

Understanding environmental injustice: The case of Imizamo Yethu at the poverty-population-environment nexus

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Chapter 1

Introduction

Environmental justice emerged as a normative concept and a social movement in the United States of America in the 1970s (Schlosberg, 2007) and has often been referred to as the spatial distribution of environmental goods and ills amongst people, including the 'fairness in the distribution of environmental wellbeing' (Gleeson & Low, 1998; Ernstson, 2013). It is a highly interdisciplinary and pluralistic field of academic discourse. The distribution of natural resources and anthropogenic waste has also been covered in the ongoing debate around this topic. It has also shed light on the particularity of ethnicities and marginalised groups that have been at the receiving end of detrimental environmental impacts (Schlosberg & Carruthers, 2010). Poverty and ineffective governance are often highlighted as key cofactors associated with environmental injustice. The environmental justice paradigm's emergence in the United States of America has been described as a "bottom-up" movement that was led by a loose alliance of grassroots, national environmental and civil rights leaders, as opposed to academia, regulatory agencies and/or local governments (Bullard, 2000).

In September 2015, the Sustainable Development Goals (SDGs) were ratified internationally and development objectives were established and prioritized. The first and foremost priority is poverty alleviation, this prioritisation is understandable since unsustainable livelihoods are often inevitable due to (and mutually reinforcing of) a lack of adaptive capacity to environmental hazards. History has taught us that social scientists and environmental specialists ought to be critical and sceptical of seemingly altruistic buzzwords such as 'bottom-up' development. This is markedly the case when it comes to environmental justice. In some instances, for example, the absence of good governance and other forms of external intervention can be pivotal in achieving the SDGs at a community level/grassroots scale.

The research area (see Figure 1) is situated in the Cape Fynbos biome – which is extremely prone to fire due to hot, rainless summers. It is generally safe to say that the weather in this region of South Africa necessitates proper shelter. Over and above such fundamental practicalities in the research area, the spatial legacy of Apartheid has proven to be a persistent problem (Oelofse & Dodson, 1997). "Cape Town...is arguably the most uneven and spatially segregated city in the country, especially with its unique white, coloured and African demographics. It may be the most ghettoized and spatially uneven city in the world" (McDonald, 2008). This picture is abundantly clear in Hout Bay. This suburban area and the adjacent settlement called Imizamo Yethu (IY) (meaning 'Our collective struggle' in Xhosa) stand in stark to one of the most aesthetically pleasing valleys of the Western Cape (Oelofse & Dodson, 1997). Here, the influx of people due to urbanisation in Post-Apartheid South Africa

is a particularly difficult problem because of the topographic constraints of the site. Mountains encapsulate the valley on every side except the southern end – which is where the river meets the ocean and has formed a beach and small estuarine zone.

Hout Bay is a small semi-rural suburb of the Cape Town Metropolitan Area, situated on the western coastline of the Cape Peninsula. Historically, it was wholly designated as a whites-only area.



Figure 1: Imizamo Yethu and Hout Bay on the Cape Peninsula, Western Cape

IY (formerly Mizamoyethu or Mandela Park) was established as a low-income site-and-service settlement for black and coloured residents, most of whom formerly squatted illegally on land elsewhere in Hout Bay (Oelofse & Dodson, 1997). A noteworthy aspect of the then informal settlements in Hout Bay was their rate of growth. By 1990, roughly 2000 squatters resided in five separate settlements. Around this time, the formal white residents showed their disapproval of the squatters by placing pressure on the Cape Provincial Administration (CPA) to deal with the problem, but the newly empowered residents of the informal settlements mobilised themselves as well (Oelofse & Dodson, 1997).

They exploited the shifting power relations in South Africa during a period of political and social transformation, pressurising the State to find land for them in Hout Bay. Conflict developed and the State was called in to mediate. By November 1990 the squatters had acquired legal rights to settle permanently on 18 ha of land within Hout Bay, much to the dismay of many of the formal residents. In April 1991, the five squatter communities were moved to the new site officially named Mizamoyethu but commonly known as Mandela Park (Oelofse & Dodson, 1997).

The response to the establishment of Mizamoyethu from the predominantly white 'ratepayers' of middle-high income Hout Bay community was largely hostile; 48% of these residents believed the sudden influx of black people into Hout Bay was a politically motivated plot to move blacks into white areas to increase voting numbers among white communities to cause general destabilisation. The so called 'Harbour community', or Hangberg, that is mainly comprised of coloured residents, responded very differently; the majority cited the pursuit of employment as the main driving force behind the influx of people from Kayelitsha and rural areas into Mizamoyethu (Oelofse & Dodson, 1997).

More than 25 years after the establishment of Mizamoyethu, the burden of environmental hazards is increasingly heavy on the shoulders of the people who live there. The disproportionate burden of environmental pollution and degradation borne by non-white, impoverished communities has been a focus of growing concern and action in North America and around the world (Brugge & Hynes, 2005; Morello-Frosch, et al., 2005; Shepard, et al., 2002; Wing, 1998; Minkler, et al., 2008). The environmental justice movement has contributed to a deepened understanding of the role that public policies, as well as market forces and other factors, may play in the genesis and exacerbation of environmental inequities (Minkler, et al., 2008).

Brief literature review

As an example, many industries and corporations practically benefit from the pervasiveness of unemployment and poverty – and the dichotomization of environmental health and job opportunities has facilitated cheap labour in developing countries (Alston, 1993: 188, Munnik, 2007). This poverty-inequality-environment nexus will be a *leitmotif* throughout this study; “Inequalities of wealth and power, which are particularly evident in developing countries, form a barrier to the creation of partnerships and cooperation in environmental decision-making. With the reliance on science and technology for assessing environmental impacts and creating solutions, social and development issues are side-lined because they are difficult to conceptualize and measure” (Oelofse, et al., 2006). Technocratic approaches to the implementation of governance strategies and policy making processes have neglected or disregarded the opinions and perspectives of underprivileged people who are intended beneficiaries of egalitarian policies in Post-Apartheid South Africa.

Now, market mechanisms are increasingly relied upon to ‘give everyone what they deserve’ instead of political measures that are notoriously prone to human error. Social grants, housing projects and other interventions have proven to be dissatisfactory for the millions of impoverished persons in South African townships and rural areas. Despite superficial ideological differences between national and provincial government in the Western Cape, there is an unspoken conformity that is displayed by both the African National Congress (national) and the Democratic Alliance (provincial) with regards to the legitimacy of the market economy (McDonald, 2008). The anti-political vogue that is characteristic of free-market capitalism complicates the issue in IY further because the voluntary pursuit of profit often involves exploitation of the less fortunate; at all levels of society.

To better understand the relationship between markets and society, comprehension of modernization processes and their effects on the organization of the economy is of paramount importance (Beckert, 2007). An eclectic approach is called for in the pursuit of environmental justice, this ultimately challenges the supremacy of neoliberal economic ideology in the context of South Africa’s post-Apartheid developmental trajectory. There is ongoing discourse on the limitations and desirability of market mechanisms in bringing about the realisation of environmental justice; and sustainable development in general. Neoliberal ideologues used to reassure Third World countries that, eventually, material and environmental prosperity would ensue; the so called “trickle-down effect”. This has diverted attention from the fact that the free market has contributed to the vulnerability of Third World countries to environmental adversities (Cox, 2007).

Today, the debate on apparent contradictions between respective Sustainable Development Goals continues, and in many cases trade-offs are necessary. In IY, the desperation and apathy that accompanies severe poverty gives rise to a plethora of self-inflicted environmental problems. "...there is also considerable evidence in academic, professional and business literature that sustainability is a contested and elusive concept with which to engage (Barbier, 1989; Dixon & Fallon, 1989; Gladwin, et al., 1995; Milne, 1996; Pearce, et al., 1989; O'Riordan, 1991; Redclift, 1987; Zorvanyi, 1998; Milne, et al., 2006). IY, Hout Bay and Cape Town, epitomizes the elusiveness of sustainable development in a postcolonial context. The magnitude and extent of desperation in IY is visible to such an extent that vulnerabilities to environmental hazards, some as simple as fire and others as complex as geomorphology and climate, are allegedly embraced and exploited for the prospect of material gain from humanitarian interventions – which completely distorts the utopian picture painted by the Sustainable Development Goals.

Whether powerful corporate interests or small portions of the local community who benefit from the status quo are concerned, it is of key importance that stakeholders likely to resist or actively fight efforts to support health-promoting environmental policies need to be identified and carefully considered in the planning and enactment of other policies and regulations applicable to these communities (Minkler, et al., 2008). In this study, the insidious behaviour displayed by some of IY's residents in the pursuit of material and monetary gain will be explored. As opposed to external factors that caused squalidness in townships during Apartheid (and still have measurable significance), the internal perceptions of residents will be appraised to better understand local environmental injustice.

Aim, hypotheses & objectives

The aim of this study is to identify key internal factors that are determinants of environmental injustice in a post-Apartheid South African township, IY. It hopes to indicate practicable recommendations for addressing these factors. It is hypothesized here that 'bottom-up' environmental governance contributes to environmental justice in the context of impoverished and overpopulated informal settlements. In other words, it is postulated that participatory decision making with regards to spatial planning, public service provision and environmental management will catalyse environmental justice in IY. This theoretical point of departure is situated in the context of postcolonial inequality and the global free market economy. In this sense, the compatibility of neoliberal economics and post-Apartheid South Africa's developmental agenda is brought into question from an environmental perspective. This is theoretically akin to the discursive adequacy of 'Ecocriticism' in South Africa post-1994 (Vital,

2008). In IY, the perceived stigma of elitism associated with environmental health and sustainable ecosystem services comes to the fore.

Brief methodology

This hypothesis will be tested by obtaining qualitative data from voluntary participants residing in the study area by means of a questionnaire and random interviews, and interpreting the data. Additionally, during interviews with randomly selected participants, insights into internal factors that reinforce and exacerbate the disproportionate local environmental pollution, vulnerability and ecological deterioration will be sought. Once these internal factors are brought to light, potential solutions will be formulated in congruence with the perceptions and preferences of those who already have the indigenous knowledge of environmental challenges. In other words, participants will answer a series of questions related (directly and indirectly) to environmental justice and environmental governance; and these answers will collectively provide a practical and realistic sample of the community's disposition.

It is important to note that the perceptions of participants not only provide insight into feasible and desirable solutions to the problems they experience in IY, but can also provide deeper insight into the reasons as to why these problems exist – since local dispositions inform local behaviour, and this can exacerbate in situ environmental pollution, degradation and vulnerability to environmental hazards.

Outline of chapters

This study demonstrates the relationship between environmental degradation and material need or poverty in a post-Apartheid South African township. This first chapter provides an overview of the study and research site. The second deals with existing literature in the field of environmental justice, and attempts to elucidate this to provide context for the data analysis and interpretation that follows. Chapter three thoroughly describes the research site and methodology that was used to obtain and analyse qualitative data. Chapter four revolves around data analysis, representation and interpretation. Finally, the last section seeks to provide a comprehensive and concise account of the conclusions, recommendations and implications drawn from the results obtained.



Figure 2: IY expansion because of environmental hazard (fire) destroying hundreds of shacks

Assumptions and problem statement

In this mini-thesis, it is assumed that appraisal of ideological and behavioural factors is salient to gain an understanding of the subjective experience of social and environmental injustice – as opposed to an analysis of the objective existence of legislative and politico-religious doctrines of equality and environmental rights. It is from this point of departure that the methodology was developed to paint a participative and locally meaningful picture of why environmental injustice (antithesis) evidently exists in Hout Bay, the qualitative results obtained from participants through the questionnaire will directly inform the discussion, conclusion and recommendations (synthesis) at the end of the study.

Furthermore, as is visually indicated in Figure 2 above, the congruence of environmental adversities, poverty and uncontrolled population growth – the so-called nexus – is assumed to be a distinguishing characteristic of IY and other South African peri-urban townships. As indicated in Figure 1, the topographic and geomorphological situation of IY's development and expansion makes it a high-risk area because of the township's proximity to the Houtbaairivier. High levels of water pollution and solid waste contaminate the river and degrade the local ecosystem.

In addition, Hout Bay's local economy/environment is directly affected by this persistent pollution, this causes persistent tensions between the starkly unequal communities.

Chapter 2

Literature review

A key conclusion of the 2002 World Summit on Sustainable Development (WSSD) was the recognition of the importance of incorporating perceptions of intended development beneficiaries by facilitating meaningful public participation in decision making regarding sustainable development (White & Hunter, 2009).

The imbalance between economic growth (which has been perceived as a key indicator of national prosperity and social development) and environmental quality is clearly a challenge. Yet, surprisingly little empirical evidence has been brought to bear on the relative priority given to environmental and socioeconomic issues among residents in developing contexts (White & Hunter, 2009). Forty years ago, the apparent problems of limited carrying capacity of natural environments and rapid industrialisation had already been acknowledged. One older and three newer social forces now influence natural resource scarcity, and equally important, our views of the nature and magnitude of that scarcity: (1) the traditional force for economic growth, (2) population growth, and two forces that constitute power-oriented social movements, namely (3) environmental and (4) equity forcers. All four of these operate at the ideological level as well as the level of social, political and economic events (Morrison, 1976).

Even today, the individualistic pursuit of monetary gain often involves unequal exchange and exploitation of human and/or natural capital. Conversely, inclusive economic growth can dramatically improve collective standards of living in developing contexts – and can be environmentally friendly at the same time. The way natural resources and land is utilized is now more significant than the magnitude of population growth in terms of sustainable development (Morrison, 1976). For example, a relatively small urban population can have a disproportionately large environmental impact because of materialistic livelihoods in comparison with a larger rural population living by means of subsistence farming. Environmental justice is about the distribution of the benefits and detriments of intensive ecosystem service utilization. This understanding has existed for a long time; even when only about 4 billion humans were alive at that time. The billion or so people who then lived in the developed countries used more – and probably wasted more – of the natural resources that were the focus of concern over scarcity than was used by the other three billion combined (Morrison, 1976). Today, the figures are even more staggering.

