oil industry are volatile, leading to significant losses in government oil revenue and multinational oil corporations' profits. As a result, obtaining a social license to operate has become central to strategic business thinking (Olufemi, 2010). To address this, multinationals such as Shell Plc are adopting partnership strategies for community development, to build mutually beneficial relationships and improve their reputation in host communities. This suggests that multinationals operating in Niger-Delta are increasingly recognizing the importance of corporate social responsibility and the need to build sustainable relationships with local communities. However, effective regulation is necessary to ensure that multi-national companies meet their social and environmental responsibilities, and voluntary initiatives alone may not be sufficient to achieve this goal.

The resilience of community members to environmental change is declining rapidly, due to the socioeconomic impacts of oil pollution. Shell claims that it works with local communities, regulators, and key stakeholders to mitigate environmental hazards through environmental sanitation and 'pay compensation' to affected communities (O'Hara, 2001). In this situation, who is responsible for environmental justice: the oil-producing company or the community members? Do these actions represent a procedural or distributive approach? This raises the question of how environmental justice is incorporated or excluded in the Niger Delta oil regions, where oil pollution occurs, and that of the role of policy and governance in this evaluation.

A GLOBAL PERSPECTIVE IN RELATION TO THE CASE STUDY

One of the case studies related to the Niger Delta's oil crisis from a global perspective is the Deepwater Horizon oil spill that occurred on April 20, 2010, on the coast of the United States in the Gulf of Mexico (Osofsky et al., 2012). This disaster was recognized as one of the largest environmental catastrophes in history, as reports in 2012 revealed that the oil well was still leaking, despite being declared closed in 2010. An article titled 'Environmental Justice and the BP Deepwater Horizon Oil Spill' (Osofsky et al., 2012) analysed environmental justice issues that arose because of the responses to the spill. The authors argue that some of these problems were caused by a failure to incorporate environmental justice into planning and regulatory provisions that allow oil companies to operate, while protecting vulnerable populations — a situation remarkably like that of the Niger Delta region. Osofsky et al. (2012) claim that an unequal distribution of both 'good' and 'bad' has broader implications for environmental justice analysis, and they argue that environmental justice issues must be understood as more than simply problematic structural racism that disproportionately affects low-income communities of colour with devastating pollution.

The response to the oil spill has been criticised for releasing waste in community areas, where people of colour live or where there is a high concentration of minorities. This article focuses on the oil spill's impact on vulnerable, low-income residents in the Niger-delta, who are unequally exposed to the negative consequences of oil rig activities. By contrast, urban dwellers in the same region are not exposed to the effects of gas flaring and have access to diverse sources of income and ways to protect themselves from environmental

hazards. It is important for the vulnerable community members in the Niger-delta to have a deeper understanding of the environmental problems they face, so that they can effectively engage with oil companies and access the resources they need to address these issues.

POLICY AND GOVERNANCE FACTORS

According to the UN's Environment Programme (2017), many countries around the world have laws or constitutions that protect the environment, or the right to a healthy environment, and have created government bodies responsible for environmental protection. As of 2017, 150 countries had environmental protections in their constitutions and 164 countries had created cabinet-level bodies for environmental protection (Environment, 2019). Nigeria is one of these countries and, as such, has laws and policies in place to protect the environment, including the Niger Delta region. This debate centres around the effectiveness of environmental protection principles embedded in constitutions and laws, as well as the role of government bodies responsible for environmental protection.

In 2021, the African Centre for Leadership, Strategy, and Development conducted a study evaluating Nigeria's environmental policies and governance in relation to their effectiveness in managing the activities of community members and companies operating in the Niger Delta. The study found that oil spills and gas flaring are major challenges to policy implementation. This is due to several factors, including the lack of tools for government agencies to carry out their duties of systematic monitoring and evaluation, and imposing punitive measures on policy violators. While the government has the authority to take such actions, it lacks the political will to ensure that oil-producing companies adhere to environmentally and socially responsible practices in line with Sustainable Development Goals (SDGs). Adopting the SDGs framework could help prioritise the need for partnerships and collaboration, which is particularly important for addressing complex environmental challenges such as those facing Nigeria's oil-producing regions. By adopting the SDGs, the government can work with other stakeholders, including civil society organizations and the private sector, to develop and implement more effective and comprehensive environmental policies and practices. By aligning its policies and actions with the SDGs, the government can demonstrate its commitment to addressing environmental challenges and engage citizens in efforts to promote sustainability.