Market freedoms ensure that middle and upper-class people can easily afford high end ecosystem services for aesthetic pleasure, health and a high quality of life. Organic foods, for instance, are significantly more expensive than mass produced foodstuffs that are grown on

a large scale with the use of pesticides, herbicides and artificial- fertilizers. The benefits humans and society can derive from biophysical processes cannot be viewed as objectively existing “out there”, but as entangled in social, economic and political conventions and behaviours (Ernstson, 2013).

Macroeconomic views on environmental justice neglects grassroots factors such as environmental degradation, social strife and historically entrenched poverty in South African townships; and this applies to other developing contexts around the world as well. More importantly, the perceptions of people living in such circumstances are undervalued in the decision-making processes on environmental and developmental governance/management. In 2008, a woman called Patricia Tronsoco in Chile (South America) went on a 109-day hunger strike in protest. She sent a letter to the nation’s then President from her hospital bed which articulated her sense of environmental injustice in the face of neoliberal development priorities:

‘From here, I want to encourage you to continue defending us from this predatory economic system that is seeking to pillage the little bit of nature we have left, and it is inhumane, because any economic project in our Mapuche territory is considered more valuable than we are, and immoral because the only human goals it leaves us are money and consumerism’ (Schlosberg & Carruthers, 2010).

From my point of view, South Africa is at the global forefront of the environmental justice challenge precisely because underlying dispositions of underprivileged people have historically been devaluated by an oppressive politico-economic elite (Apartheid government); and this was justified by a false sense of racial superiority and entitlement. Renowned academics also focused their analyses on the relationship between race and environmental inequity, including experiences of oppression and political exclusion (Schlosberg & Carruthers, 2010).

Now, similar neglect and conceited avoidance of the issue of inequality and unacceptable socio-economic conditions is being justified based on exalted neoliberal principles and the legitimacy of financial status; and the access to sustainable ecosystem services that this affords. The hierarchical structure of socio-economic diversity is often justified by environmental imperatives. For example, the expansion of IY has been confined by a court of law based on an environmental heritage case that was put forward in the *Hout Bay & Llandudno Environment Conservation Group v Minister of Local Government, Environmental Affairs & Development Planning, Western Cape and Others* (23827/2010) [2012] ZAWCHC 22 (22 March 2012) case. Any "ethics" [such as environmental conservation] that are keeping the affluent from sharing with the poor exist quite apart from the current conditions and

resource rationalizations available. Ostensibly, then, the lifeboat ethic protects resources, but in reality, it protects certain lifestyles (Morrison, 1976).

This study critically engages, albeit indirectly, with the concept of ecological modernization, and its apparent partiality toward capitalistic values – hence, it aligns itself with “Ecocriticism” discourse. Put simply, it alludes to imperfections in the avenues through which environmental rights and privileges are asserted and employed in contemporary South Africa. In the global context, again, some contradictions between the growing world economy and environmental conservation persist. If the environmental movement has transformed, it is in response to its apparently inevitable subordination to capitalist networks; therefore the new aspiration of a global ‘green economy’ as part of a vision of ‘ecological modernization’, where economic growth and environmental conservation work in tandem (Fairhead, et al., 2012).

In contrast, at a grassroots scale, the stark juxtaposition of extreme affluence and extreme poverty that is evident in Hout Bay led to complaints among white residents about the behaviour and norms of their new neighbours (Saff, 2001). As opposed to a welcoming and empathetic attitude toward the desperation and squalidness obviously being experienced by the residents of IY, the existing affluent community perceived them as both a socioeconomic and environmental hazard. Overall, the establishment of ‘Mizamoyethu’ or Mandela Park was perceived to have a negative impact in terms of security, property prices, deforestation and congestion by 60% of the “Ratepayers”, while only 30% anticipated a negative impact on environmental quality (Oelofse & Dodson, 1997). Now, the reality is that surface runoff and solid waste has been flowing downstream into the river for years – causing in situ and ex situ pollution on such a scale that residents and tourists are warned against touching water on the beach and in the estuarine zone. In IY itself, only a handful of public sanitary facilities are available (e.g. toilets, basins) – but these are generally unhygienic, dysfunctional and/or unused. Washing of clothing, urination and defecation, solid waste disposal and the like are executed amidst shacks at random – especially in the peripheral sections which are legally designated as buffer zones, but are now predominantly occupied by foreign nationals who pay formal land owners who are actively rent-seeking.

It is odd to note that, in judicial terms, the most audible and prominent dissatisfaction emanates from the feeling of repugnance experienced by the affluent residents of Hout Bay – as opposed to the dissatisfaction being experienced by the underprivileged residents of IY because of squalidness, skewed service delivery and disproportionate environmental degradation. More recently, a renewed appetite for service delivery protests has emerged in IY, but this resulted from the call for temporary resettlement to be serviced with electricity and other amenities for permanent occupation (see Figure 2). The affluence enjoyed by the greater Hout Bay

residents makes them resilient to the adverse effects of environmental degradation; and environmental change in general. In contrast, IY is situated in a biophysical situation that is hazardous to human health and certainly not conducive to sustainable livelihoods. In addition to being situated on a steep slope of Table Mountain National Park, the area experiences heavy rainfall in the winter and extreme heat in the summer (see Figure 1). Rainfall and steep slopes cause runoff, and the resulting erosion creates problems for the development of sustainable infrastructure. Extreme heat causes yearly fynbos fires, which are exacerbated by invasive tree species surrounding IY. Furthermore, barren and infertile clay inhibits agricultural success. Climate change is worsening the already degraded environmental conditions found at IY, as overall aridity increases while precipitation events intensify (Brod, 2014). Hence, IY is not only marginalized in the metaphorical sense of economic participation, but also in the literal sense of geographic situation.

Looking at this from a general sustainable development perspective, the following image is a succinct depiction of the interconnected range of socio-economic and biophysical issues that sustainable development aims to address:

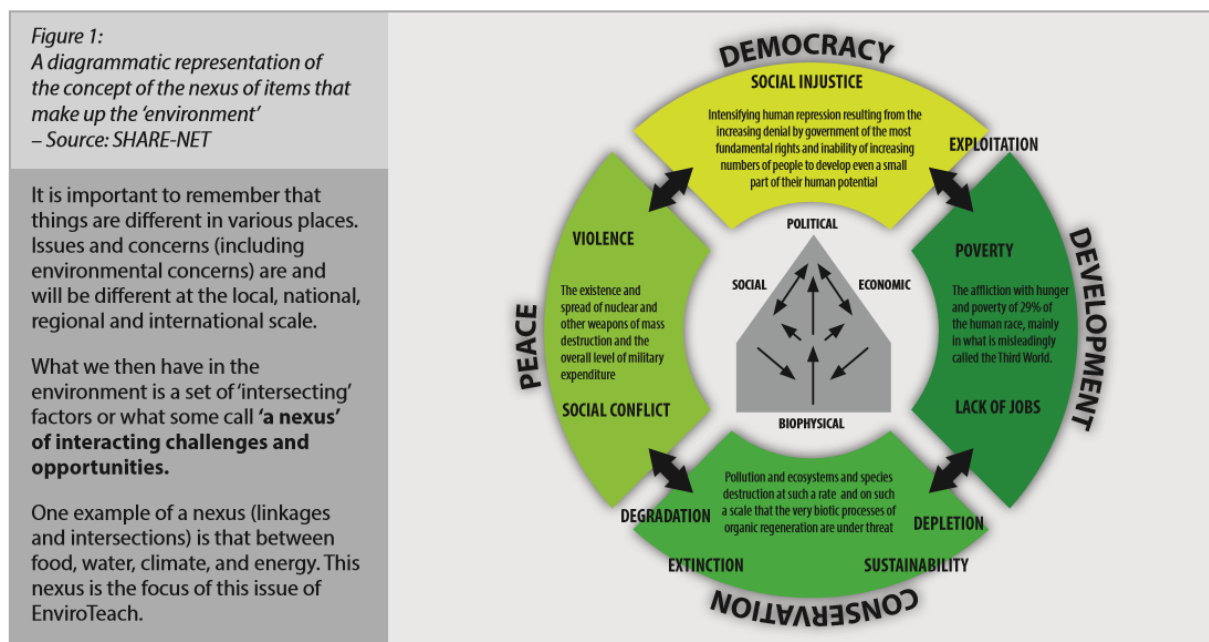


Figure 3: The interconnectedness of social, political, economic and biophysical aspects of sustainable development (Enviroteach, 2013)

As Figure 3 shows, socio-political injustices and ideologies have direct and indirect influences on the realisation (or lack) of environmental justice or 'conservation' – while this in turn indirectly reinforces poverty and social injustice. Negative identities are often ascribed to unwanted townships, because they are prejudicially characterized as being inherently conducive to criminality and environmental degradation. From my perspective, the prevalence

of environmental degradation, hostility and criminality in impoverished informal settlements is often a result of poverty, dissatisfaction and resentment; as opposed to uncivilized or antisocial cultural or moral norms. According to Saff (2001), language and the educated ability to ascribe negative characteristics to a marginalised group allows dominant social groups to legitimate and justify the exclusion of the former from certain spaces and places in society.

On this note, metaphysical aspects of environmental health such as mental health and psychological stability are often ignored when considering environmental rights. Yet, this could be a significant factor contributing to unsustainable behaviour and livelihoods. IY is comprised of a legally designated residential zone that was endowed with brick housing, formal ownership of said houses, as well as an extended community perimeter. This, however, promoted the influx of people from other townships, countries and rural areas – and hence the peripheral densification intensified. Those residing in these shacks demonstrated reduced mental health and expressed tensions and feelings of exclusion from the benefits of formalised housing (Shortt & Hammett, 2013).

Relating specifically to the housing project that was undertaken in IY, land ownership and a sense of security have the potential to promote voluntary household practices that are environmentally friendly. However, cultural factors do indeed play an indirect role in the exacerbation of environmental degradation and vulnerability to environmental hazards in IY. Most people living in IY belong to the Xhosa cultural group. For the Xhosa people, ancestors are an integral part of the social system. Their beliefs are particularly relevant to hazard vulnerability and resilience in that the Xhosa culture dictates that one's ancestors will be angered if one does not help immediate and/or extended family members who need assistance, regardless of the financial and material difficulties associated with rendering this assistance (Lohnert, et al., 1998; Xhosa interviewee, 2004; Harte, et al., 2006). Now, one elderly, long time Xhosa resident verbally expresses his dissatisfaction with the unrestricted number of foreigners overpopulating IY. At the same time, a middle-aged Xhosa woman indicated that she no longer believes in the spiritual existence of her ancestors, because they would not allow for fire and other environmental adversities to ravage their community as it has (see Data Analysis chapter).

Post-Apartheid government (largely the ANC) promised Historically Disadvantaged Persons (HDPs) tangible socioeconomic transformation, but this has led to deep disappointment among millions of impoverished South Africans to this day. Environmental legislation was ratified (section 24 of the Bill of Rights in the South African Constitution) that explicitly orders "...ecologically sustainable development and use of natural resources while promoting justifiable economic and social development." Yet, the practical virtue and meaning of legal

and judicial instruments such as this has been limited. The actual impacts of state policy are uneven, even within various sections of IY (Lohnert, et al., 1998). Since 1998, this has been exacerbated as peripheral land occupation has accelerated – and no infrastructure improvement, public service delivery or environmental rehabilitation plans exist for this buffer zone. On the ground, the occupation has crossed the border of the Table Mountain National Park on the steepest incline in contravention of the designated residential zone. “Not all residents gain from the housing programme that targets only new construction under conditions of secure title” (Lohnert, et al., 1998). Moreover, the practicalities and monetary underpinnings of legislative action addressing social and environmental injustice makes them relatively inaccessible for uneducated and impoverished members of society. According to an elder Xhosa resident who conducts township tours to make a living and sends his daughter to the private school across Main Road, it is the relentless pursuit of monetary gain by those residents who already have secure ownership of property in the formalised area which facilitates the ongoing influx of foreign nationals into IY.

The social, legal, cultural, economic and environmental context of this study is important to consider when weighing the internal factors that may be creating and perpetuating environmental injustice in IY. Not forgetting this context, according to Saff (2001) the production of space within a capitalist land market gives landowners incentive to do anything to maintain property values (Saff, 2001). This invisible hand (the property market, especially) incentivizes the exploitation of natural landscape in IY; and the resultant inequality that is characteristic of urban South Africa reflects the general principles of individualistic neoliberal culture.

Cape Town Metropolitan Area is arguably the African epitome of this phenomenon, and therefore the city has been diagnosed as suffering from ‘World City Syndrome’ (McDonald, 2008). Policymakers have to take realities on the ground into account, and as such they must be aware of the divergent perceptions and dispositions of all groups in society. Squatters might ‘chop down trees’, they might defecate in parks, and their music might deprive their neighbours of sleep. While the above conclusions do not excuse the often-hostile sentiments of affluent communities towards the ‘other’, it does show that their fears are not always irrational. This does not, however, mean that these outcomes are inevitable, as more enlightened social and economic policies could eliminate or ameliorate these problems (Saff, 2001). Considering the untapped potential of ‘enlightened’ social and economic policies, I take precaution in this study to ensure that an critical attitude towards market mechanisms is avoided.

To explain this caution, consider the commoditization of nature, which has been a central point of scrutiny in environmental discourse and the overall criticism of free-market capitalism

(save environmental economics). The impacts of neoliberal forces are often particular to distinct, contingent grassroots situations, rather than generalizable as a singular hegemonic project. This is perhaps because, as (Castree, 2010; Castree, 2011) suggests, some observers become blinded by homogenised assumptions about the nature of free-market capitalism, as well as a lack of analytical clarity about underlying processes involved (Fairhead, et al., 2012).

We are faced with the pervasive question of top-down versus bottom-up environmental governance in Hout Bay. Can residents of this area rely on external interventions and regulations if a similarly authoritative force entrenched inequality and unsustainable development in recent history; and is failing to bring about meaningful change in the present? And if not, can the supposedly impartial mechanisms of free-market capitalism serve as a viable and sustainable alternative? This begs the question of whether policymakers should prioritize the needs and preferences of impoverished communities at the expense of adjacent affluent communities (and in the process, subvert the capitalist land market) (Saff, 2001). At the same time, this problem places the heavy responsibility of making trade-offs between environmentally and socioeconomically focused sustainable development imperatives on provincial and municipal urban planners. According to Saff (2001), a crucial first step in this regard would be for these decision makers to align themselves with dispossessed residents in townships like IY, rather than with the new non-racial suburban elite (Saff, 2001). This mini-thesis appraises the perceptions and interests of the 'dispossessed' in IY to ascertain whether 'bottom-up' developmental decision making will bring about environmental justice in IY.

The nature and scope of the inquiry here is the self-perceived conditions of the township environment (social, economic and ecological) and empirical accounts of the quality of life it hosts. "A growing body of work suggests that improving the quality of life in informal settlements requires tri-sector partnerships, which bring the state, civil society and the private sector together" (Goodland, 1996; Otiso, 2003; Dixon & Ramutsindela, 2006). Key informants include community leaders, regular men and women, and elders to represent civil society; as well as informal entrepreneurs and enterprises operating in and/or around IY to represent the commercial sector. Finally, the question must be posed as to what exactly can be done about this issue (which embodies the poverty-population-environment nexus) – and who should take responsibility for implementing the much-needed solutions to this multifaceted problem?

The qualitative data collected (local perceptions) demonstrate the relative importance of socio-economic and environmental concerns from a grassroots vantage point. In practice, policymakers must deal with conflicting priorities, variable social and environmental

challenges, thus appraising the local perspective may improve their ability to respond to concerns most salient for residents (Hunter, 2006).

However, there is a multiplicity of scale (as well as a diversity of interests and power relations) that must be accounted for throughout this study to gain meaningful and practically relevant understanding of environmental injustice. And, in turn, local context is directly related to current national policies and legislation, international economics and historical social stratification.

Situating this study in the broader academic context, it can serve as a case study in the field of political ecology. Urban political ecology (UPE) has provided critical insights into the socio-material construction of urban environments, the unequal distribution of resources, as well as the contestation over power and resources in such urban environments (Lawhon, et al., 2014). To break from the idea that political ecologists tend for the most part to describe problems rather than prescribe solutions, it is crucial to note that in order to resolve the Third World's environmental crisis one must first understand the nature and dynamic of that crisis (Bryant & Bailey, 1997). After the prospective understanding gained in this study regarding the nature of the vulnerability and squalidness in IY, an attempt is made to recommend potential solutions to the persistent experience of environmental injustice for the benefit of local government, and ultimately the local community.

Nonetheless, this mini-thesis is intentionally anchored in the practical reality on the ground in IY, rather than revolved around theoretical edicts that often dominate discussions on environmental justice and the poverty-population-environment nexus.

Chapter 3

Study Area and Methodology

At first sight, inadequate refuse removal, lack of adequate sewerage systems, polluted and wasted water perpetually flowing from broken/blocked pipes and the smell of squalidness overwhelms the senses. From an environmentalist's perspective, IY is a typical degradation hotspot that - due in part to the concentration of thousands of people in a confined space, lack of infrastructure, and topographical situation - hosts a distinctly vulnerable community. Nonetheless, this is not an uncommon sight. Townships in South Africa are known for similar conditions (Froestad, 2005).

Upon entering the area, a prominent police station marks the divide between IY and the rest of Hout Bay valley. Although accurate statistics on service delivery is difficult to find, the environmental health problems are palpable. On one side of the road that separates the rich from the poor (the pristine from the squalid, if you will), the prominent police station is immediately surrounded by makeshift shacks, soil and water pollution and scattered solid waste. The main road that leads into the heart of IY is used to dispose of grey water and solid waste. The abundance of people roaming the streets during mid-day hints at high unemployment rates in the community. Across Main Road (M6), within view from the police station, one can see a large synthetic hockey field and natural soccer field; adjacent to this, the new [temporary] settlement emerged after the fire that ravaged the community (see Figure 2).

An appropriate sample size for a qualitative study is one that answers the research question adequately. For simple questions or very detailed studies, this might be in single figures; for complex questions, large samples and a variety of sampling techniques might be necessary (Marshall, 1996). Due in part to time constraints and limited resources a relatively small, but maximally representative, sample was used to approximate the general perception of residents in IY with regards to developmental governance and priorities (with emphasis on the environment). In turn, this sample sheds light on dispositions within the community that can be considered contributing factors to the subjective experience of environmental injustice. Known quantitative data on the research area informed the formulation of the methodology for the purposes of this study.

According to Statistics South Africa (2011), the total population of Hout Bay (excluding IY) was 17 900 persons residing in 5963 households. The population density was 631 persons per square kilometre. The proportion of the population whom had received higher education was 45.8%. The proportion of households that enjoyed piped water inside the dwelling was 96.5%. The proportion of households that hosted a flush toilet connected to sewerage was 93.9% (StatsSA, 2011).

In IY, the population was 15 538, residing in 6010 households. The population density was 27 227 persons per square kilometre. The proportion of the population that had received higher education was 2.6%. The proportion of households that enjoyed piped water inside the dwelling was 25.3% and the proportion of households that hosted a flush toiled connected to sewerage was 61.7% (StatsSA, 2011).

Purposeful/stratified random sampling was employed in this study. The sample size, therefore, was small relative to the total population sizes. Participants voluntarily completed the questionnaire after receiving a written or verbal version of the information letter (see Appendix B). This discloses direct accounts of each participant's demographic profile in conjunction with the qualitative, empirical data that is obtained through deeper questions designed to reflect local perceptions on environmental injustice in a practical and candid manner (see Appendix A). The former provides context for analysis and interpretation of the latter. The priority of the abovementioned sampling technique is credibility, as opposed to generalizability and representativeness.

More specifically, the first part of the questionnaire requests information from respondents along the lines of gender, income, age, education, employment status – as well as the duration the respondent has lived in IY. Hence, a demographic profile is rendered for the entire sample – which should ideally be balanced to maximize representativeness in a highly heterogenous community.

The second part of the questionnaire appraises the empirical accounts' internal socioeconomic, biophysical and ideological factors relevant to environmental injustice in IY. This includes basic accounts of quality of life, environmental conditions, attitudes toward the environment, public service delivery, government versus private sector's ability to care for the local environment, land ownership etc. The questions were simplified as far as possible to be easily understandable and unambiguous. Also, questions are answered with a 'yes' or 'no' to simplify the subsequent data analysis and interpretation – given the limitations and scope of this study. [In this study] improved understanding of complex human issues is more important than generalizability of results. This basic issue explains why probabilistic sampling is neither productive nor efficient for qualitative studies and why alternative strategies are used (Marshall, 1996). This method provides an unconventional insight into the lack of environmental justice in semi-rural townships – where degradation and squalidness can be better understood by identifying and exploring both internal and external sociological factors.

Importantly, the specific conception of environmental justice here assumes that self-perceived wellbeing is inextricably interconnected with environmental justice and -health. This idea is enshrined in the South African constitution, and embodies the principles of sustainable

development which addresses the so-called 'triple bottom line' of economic, social and environmental interests holistically. The 'benefits' of ecosystem services are not always obvious since monetary gain is a de facto prerequisite for access to ecosystem services in neoliberal society; and vice versa. In mainstream discourse, the disproportionate experience of hazardous biophysical living conditions is a classic example of environmentally centred inequity as opposed to the conventional principle of environmental justice (equal distribution of environmental services and disservices).

The stratified and purposeful random sampling technique described above enables an orderly and systematic appraisal of complex and often contradictory local perceptions and attitudes toward the environment and beyond. This ensures that the observable correlation between poverty, population and the subjective experience of environmental injustice is somewhat statistically significant – albeit based on predominantly qualitative data. This is necessary because the subjective experience and politico-religious-economic determinants of human behaviour are highly complex and involve a diverse range of intangible variables. Some factors being explored include the ownership of private property, income, ancestry/heritage, employment, and general dispositions towards environmental conservation versus socioeconomic progress etc. This is not to assume the mutual exclusivity of socioeconomic 'growth' and environmental justice, but rather to pinpoint behavioural and ideological factors that contribute to community vulnerability and the experience of environmental injustice. The nuanced and convoluted relationship between economic growth and environmental justice is beyond the scope of this mini-dissertation, but a brief overview is necessary.

This conceptual approach is situated within a broader academic context. "While a green economy has been defined as 'low carbon, resource efficient, and socially inclusive' ideological debates rage on how to address issues related to economic growth, environmental sustainability, and social equity including significant differences in emphasis and focus. Considerable attention has been directed towards technological innovations emphasising environmental and economic sustainability objectives, for example, through ecological modernisation in the transportation, energy, and building sectors. Research on climate policies and the commodification of nature (e.g. carbon markets), however, reveals considerable limitations of the reformed capitalist growth regime driven by ecological modernisation and transition studies thinking" (Redclift, 2009; Bailey, et al., 2011; Böhm, et al., 2012; Brown, 2014; Kenis & Lievens, 2015; Affolderbach & Krueger, 2017).

Such technocratic approaches have triggered 'international calls for a radical transformation of current development practices and transitions towards a just green economy' (Davies, 2013) that question objectives of growth for growth's sake and postulate a deeper contemplation and reconceptualization of economic processes and models (Schulz & Bailey,

2014; Kenis & Lievens, 2015). In response to these calls for a just green economy, the proposition that businesses, and small businesses in particular, have a role to play in responding to the challenges of the economic, social, and environmental crisis is an emerging domain of academic exploration (North, 2015; Affolderbach & Krueger, 2017).

Many foreign nationals living in IY have attempted to start up small businesses, such as take-away restaurants, but the lack of local buying power makes the likelihood of success and sustainable job creation tiny. The property market, and ownership of land, are more relevant for the purposes of this study – and this is clarified in the following section.

To further explain the choice of stratified random sampling, I refer to a historical publication which employed the same sampling technique for a similar appraisal of perspectives in Hout Bay. This goes back to the very origins of the informal settlement in question – which was then called 'Mizamoyethu'. The article is titled "Community, Place and Transformation: A Perceptual Analysis of Residents' Responses to an Informal Settlement in Hout Bay, South Africa" (Oelofse & Dodson, 1997).

It is important to note that the statistical data mentioned earlier is outdated. More specifically, Statistics South Africa's data were collected during the 2011 census. This means that more than five years had passed since the data were obtained until this study was executed. Moreover, the quantification of human misery and environmental deterioration has proven to be difficult. Quantifying and generalizing the plethora of factors relevant to environmental injustice and the subjective experience of equity and fairness in such a way that it might be meaningful for the layman is challenging. Hence, the qualitative methodology emphasizing a stratified random sampling approach is employed in the collection, analysis and interpretation of data obtained in this study.

Additionally, singular locals were approached at random to provide less restrictive insights into the internal factors contributing to environmental injustice in IY. The method here is predominantly informal interviews and conversations that were mediated with the help of the aforementioned community elder who makes a living by conducting 'township tours' and has resided in IY for decades. This catalysed trust and comfortable communication from respondents.

To reiterate, the foundation of the methodology employed here is physical observations, a questionnaire, informal interviews as well as newspaper articles and other media platforms. In academic terms, this study is highly qualitative in accordance with the assumption that environmental injustice is an empirical fact in the research area. In other words, to gain an

understanding of the subjective concept of environmental injustice in IY – it is deemed appropriate here that subjective accounts of daily life from random residents and respondents should be used to gain comprehensive insights into the factors that cause and perpetuate squalidness as well as a disproportionate lack of environmental health and justice in the community. Indeed, the disposition adopted by the author is such that it matured and evolved as the data collection proceeded. The apparent adequacy of the chosen methodology was repetitively reinforced by the positive and open attitudes with which participants and respondents answered questions and presented their perceptions for the purposes of this study.

Chapter 4

Data analysis

To appreciate context, consider the total human population in Hout Bay around 2005. An article investigating Environmental Health problems in the area noted that “...approximately 20–25,000 people live in the Hout Bay valley” (Froestad, 2005). Hout Bay valley includes Hout Bay ‘proper’ (for argument’s sake), as well as Hangberg/Harbour and IY. The sprawling development pattern observed in this area serves as a microcosm of general urban development patterns in South African cities (see Figure 4).

Again, according to the 2011 census, there were 15 538 persons living in IY. The population density put forward then was 27 227 persons per square kilometre. Figure 4 shows the expansion of IY between 2001 and 2017 with satellite imagery, but the seemingly small magnitude of outward growth does not reflect the magnitude of population growth.



Figure 4: IY’s expansion over 16 years; satellite images taken in 2001 (left) and 2017 (right), respectively

A strikingly strong perspective conveyed by outspoken persons in the community is despair among residents of IY – especially with regards to the trustworthiness of the current South African government. They say that community members feel as though their lives are being ignored or neglected, but “people cannot live this way forever”.

This complex situation has existed in the area for twenty years. With the advent of democracy in 1994, the ANC promised great opportunities for historically disadvantaged persons. Today, the local community in IY is increasingly reliant on autonomous entrepreneurial and rent-seeking activities, rather than government intervention, for their subsistence; and the apparent exclusion being experienced by residents indicates that the people’s will to support the political dictum of socio-political transformation is far outweighed by the imperative of seeking employment or financial gain in general. Put succinctly, residents of IY have been disillusioned about empty promises of representative and material equality – and now clearly state their need for material or economic empowerment to survive and support their families.

Another aspect explored here is the issue of land use and private property; and the impact this has on environmental conditions in IY. South Africa is infamous for the unequal distribution of natural resources – the epitome of which being land. Therefore, the concept of environmental justice is so important in the context of a post-Apartheid township.

Hout Bay can be viewed as a microcosm of South African urban sprawl, it epitomizes the residual challenge of correcting historically unjust urban development planning. The prevalence of solid waste, water pollution and vulnerability to environmental hazards in South African settlements/townships is commonplace; in large part, this is due to the social and political forces that determined spatial development policies in the past. As an answer to the persistent problem in question, this study appraises ongoing ideological, socioeconomic and political factors that contribute to the perceptual experience of environmental injustice after 23 years of post-Apartheid governance in IY.