Adhering to the SDGs would require balancing economic development with environmental protection and social justice. By failing to enforce regulations and promote sustainable practices, the government risks perpetuating environmental and social injustices and hindering long-term development in the region. As noted by Westley et al. (2011), an effective environmental policy may require a combination of top-down institutional frameworks and bottom-up catalytic and disruptive innovations.

COMMUNITY PERSPECTIVE

Adomokai and Sheate's (2004) publication on 'Community Participation and Environmental Decision-Making in the Niger Delta' highlighted some community perspectives on environmental issues in the region. More than three decades ago, numerous inhabitants of

the Niger Delta became cognizant of the oil companies, as certain individuals from different regions started migrating to these oil-rich areas in search of better opportunities. At the time, it was common for these companies to pay tribute to the elders and youth groups in the communities (Ratcliffe, 2019).

This shows that the arrival of multinational companies brought new economic opportunities to the region along with significant environmental and social impacts. The fact that community members became aware of the companies over 30 years ago suggests that the issues surrounding environmental degradation and social injustice in the region are not new and have been ongoing for decades. This highlights the importance of understanding the historical and social context in which environmental issues arise. Environmental issues do not occur in a vacuum but are shaped by political, economic, and social factors. In the case of the Niger Delta, the arrival of oil-producing companies had significant economic impacts but also led to environmental degradation and social injustice faced by the residents of this community.

Prior to the implementation of Environmental Impact Assessments (EIAs) in 1992, oil-producing companies were not legally required to conduct EIAs and there was no requirement for communities to be involved in decision-making or to express their views on the potential impacts of projects on their environment and livelihoods.

Gas flaring and oil pollution in the Niger Delta by oil-producing companies has led to a decline in livelihood support activities such as fishing, hunting, and canoe services, and a loss of employment opportunities for low-income residents. This has contributed to a long period of community unrest and violence in the region. As a result, it has become important for the government and oil-producing companies to seek ways to engage and communicate with community members before and after the completion of projects in their communities.

This approach led to companies dictating the types of community projects they believed were necessary, rather than properly assessing the needs of the community. For example, they might provide access to a community clinic or educational centre as an act of charity rather than a collaborative effort to address community-driven environmental issues (Adomokai and Sheate, 2004). This approach tends to prioritize the interests and agendas of the companies rather than those of the communities affected by their operations. As a result, these companies have often dictated the types of community projects that they believed were necessary without properly assessing the needs and priorities of the local community. suggest that community involvement and engagement are essential for sustainable development and environmental protection. This is because the people most affected by environmental issues should be involved in the decision-making processes related to their community development. In this case, the argument is that a more collaborative effort is needed between the oil-producing companies and the communities to address the environmental issues in the Niger Delta. This approach should involve properly assessing the needs and priorities of the community and involving them in the decisionmaking process to create sustainable solutions that benefit both the community and the company.

In response, communities would often stage peaceful demonstrations, and representatives from the oil companies and chosen members of the community would meet to discuss problems and potential solutions. However, according to some stakeholders, the solutions agreed upon during these meetings were not always followed by the companies (Demirel-Pegg and Pegg, 2015). This leads to feelings of doubt, despair, violence, and disappointment among Niger Delta communities, who perceived that the government and oil-producing companies did not have their best interests in mind and were not meeting their demands and requests. As Adomokai and Sheate (2004) noted, community members and local stakeholders often reported that the companies did not follow through on their commitments to ensure environmental stability.

This suggests that oil-producing companies have not effectively engaged with the communities in the Niger Delta region to address environmental concerns and meet the needs of residents. This has led to frustration and disillusionment among the community members and resulted in demonstrations, mostly peaceful but sometimes resulting in acts of violence. In addition, it also implies that companies have a responsibility to work collaboratively with local communities to address their needs and concerns, and failure to do so can lead to negative consequences for both the companies and the communities. Overall, there is a need for companies to be more socially responsible and to engage effectively with local communities to address environmental issues and promote sustainable development.