Demographic Profile

Considering the importance of subjective accounts of environmental justice, here follows an analysis of the subjective data collected by means of the questionnaire (Appendix A). Using the random stratified sampling method, 79 participants who call IY home provided the following personal information.

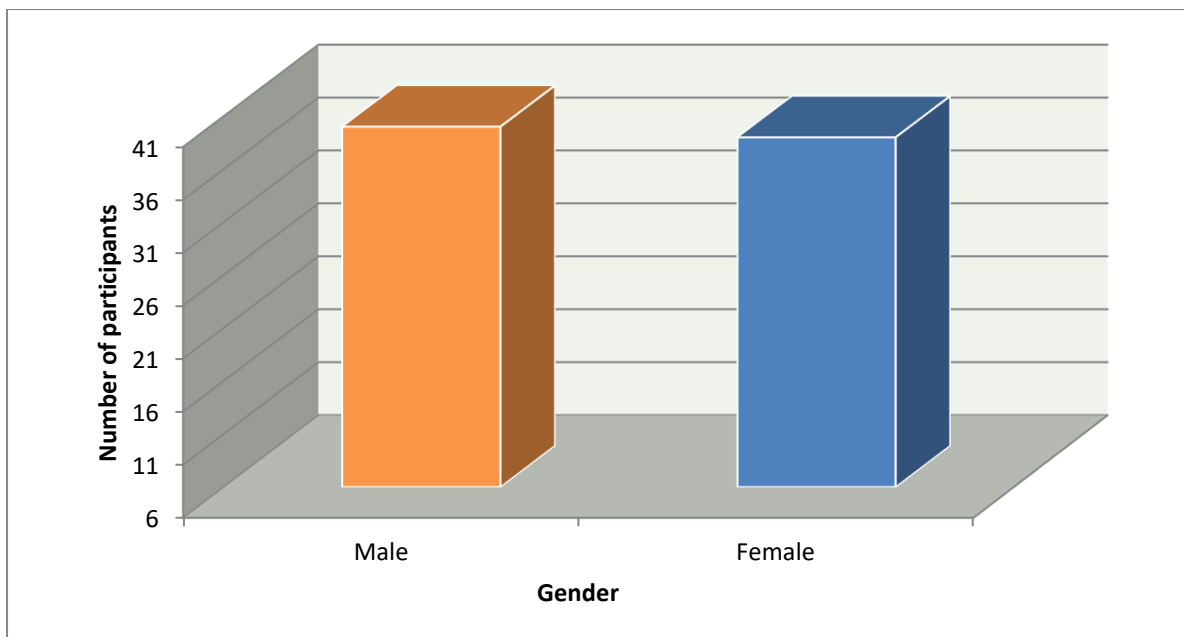


Figure 5: Gender profile of respondents in IY

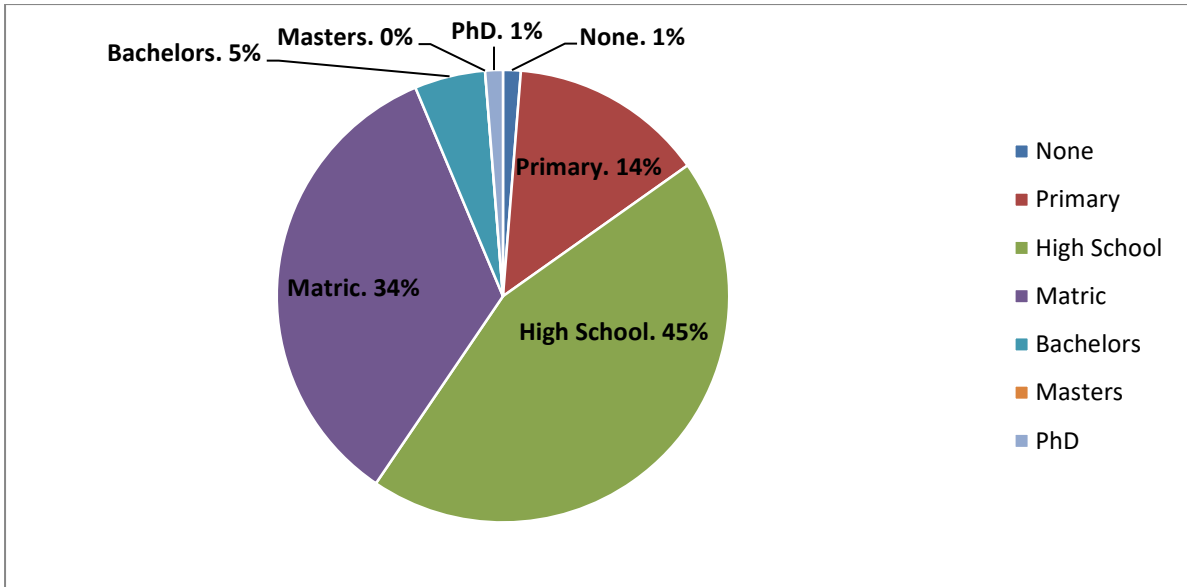


Figure 6: Relative education qualifications in IY according to respondents

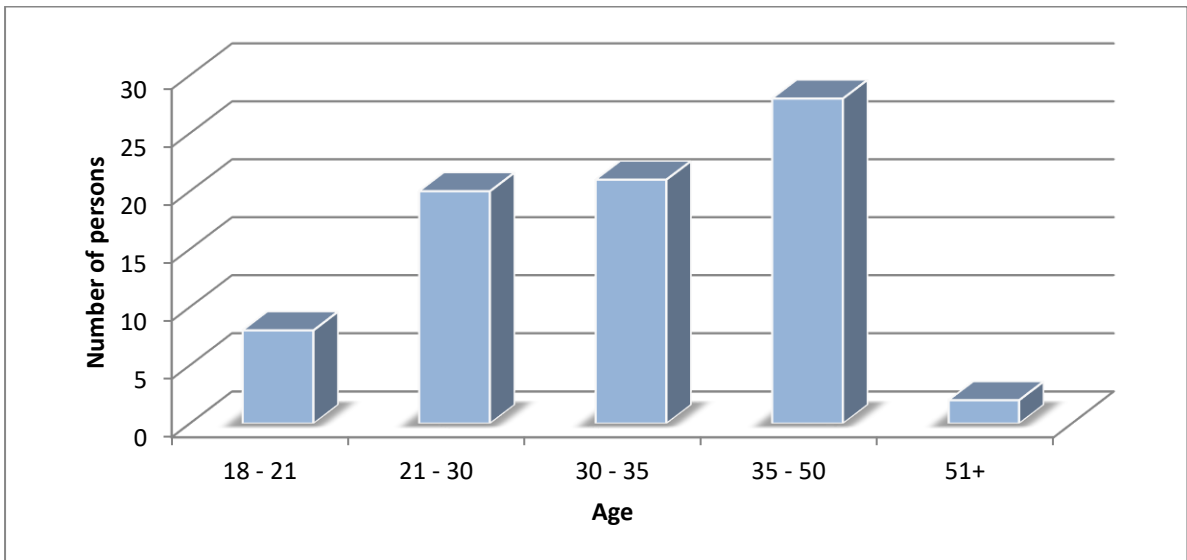


Figure 7: Number of participants falling under indicated age categories indicated in the questionnaire

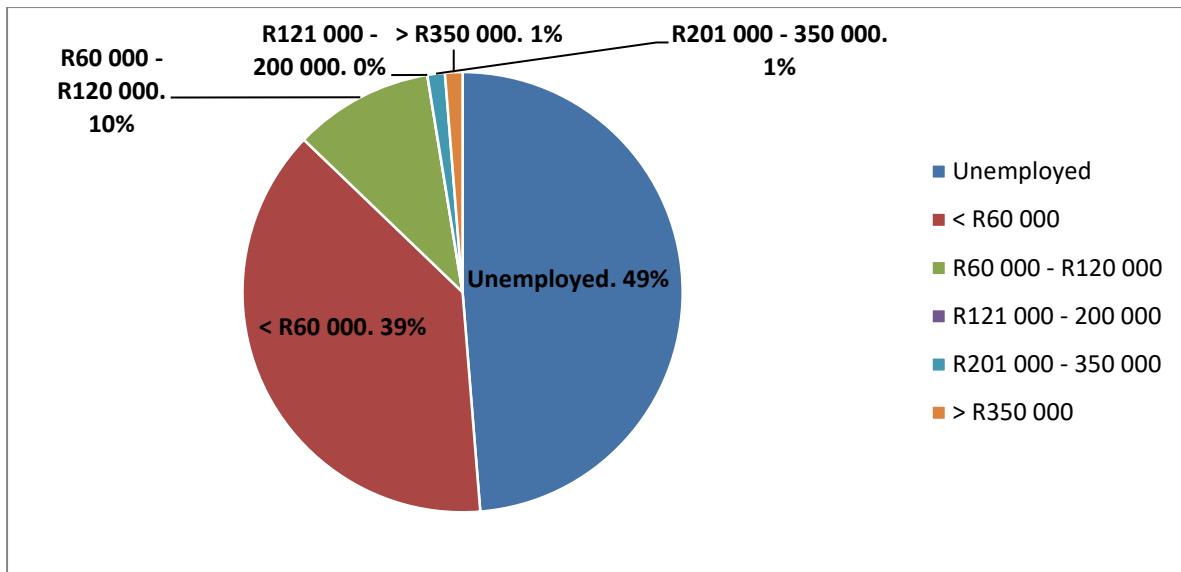


Figure 8: Participants' employment status and their indicated income brackets

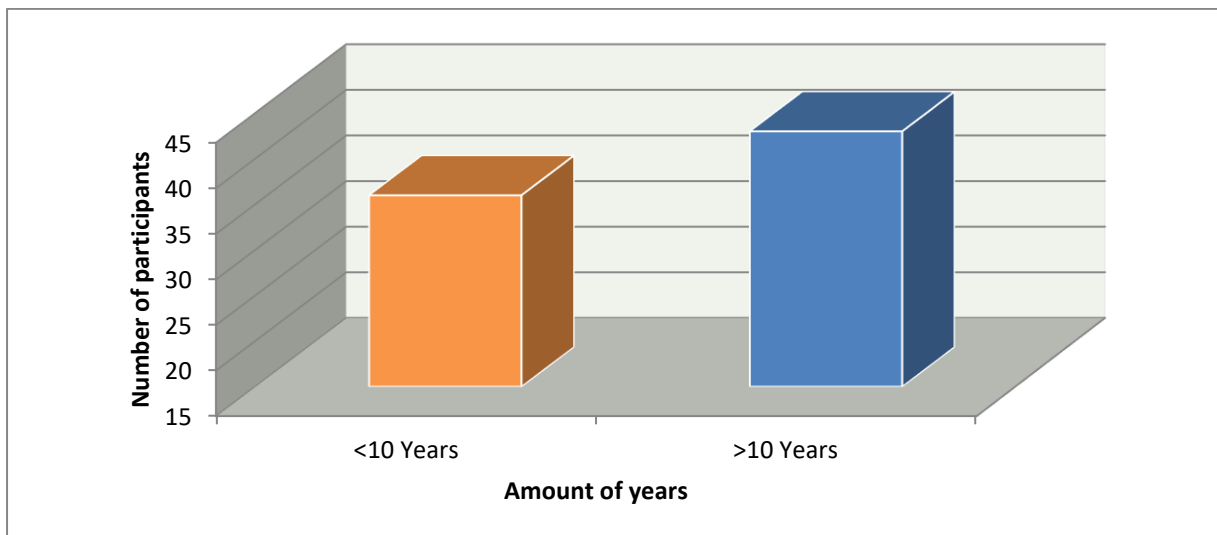


Figure 9: Respondents' duration of residence in IY

The graphs above give an indication of the demographic profile of IY. Most telling of these is the proportion of participants who either earned an annual salary of R60 000.00 or less, or were unemployed (see Figure 8). In total, these two categories constituted 88% of all respondents who voluntarily completed the questionnaire. In other words, we can infer from the questionnaire that most persons living in this informal settlement are deeply impoverished. Secondly, a relatively low average level of educational qualification was held by most participants (see Figure 6). Forty-five percent dropped out of high school, whilst only 34% managed to complete their secondary education and obtain a matric certificate. Indeed, 14% of participants had only reached primary school.

Conversations with one or two of the few elderly people in the community showed their concern about the fact that many young men are addicted to methamphetamines and other drugs. The squalidness of the settlement appears to be deeply disheartening to those who are expected to enter adulthood with aspirations and ambition. This reminds us of the concept of environmental psychology, which emphasizes the psychological importance of one's physical and socioeconomic environment (Schultz, 2001; Bragg, 1996; Kinder, 2001; Weigert, 1997; Hansla, et al., 2008). In terms of age, I must remind the reader that younger adults are less interested in engaging with outsiders like me to fill out a questionnaire unless they are compensated for this directly. Hence, the age distribution is skewed toward late middle-aged persons who were readily willing to participate in my study. The apparent lack of elderly participants is due to a real lack of elderly people visible in IY (see Figure 7).

Approximately 65% of respondents had resided in IY for more than ten years when the questionnaire was disseminated (see Figure 9). Roughly the same amount of male and female residents opted to participate in the questionnaire (see Figure 5), making the qualitative data obtained more representative. Despite a substantial portion of respondents being foreign nationals, many of them had been residing in IY for more than ten years – unable to gain South African citizenship or adopt any local languages, which made communication difficult; even with the help of a volunteer Xhosa translator.

Perceptions

The results obtained from the qualitative aspect of the questionnaire are put forward graphically below. Each graph shows relative percentages of “yes” and “no” answers given by participants to indicated questions (shown here as titles).

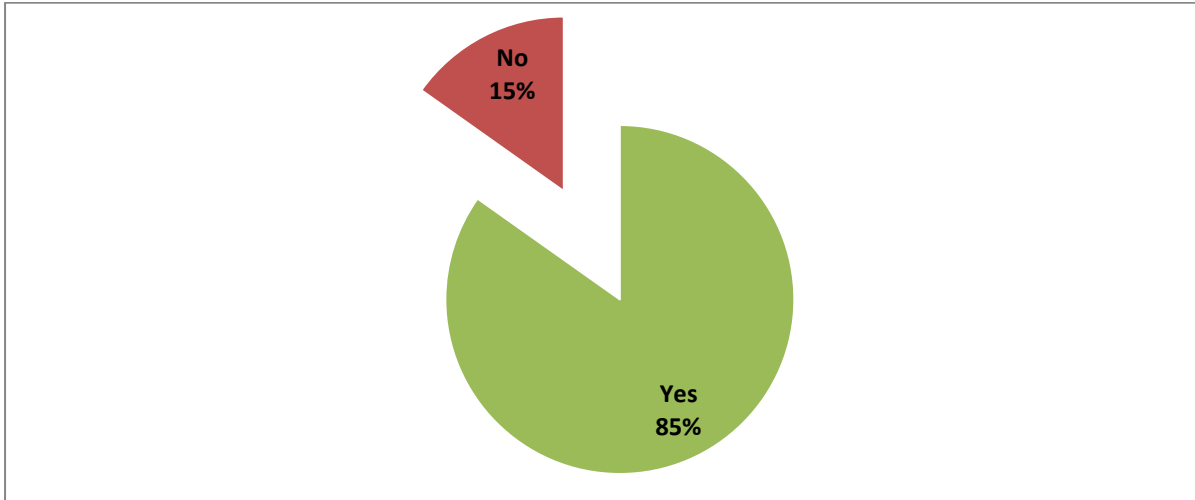


Figure 10: Response to question 1; “Is your surrounding environment a source of stress to you?”

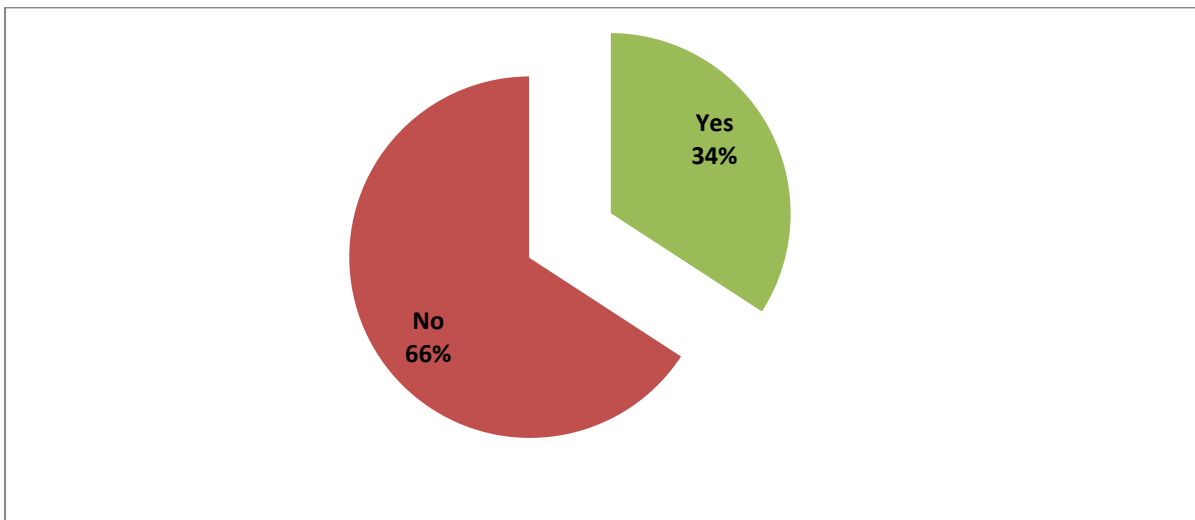


Figure 11: Response to question 2 of the questionnaire; “Are you able to satisfy your basic needs daily?”

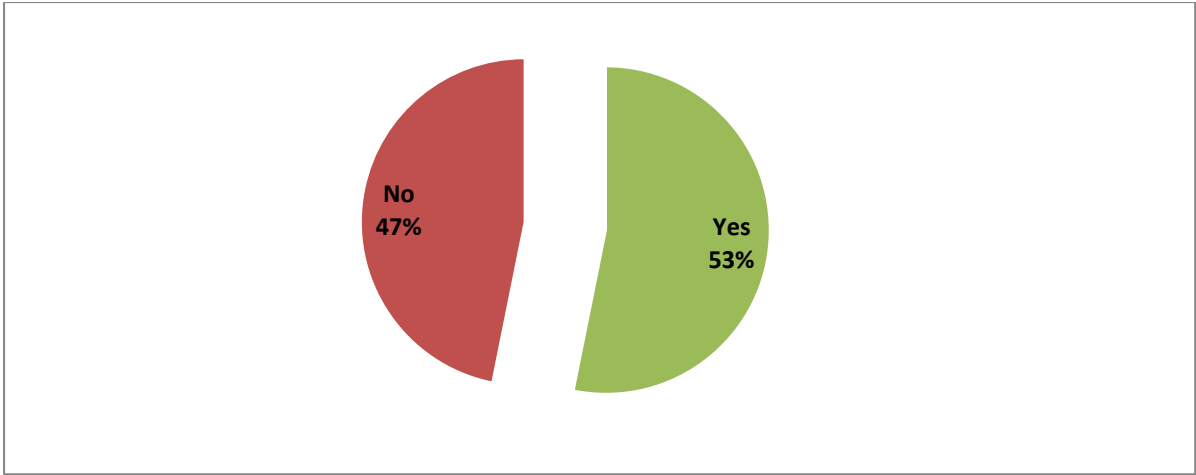


Figure 12: Response to question 3 of the questionnaire; “Do you know of and/or support any environmentally friendly businesses or agencies?”

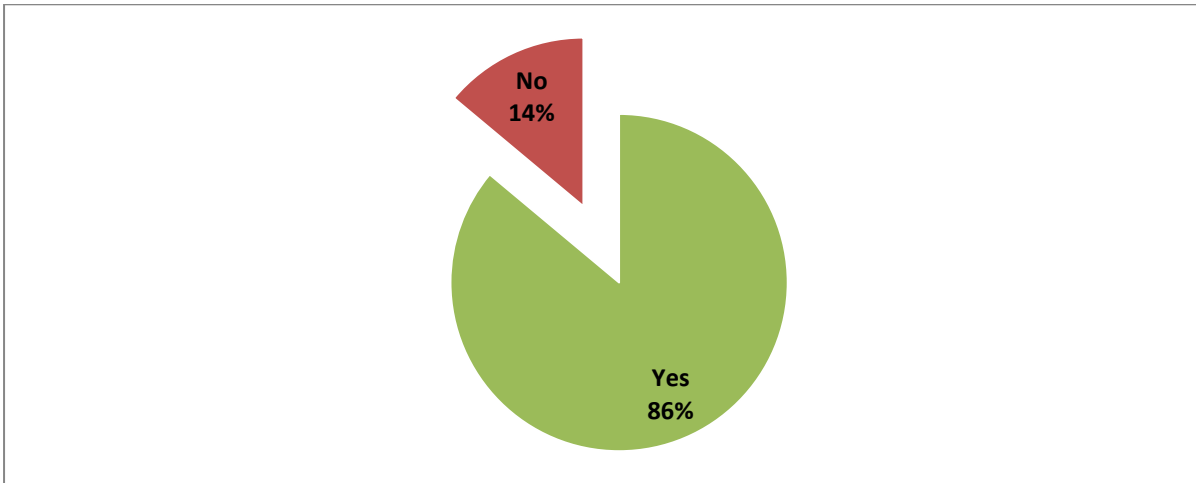


Figure 13: Response to question 4 of the questionnaire; “Have you recently experienced any particularly difficult or traumatic events relating to your environment?”

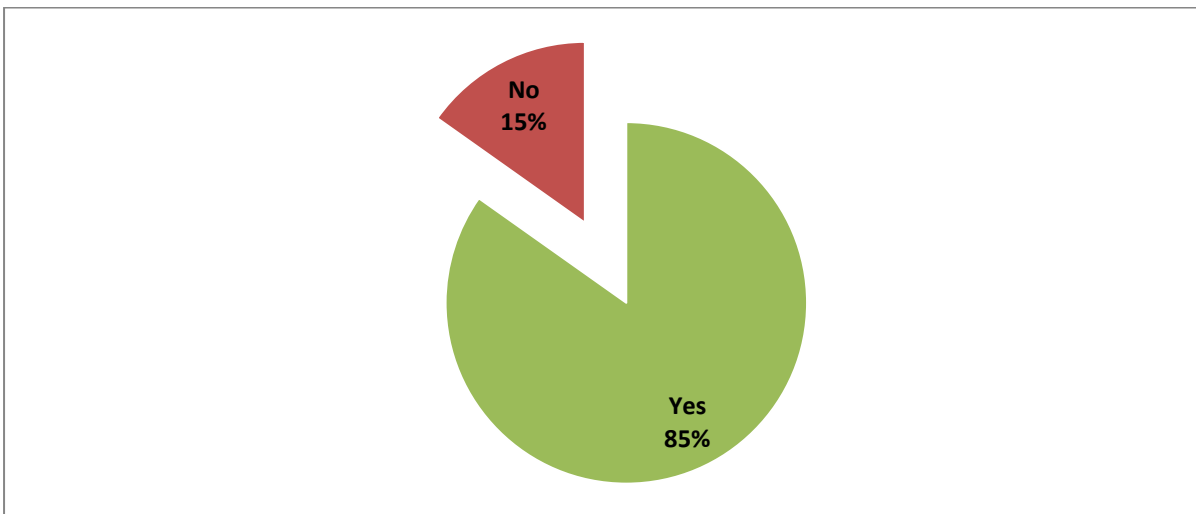


Figure 14: Response to question 5 of the questionnaire; “Do you think there should be a limit to the amount of people allowed to live in Imizamo Yethu?”

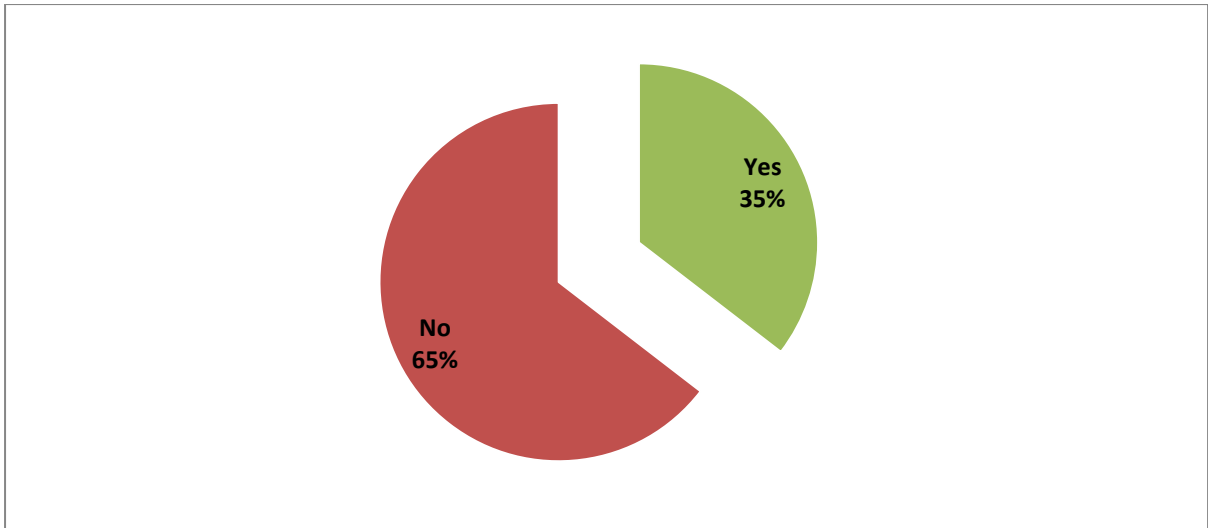


Figure 15: Response to question 6 of the questionnaire; “Do you have access to clean drinking water, clean air to breathe and healthy food to eat on a regular basis?”

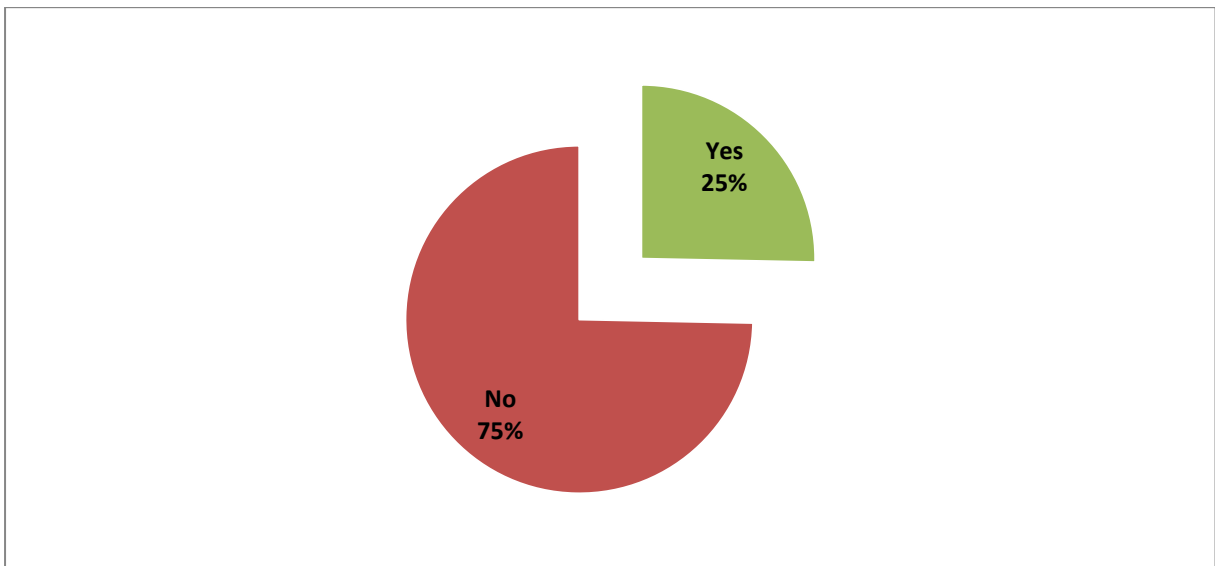


Figure 16: Response to question 7 of the questionnaire; “Has your community experienced sufficient public service delivery (rubbish removal, sanitation etc.) in recent years?”