RECOMMENDATIONS

Addressing environmental injustice, such as the situation facing the community members in the Niger Delta region, requires a holistic and reflexive approach, involving collaboration between oil-producing companies, the state and federal governments, the affected communities, and the broader civil society. This means taking proactive steps to empower the most vulnerable and affected communities to have a voice in decision-making processes related to their environment, whether socially, environmentally, or economically.

Given the author's experience in promoting inclusion and equity for vulnerable populations, such as persons with disabilities, the author recommends that the community members of the Niger Delta oil-producing areas work together to adopt a collaborative approach to learning, socialization, creativity, and shared outcomes in the pursuit of environmental justice and sustainability in the region. Community members should advocate for and monitor environmental justice peacefully, without resorting to violence against oil company staff or engaging in illegal activities.

The Federal Republic of Nigeria should ensure that its political practices prioritise social inclusion and equity among local community members of the Niger Delta oil-producing areas, the oil companies, and the environment, to promote peaceful practices in the region. Outdated laws that no longer reflect the realities of affected communities, the environment and society in the Niger Delta must be revised and replaced with evidence-based laws. These laws must be implemented with clear indicators rather than as tokenistic gestures, to truly ensure the environmental safety of the people of the Niger Delta. There must be a separation of environmental regulations from the business interests of oil-producing companies to prevent environmental inequity and injustice. Regular assessments of environmental justice are also necessary for the region, but these assessments must be based

on reliable demographic data about the community members, including information about their age, sex, ethnicity, disability, religion, employment status, education level, and other relevant factors.

Aggregating this data on a regular basis will provide local stakeholders, oil-producing companies, the government, and community members with a deeper understanding of the context in which they operate and help to promote a more equitable distribution of benefits and greater community involvement in decision-making processes that affect them. Reforming the environmental laws of the federal and state governments in the Niger Delta oil-producing regions can help to achieve environmental justice and sustainability.

There needs to be an increase in awareness-raising campaigns on environmental issues, the importance of environmental sustainability, and the rights of communities to a healthy environment. In addition, diversifying the local economy of the Niger Delta could help reduce the region on its reliance on the oil industry, and reduce the environmental impact of oil production and provide alternative sources of income for the community.

Diversification could take many forms, including investing in tourism, agriculture, renewable energy, and aquaculture. Firstly, home to a rich cultural heritage, as well as natural attractions such as wildlife reserves, beaches, and waterfalls, the Niger Delta has excellent potentials for developing tourism, which could provide new opportunities for job creation for the local population and revenue generation for the local government. Secondly, the region also has the potential to become a major agricultural hub, thanks to its fertile land and favourable weather conditions. Encouraging small-scale and commercial farming could create jobs and provide alternative sources of income for local communities. Thirdly, the Niger Delta has abundant renewable energy resources, including solar, wind, and biomass. Investing in renewable energy could help reduce the region's dependence on fossil fuels and, again, provide new job opportunities. Fourthly, the Niger Delta is home to numerous water bodies, making it a suitable candidate as a hub for fisheries and aquaculture. Encouraging local fishermen to adopt sustainable practices and supporting the development of fish farms could provide alternative sources of income for the community.

Overall, diversifying the economy of the Niger Delta requires a long-term, multi-sectoral approach that involves the government, private sector, and civil society. It is important to engage with local communities and stakeholders to ensure that any economic development initiatives are sustainable, inclusive, and meet the needs of the local population.

CONCLUSION

Environmental justice involves addressing the fact that marginalised communities are often disproportionately affected by issues such as exploitation, toxic waste, poisoning, as well as water and air pollution, as has been the case for the community members of the Niger Delta oil-producing region in Nigeria. Disadvantaged groups and lands should not be treated as disposable but rather recognised for their historical, environmental, and cultural value. The systemic injustices experienced by indigenous communities and minorities are interconnected with the environmental crisis and must be addressed through a combination of top-down and bottom-up approaches, involving dialogue between marginalised

communities and the oil-producing companies to co-produce, own, and implement decisions that reflect the views and impacts of both parties and are communicated to those with decision-making power (the government) to influence their decisions.

A just transition to a sustainable future must ensure that no one is left behind, that resources are distributed fairly, and that human rights are prioritized in decision-making at the local and national levels. To promote environmental justice and sustainability in the Niger Delta region of Nigeria, oil-producing companies must develop a deep understanding of and establish working relationships with the diverse ethnicities, social groups, and historically marginalized groups in the region.

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