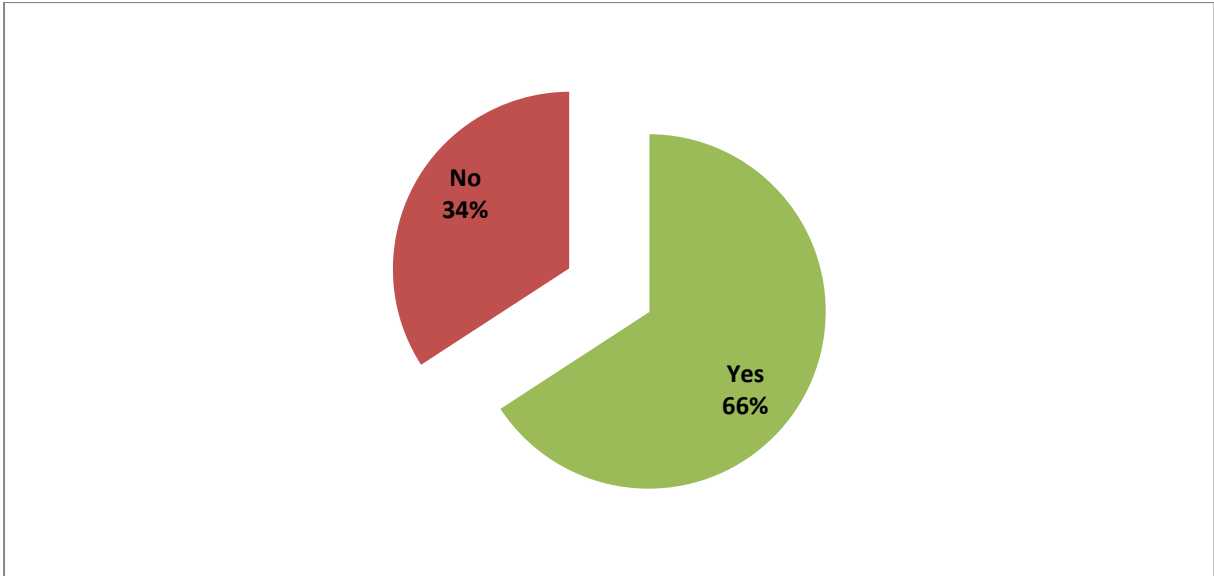


Figure 17: Response to question 8 of the questionnaire; “Do you think businesses and community members can take better care of the Imizamo Yethu environment than the government?”

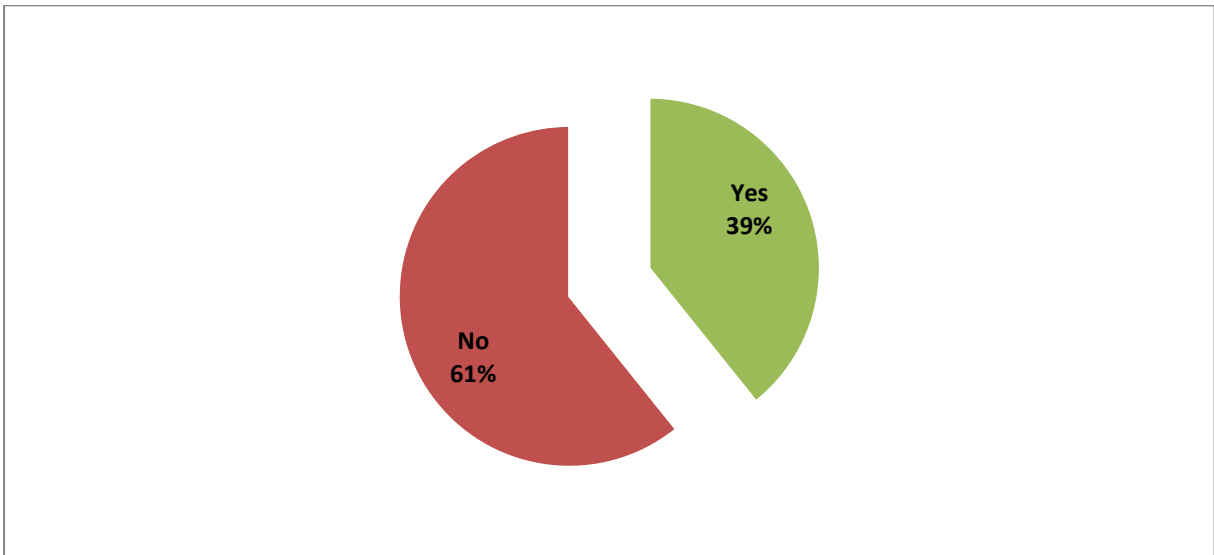


Figure 18: Response to question 9 of the questionnaire; “Do you think people should pay for good environmental conditions?”

Some of the questions were included to gain some insight into local perspectives on the ideological underpinnings of environmental justice in general. An interesting question which had a relatively balanced response was whether people should pay for a healthy environment. Nearly half of respondents indicated that people should indeed pay and are not necessarily entitled to this (see Figure 18). Perhaps this relates to the general air of hostility toward foreigners (from Somalia, Namibia, Zimbabwe, Malawi etc.) due to the resultant overpopulation and exacerbation of environmental degradation.

In practise, the actual feat of engendering grassroots awareness of environmental rights is paramount for the prospect of achieving environmental justice in IY. In township environments,

a lack of tertiary education is the norm; only 6% of participants had received any (see Figure 6). In terms of ideology, a preoccupation with social and economic problems of everyday life appears to relate to a lack of will or inability to focus on environmental problems (see Figure 24). In practical terms, poverty, apathy and a lack of public services are predominantly causes of environmental degradation. Three quarters of participants indicated that public service delivery in IY is inadequate to this day, and physical observation of the accumulation of solid waste and water pollution confirms this (see Figure 16). Candidly, the degree of squalidness and poverty is such that it strongly influences the general outlook of residents and their attitudes toward the environment.

Two thirds of participants thought that businesses and community members would be better custodians of the environment than the current governmental regime (see Figure 17) – which is inadequate in its delivery of public services according to three quarters of participants (see Figure 16). The large number of foreigners residing in IY in contravention of the limited designated residential development zone might be blamed by some, but this is only possible with the permission of real or fictitious land owners who are indigenous South African citizens. Similarly, the community's vulnerability to wildfire and extreme weather events is also largely due to the population density and the lack of safe electrical appliances (fire is commonly used for warmth and cooking). Thousands of low-hanging electrical connections decorate the area. Shacks are virtually built on top of one another, within and outside of the boundaries of the designated residential area. According to most participants that were randomly approached during data collection, the overpopulation is partially a result of land owners who make small spaces available to rent for relatively affordable prices. To demonstrate the awareness and agitation of overpopulation in IY among residents, 85% of participants in the questionnaire stated that there should be a limit to the number of people allowed to reside in IY (see Figure 14). More than eighty percent of participants residing in IY claimed that their ancestors did not have any rights to, or interest in, Hout Bay valley (see Figure 19); this reaffirms the fact that the bulk of persons living here moved from South African rural areas and other Cape Town Metropolitan Area townships, or other countries, after 1994.

Despite half of participants knowing of and/or supporting environmentally friendly businesses or agencies in the local community (see Figure 12), more than eighty percent of them experience stress relating to their environment (see Figure 10); moreover, 86% indicated that they have experienced particularly traumatic events relating to the environment (see Figure 13). About a third of participants indicated that they can satisfy their basic needs on a daily basis (see Figure 11) and only 35% indicated that they have clean water to drink and healthy food to eat on a regular basis (see Figure 15).

With regards to a bottom-up conception of environmental justice in the area, 81% of participants indicated that ownership of land would make a difference in their attitude toward the environment (see Figure 20). In terms of the top-down approach, only 20% of respondents believed that national and local government respects their rights to environmental health (see Figure 21). Importantly, 72% of participants consider social and economic problems to be more important than environmental problems (see Figure 24). This sheds light on the understated prioritization of sustainable development goals by the poorest of the poor; those who ought to be the primary beneficiaries of sustainable development principles and practices.

Yet, the need for effective law enforcement is clear despite the presence of a police station at the main entrance to IY. Almost ninety percent of participants claimed that they have been victims of violent crime or burglary in or near their homes (see Figure 23).

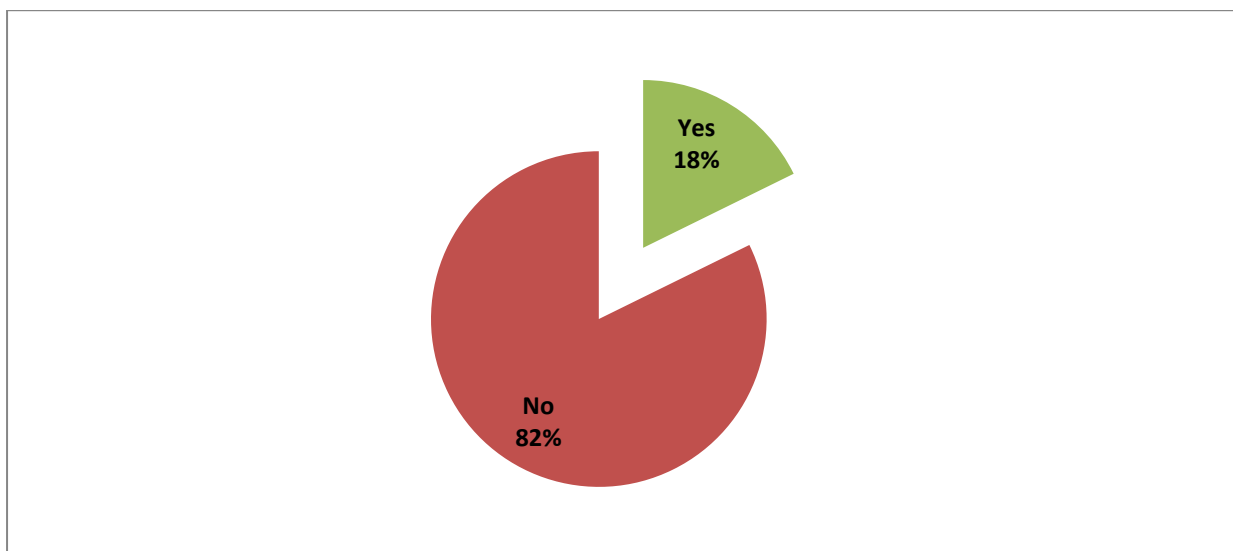


Figure 19: Response to question 10 of the questionnaire; “Did your ancestors have any traditional rights to, or interest in, the Imizamo Yethu and Hout Bay valley environment?”

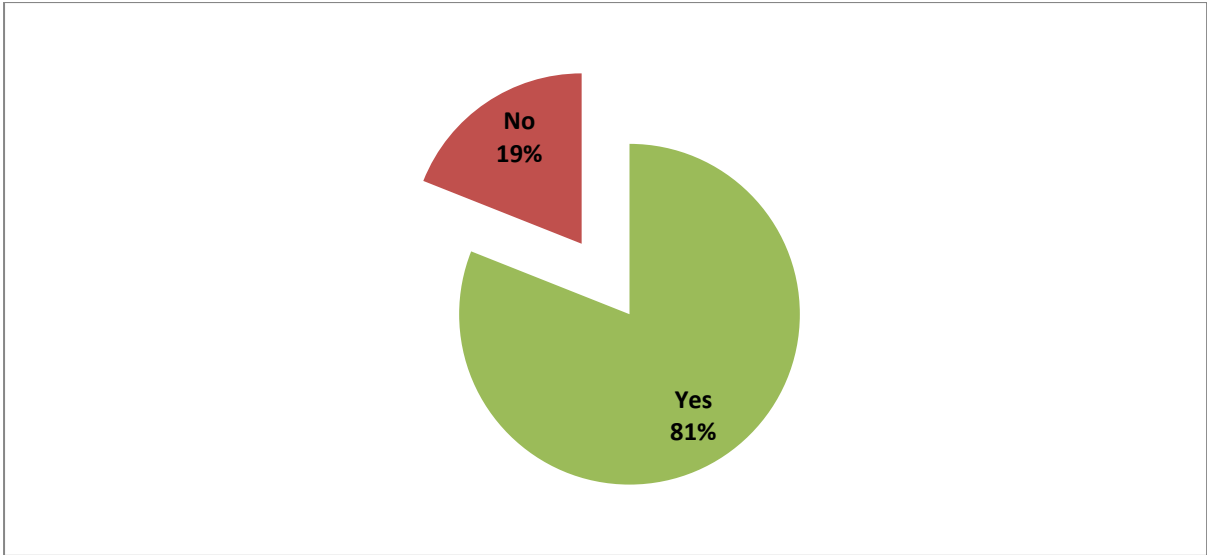


Figure 20: Response to question 11 of the questionnaire; “Does/Would ownership of land make a difference to your attitude toward the Imizamo Yethu environment?”

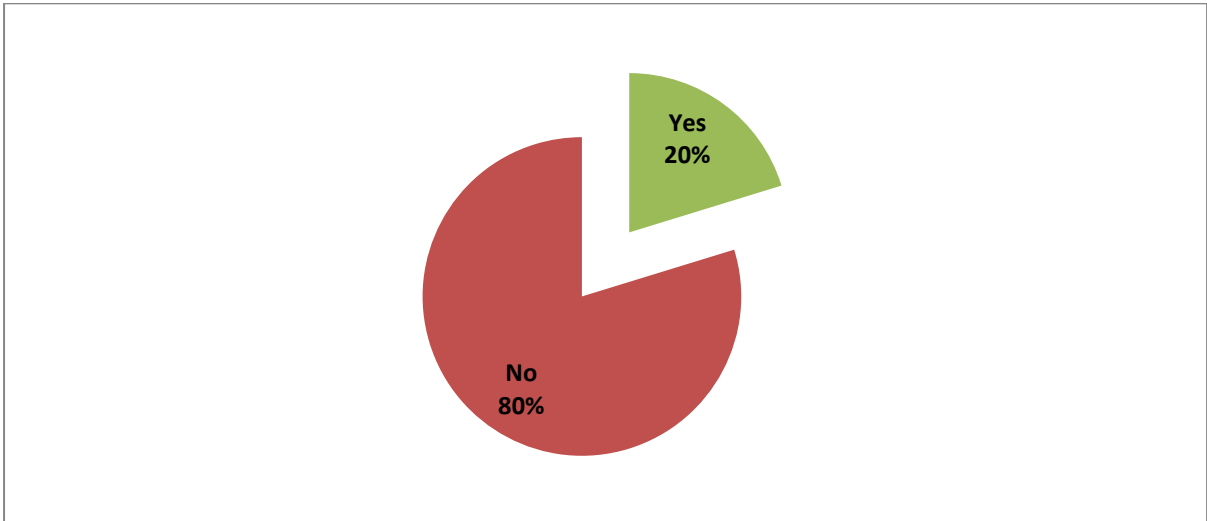


Figure 21: Response to question 12 of the questionnaire; “Do you believe that national and local government respects your right to a healthy environment?”

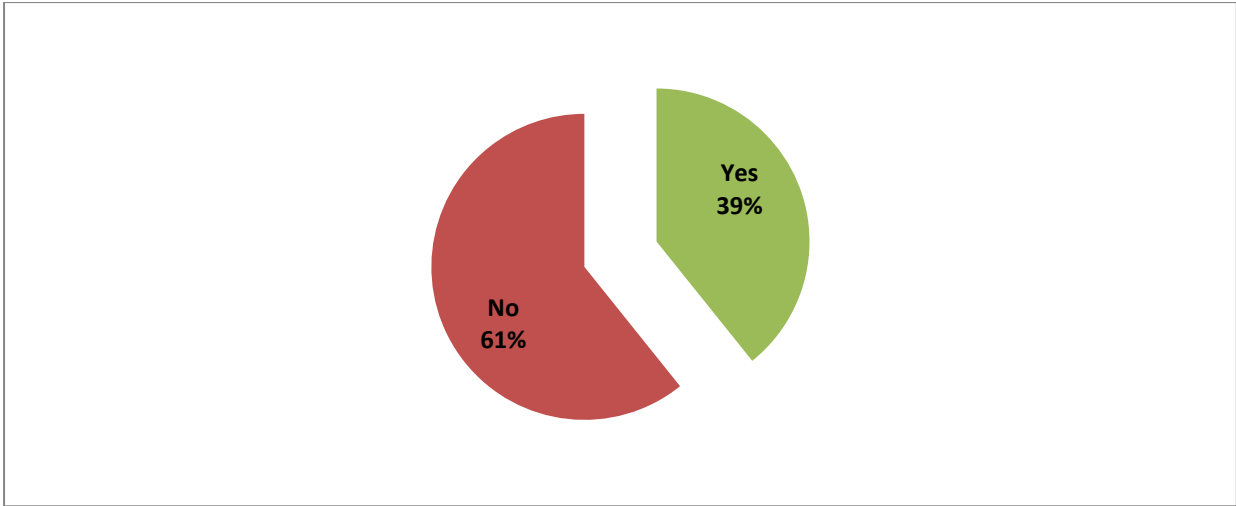


Figure 22: Response to question 13 of the questionnaire; “Would you be willing to smuggle Abalone, if it was necessary, to provide for your family?”

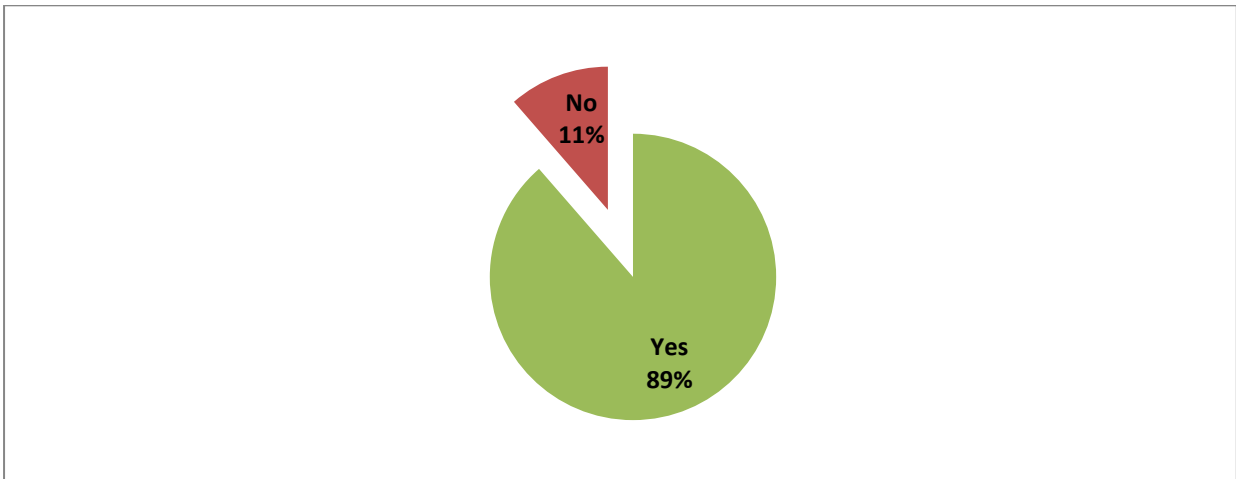


Figure 23: Response to question 14 of the questionnaire; “Have you or your family members experienced any violent crime or burglary in or near your home?”

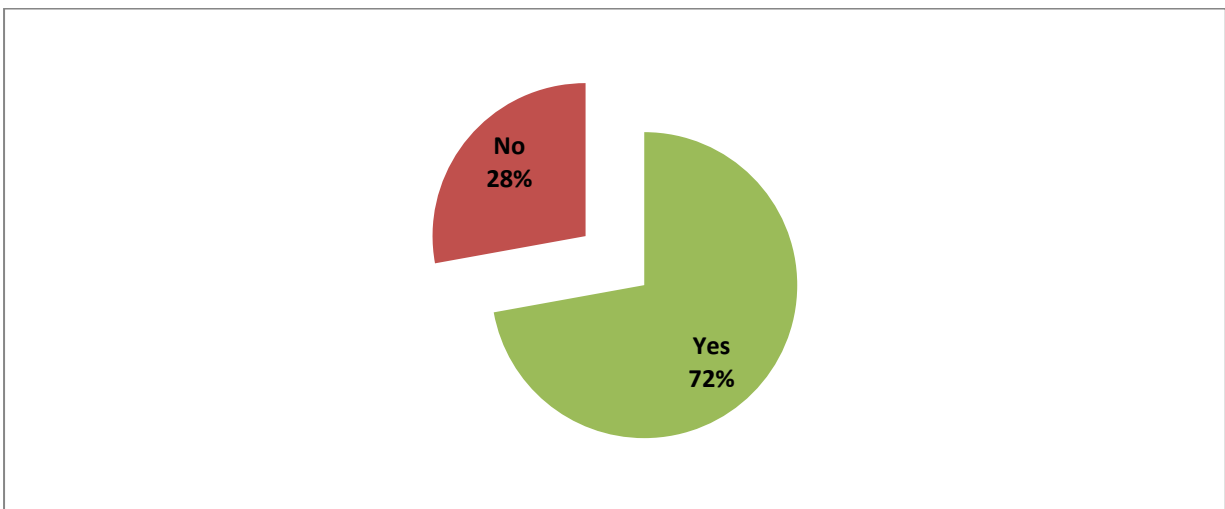


Figure 24: Response to question 15 of the questionnaire; “Are social and economic problems more important than environmental problems?”

Due to persistent socio-economic deprivation, many black township residents, especially among the younger generation, feel they have been cheated and accuse the ruling party (ANC) of having 'sold out' (Cheru, 1994; Adedeji, 1996). Scarcity of resources and a feeling of hopelessness has led people to resort either to opportunistic individual strategies, seeking advantages at the expense of others, or to engage in collective forms of action that define other groups as enemies (Froestad, 2005). In IY, this is particularly evident; formal homeowners facilitate the exacerbation of population density by embracing the individualistic opportunity of renting out space in their back yards or in the buffer zone.

The ideological force that results from the scarcity of resources trumps the obvious need for more environmentally friendly behaviour in the community, but the imperative of making money and caring for the environment is not necessarily mutually exclusive. People in IY are compelled to exploit every opportunity to generate income, even if this deteriorates their own environment. In fact, nearly half of participants indicated that they would be willing to smuggle Abalone, if it was necessary, to provide for their families (see Figure 22).

Discussion

The departure point for this discussion is the observation that environmental injustice is evident in IY. The main objective is to ascertain, by means of appraising and analysing local perceptions and dispositions, what the most prominent internal factors are that cause or contribute to this subjective reality.

I hypothesized that bottom-up development and environmental decision making will contribute to the realization of empirical environmental justice in IY. The formalisation of bottom-up community involvement in environmental management has been driven by past failings of top-down approaches (Fraser, et al., 2006). This resonates with the loss of trust in government's willingness and ability to bring about environmental health in IY indicated by participants. This loss of trust has been observed before (Froestad, 2005), and appears to be worsening. At the same time, many community members are alleged to be responsible for accommodating the excessive influx of people into the township, this is reported to be a primary internal factor that perpetuates the experience of environmental injustice among community members.

Nonetheless, the significance of external factors which influence local dispositions and behaviour cannot be understated. New discourses on ecological modernization and the pursuit of a 'green economy' is far from feasible in IY. Innovative entrepreneurs have tried to establish small businesses that sell fresh produce, prepare affordable meals and so forth; but in practical terms, consumers who live in deep poverty cannot be expected to adapt their [virtually non-existent] buying power in any way. Rather, ongoing discourse has shown an emerging emphasis on social sustainability that advocates an entrepreneurial starting point that uses social sustainability and business ethics as key values for decision making; rather than being driven by profit-maximisation (Affolderbach & Krueger, 2017). For formal homeowners in IY, ethical considerations are a luxury that cannot be afforded. Renting out every possible square meter is a matter of necessity, not preference.

Despite South Africa having its own considerable unemployment and inequality statistics, other African countries experience economic circumstances that are even worse – and it is precisely because of IY's proximity to an almost otherworldly affluence that makes it so attractive for job seekers from abroad. In other words, inequality and population growth in IY are inextricably interconnected – and in turn these relate to relative international macroeconomics. Less abstractly, the perceptual importance of social and economic problems versus environmental issues is not difficult to understand in the squalid circumstances. There are thousands of families that have virtually no access to a functional toilet or other ablution facilities (Froestad, 2005). It is thus commonplace for people here to

dispose of solid waste, grey water and sewage on the outskirts of the buffer zone – or randomly between shacks. This then becomes runoff and flows into the nearby river which ultimately ends up in the famous Hout Bay estuary and beach – causing a health hazard not only to community members in IY, but to all those who take the risk of swimming in the bay.

Even though most participants held the view that community leaders and businesses could take better care of the IY environment for the benefit of residents, this does not justify an objective advocacy of bottom-up management/governance. On the contrary, a stubborn resistance to external intervention culminated in a perplexing dispute between municipal firefighters and some residents when a blaze broke out in early 2017; leaving thousands of people temporarily homeless. In reaction to this, local government cooperated with self-proclaimed community leaders and civil society organisations to provide food, clothing and temporary housing to those affected by the disastrous environmental hazard (see Figure 2). Subsequently, the temporary settlement has been emanating strong demands for permanent infrastructure and utilities.

With regards to land ownership, the majority of participants indicated that owning a piece of land would change their attitude toward the local environment. This might be connected to the reported abundance of tenants residing on formal land owners' property. Demographically, 49% of participants indicated that they are unemployed. Yet, this questionnaire was largely conducted during working hours – so the data's representative value might be jeopardized by this. Nonetheless, extreme poverty and fierce competition for space serves as testimony to high unemployment rates. 46% of participants indicated that they had not been living in IY for longer than ten years, which means that they voluntarily moved there despite the unfavourable living conditions that have been commonplace for more than a decade.

Despite most participants indicating that environmentally friendly businesses or organisations and community members can take better care of the environment than government, only half reported that they were aware of and/or support any such entity in or around IY. Perhaps this is because of the frustration with unfulfilled promises made by the post-Apartheid regime. This might also be explained by the relative lack of formal education levels among participants. Overall, conducting the questionnaire evoked a range of responses from participants. Most were grateful for the opportunity to 'voice' their opinion on the state of affairs in IY, but in some instances, an air of tension was evoked between long-time residents and foreigners by questions hinting at overpopulation.

The issue of land ownership reminds one of the intended goals of land reformation in South Africa. Among these are realising human rights, improving social justice and equity, reducing

rural conflict and violence, improving food security and incomes for the poor etc. (Hall, 2012). These improvements would be welcome in IY, but the expectations inspired by political promises have been rendered null and void in this sobering context. Generally, in times of crisis, when business leaders lose their self-confidence, they often look to political power to fill the void. Government is increasingly seen as the ultimate solution to tough economic problems, from innovation to employment (Coase, 2012). This is particularly true in South Africa, where legislative and political intervention has been relied upon by tens of millions of historically disadvantaged persons for economic opportunities and social empowerment. Yet, the emptiness of the promises that were made to the masses in 1994 has been, and is still being, endured by those South Africans who opted for a few square meters of living space just for a chance to earn some money in IY. Capital is a force inscribed in objective and subjective structures, but it is also the principle underlying the immanent regularities of the social world. It is what makes the games of society – not least, the economic game – something other than simple games of chance offering at every moment the possibility of a miracle (Bourdieu, 2011).

Hout Bay is generally described as being sharply divided into three distinct cultures or communities, consisting of whites, 'coloureds' and Africans, and hence is sometimes pictured as a microcosm of South Africa; a delimited geographical area representing many of the contradictions and tensions that characterise the country on a national scale. This makes the area a suitable case study of how social relations between/within various communities, and between communities and government, developed during the apartheid years, and to what extent they have changed since 1994, under a new political regime (Froestad, 2005). In this sense, the balance between bottom-up and top-down development is of paramount importance. In my view, the most striking internal factor that drives the disproportionate environmental degradation in IY is the relentless pursuit of personal gain. In the absence of effective local governance, an anarchical air permeates the place.

Throughout the various spheres and portfolios South African government, historically entrenched inequality is an emotionally and politically charged topic. Promises of ever increasingly radical economic transformation are put forward, but in IY the legacy of Apartheid is still palpable in 2017. Environmental degradation due to irregular garbage collection, the absence of a proper sewage systems and insufficient supply of fresh water characterise the basic sanitation problems of many townships in South Africa. In IY, major environmental health problems have been observed for more than a decade; including grey water pollution, dirty drains and blocked or leaking sewerage, insufficient toilet facilities and piles of rubbish (Froestad, 2005). Hence, one might argue that the transformed political regime has had a very small impact on the livelihoods of people living in these types of situations. Legislative

measures aimed at preferential procurement in government-funded infrastructure projects have indeed brought substantial profits for black-owned companies in the commercial and industrial sectors, but the distributive extent of these benefits have been limited. The post-apartheid development path manifestly favours domestic (and international) corporate capital. The problem is not simply one of 'poverty' — a lack of means — but of the glaring disparities that assault people day in and out. A seething sense of injustice exists, generating rancour and insubordination (Marais, 2010).

To avoid diabolizing the role of politico-economic interventions in post-apartheid South Africa, we must consider the macroeconomic mechanisms that can and do improve the livelihoods of impoverished people. Can these mechanisms contribute to environmental justice in South African townships? Fiscal monies are collected from tax payers at the national level, and these are then allocated to provincial and municipal government for the delivery of public services and so forth. In IY, the lack of public service delivery is a persistent factor contributing to the experience of environmental injustice, hence we must appreciate the salience of governmental service provision; and the frugality (or lack thereof) with which fiscal resources are allocated and employed. Capital exists in many forms; human, natural and financial are the most familiar. Considering the concept in general terms, competition for resources/capital becomes a central factor in the lack of environmental justice in IY. On the ground, community members compete for space, money and access to public service delivery (water, electricity, rubbish removal etc.). In terms of local government, municipalities compete for financial resources and there is inter-suburban competition for public service delivery as well.

To demonstrate the relevance of governance and developmental leadership – the lack of access to governmental services has been a persistent problem for residents living in IY. More generally, in South Africa, like many of the southern contexts (Chatterjee, 2004; Yiftachel, 2009; Piper & Von Lires, 2011; *Journal of Asian and African Studies*, 2011), there is a strong case that the (black) urban poor struggle to access the state (Piper & Bénit-Gbaffou, 2014). Akin to one definition of environmental justice as equal access to and benefit from environmental laws and rights – the need to 'remedy the inequality in access to the state' is particularly important in South African low-income neighbourhoods. One reason for this is the fragmentation and complexity of the state apparatus and operations, partly linked to its system of three 'spheres' of government (national, provincial and local) where overlapping responsibilities are not clearly attributed and prioritised (Piper & Bénit-Gbaffou, 2014). Currently, this is disconnection and blurring of governmental responsibilities is exacerbated by the fact that the provincial and national governments in the Western Cape respectively consist of two agonistically opposed political parties; Democratic Alliance (DA - provincial) and

African National Congress (ANC - national). Referring to public service delivery protests in IY and other informal settlements around Cape Town, this article (amongst many others) demonstrates this problem. In 2013, President Jacob Zuma expressed his disgust at the DA's lack of service delivery during a visit to the IY informal settlement outside Hout Bay and the DA had responded by variously claiming that the protests were part of the ANC's campaign to reclaim the province, and by denying the existence of a sanitation crisis in Cape Town's informal settlements (Knoetze, 2013). It is this kind of partisan rhetoric that diverts urgently needed attention from poor governance in favour of party politics. The environmental injustice in IY is not an uncommon phenomenon – and undeniably exists in townships and informal settlements throughout South Africa.

Importantly, the equivalence of environmental justice and service delivery is not implied in this study. In a practical sense, public service delivery is observed to be an integral step toward environmental justice. The removal of solid waste, controlling of hydrological waste and wastage, construction and maintenance of infrastructure to prevent excessive soil erosion and leaching, water and sanitation provision, accessibility of public transport, proximity of affordable education and healthcare facilities etc. These basic services partially constitute and catalyse local environmental conservation and sustainable livelihoods. Indeed, the environmental benefits of effective service delivery can be tangibly enjoyed by all those communities residing in Hout Bay; and beyond. Chemically contaminated water and pieces of solid waste flowing from IY pollutes Houtbaairivier (Hout Bay river), for example, deteriorating the environmental health and aesthetic value of the coastal habitat where the river meets the Atlantic Ocean. Presumably, this becomes marine pollution and contributes to global ocean acidification and maritime ecosystem degradation. Plankton absorbs toxic pollutants, gets consumed by zooplankton and so on. Here, bio-magnification takes place; which means that the toxicity and concentration of pollutants and harmful chemical compounds increases as it moves through the food chain to higher trophic levels. In the end, oceanic fauna and flora is consumed by a widespread range of human beings all over the world and this has a detrimental effect on human health and longevity (Schwarzenbach, et al., 2010). I elaborate intentionally here to demonstrate the interconnectedness of public service delivery and environmental justice and -health. Despite the root causes being observed *in situ*, the knock-on effects that the non-delivery of public services have on human communities and ecosystems have insidiously gradual impacts locally and around the world (Schwarzenbach, et al., 2010).

Moving away from the economic and executive underpinnings of environmental governance, the discussion shifts to the judicial, legislative and jurisprudential foundations of environmental

rights. South Africa's constitutional transformation marked the birth of constitutional protection of peoples' environmental interests as set forth in section 24 of the Constitution. In practical terms, impartiality, independence, and ability of the South African judiciary to uphold the Constitution and the rule of law are prerequisites for a successfully functioning constitutional state (Kotze & du Plessis, 2010). This picture of impartiality holds in theory, but in practice only adjudication is impartial – in other words, the courts and judges must pass impartial verdicts in cases relating to environmental rights; but legal representatives are usually expensive and are deployed to represent the interests of a specific party involved. Courts cannot invent facts or speak on behalf of any of the parties; they can only pronounce on what is before them. Seen this way, the role of the courts in developing environmental rights jurisprudence depends on the contribution and involvement of many other parties and factors (Kotze & du Plessis, 2010). When participants in the questionnaire were asked whether they believe that the government cares about their right to a healthy environment, it was striking that most of them were somewhat perplexed. Many respondents were not aware of their constitutional right to an environment that is not detrimental to their wellbeing at all.

Moreover, the fact that some participants and community members are foreigners implies that this right is not applicable to them – especially if they are resident in South Africa illegally. Similarly, the restrictions imposed on foreign land ownership are politically and emotionally charged in the context of historical illegality of land ownership by black South Africans. Regardless of the implications of foreign land ownership and -use, it is an issue that strikes at the heart of the nation state, and can evoke nationalist and protective sentiments. Public perceptions frequently play a significant role in determining the nature and extent of the restrictions imposed (Hodgson, et al., 1999). Contrary to the European Union, the African Union's developmental reality is far from focused on principles of free trade and movement of people. South Africa has seen numerous events of xenophobic violence and protests in recent years and months, this is certainly related to persistent inequality, poverty, unemployment and the demographic profile of these. The issue of land ownership demonstrates the discrepancy between representative and material equality. This may be an area of law where the mere existence of legislation may be more important for its political virtue, as opposed to its pragmatic worth.

What seems most certain is that despite pressures leading towards the globalisation of markets and investments, and in increasingly internationalist world community, a uniform approach is unlikely for the foreseeable future (Hodgson, et al., 1999). In other African countries, communal land tenure is commonplace – but due to the particularity of South Africa's private property history, the prospect of social solidarity and interpersonal

respect/cooperation necessary for the sharing of natural resources is onerous, if not impossible. Once again, the issue becomes economic in its nature. To address past injustices, whether viewed as social or environmental – or both, South Africa has embarked on a road of *redistribution through growth*, with supposedly tight fiscal and monetary discipline in government spending, coupled with programmes on meeting the basic needs of the people, i.e. jobs, housing, water, electricity, communications, health care and social welfare. In many cases the management of natural and environmental resources and their associated challenges, such as water availability and quality, land availability, soil quality, indoor and outdoor air pollution, solid waste etc. cannot be detached from the basic needs and quality of life of people (de Wit, 2004).

I have already explained how the failure of government to adhere to tight fiscal and monetary discipline in spending can be considered a major external factor in perpetuating environmental injustice, but the reference above demonstrates the adequacy of IY as a microcosm of South African sustainable development challenges. In the international arena of mega economics and geopolitical jousting – South Africa presents itself as a model postcolonial society in which fundamental injustices are a thing of the past. Is this true? Upon entering IY for the first time, I was welcomed by a proud man who asked me whether I know what the name “Imizamo Yethu” means. I said no; and he loudly exclaimed: “It means our collective struggle!” This fierce spirit of continued struggle paints a very different portrait than that of authoritative figures in positions of political and corporate power.

The environmental justice movement has set out clear goals of eliminating unequal enforcement of environmental, civil rights, and public health laws; differential exposure of some populations to harmful chemicals, pesticides, and other toxins in the home, school, neighbourhood, and workplace; faulty assumptions in calculating, assessing, and managing risks; discriminatory zoning and land use practices; and exclusionary policies and practices that limit some individuals and groups from participation in decision making. Many of these problems could be eliminated if existing environmental, health, housing, and civil rights laws were vigorously enforced in a non-discriminatory way (Bullard & Johnson, 2000).

Chapter 5

Conclusion & recommendations

Environmental injustice culminates in the vulnerability that results from the poverty-overpopulation-environment nexus and its associated risks in IY. The behavioural importance of economic participation and ownership of assets are highlighted as less well-known prerequisites for the realisation of environmental justice.

Again, disproportionate risk and vulnerability to the impacts of natural disasters like fire and extreme weather events are manifestations of environmental injustice. An unpopular factor which exacerbates environmental injustice in IY is social conflict and inadequate governmental service provision. With regards to the former, a large proportion of residents do not own property and are forced to pay rent – while those who do resort to [often illegal] rent-seeking. High levels of interpersonal tension exist due to overpopulation. This causes social conflict and a lack of cooperation, disrespect for the environment and a reluctance to commit to communal investments. Thus, social pathologies and poverty causes unsustainable and self-destructive livelihoods in IY; this, in turn, is coupled with material poverty and the desperate pursuit of monetary wealth. Inadequate governmental service provision and wasteful domestic behaviour cause in situ biophysical and ecological degradation; and this ultimately deteriorates estuarine and marine environmental health.

Poverty in post-Apartheid South Africa is predominantly experienced by certain ethnic groups such as African people in townships, but the issue has transcended racial stratification. In IY, the prevalence of foreign nationals adds an unusual dimension that contributes to uncontrolled population density and disorganized, ad hoc land use practices. Again, South African residents who own property (either legitimate private property or make-believe tenure) in the community accommodate overpopulation and urbanisation by renting out property, often illegally; and this worsens the impact and magnitude of inadequate waste removal services, sanitation facilities, pollution, vulnerability to hazards etc. In a way, the social stratification that has existed for so long in South Africa is now compounded by the influx of severely impoverished immigrants from Southern and Eastern Africa – seeking employment to earn a livelihood for themselves and their families. This brings us to the question of bottom-up development and -environmental governance. Despite the theoretical ethicality of allowing communities to govern themselves and to determine the planning and decision making of human geography autonomously – there are evidently pitfalls in practice. Participants disclosed a consensual attitude of hostility toward the government because of unfulfilled political promises – yet, the need for effective governance and spatial planning is clear. In effect, collaborative relationships between Non-Governmental Organizations and local government have been successful in curbing, or at

least mitigating, the lack of resilience here. In this sense, good governance and institutional cooperation between the public and private sectors increases environmental justice in IY. International Non-for-profit organizations such as Gift of the Givers play a particularly important role in effective interventions, as opposed to entrepreneurial or profit-oriented enterprises.

Thus, this mini-thesis shows that sophisticated environmental law and constitutional rights are practically limited in IY as well as other peri-urban townships in South Africa; whilst localized and humanitarian institutions – in collaboration with willing local government – can make a real difference in dire situations of environmental adversity. It is concluded that more precautionary measures should be employed to prevent vulnerability to environmental hazards. In a relatively ungoverned community, the sociological situation is such that environmental rights and legislation don't have any real impact on the lives of those who call the place their home. In terms of legal environmental injustice, there is inter- as well as intra- 'suburban' inequality with regards to the accessibility of judicial and other legitimate mechanisms designed to safeguard environmental health and sustainable livelihoods. Intra- 'suburban' inequality in terms of the difference between the environmental and property rights of South African citizens vis-à-vis foreigners (or those South Africans who do and do not own property); and inter-suburban inequality between residents of IY and those of more affluent communities of Hout Bay.

To demonstrate this, poverty renders much of IY's population unable to afford legal services – and at the same time most residents are not well educated and thus unaware of their rights to legal representation and a healthy environment. In fact, most participants in the questionnaire did not appear to be well informed of any human- or environmental rights whatsoever; even South African citizens. Subtle social fragmentation, perpetual squalidness and drug abuse among young adults culminates in an air of despair (and apathy) that permeates the atmosphere in IY. This is not surprising, since the living conditions and constant threat of crime have detrimental impacts on the psychological health of the community. Distrust of one's neighbours and local government adds to the disorganization and lack of solidarity on developmental planning and land use. In summary, there is a complex array of socioeconomic factors that cause the continuation and entrenchment of environmental injustices in IY.

The hypothesis put forward is thus disproven. Due to the abovementioned dynamics that govern land use practices and other forms of environmental management, 'bottom-up' environmental governance or management will not necessarily bring about environmental justice in IY.

A better approach might be effective regulation of the local property market and population growth in the saturated space. The construction of formal housing was a step in the right direction, but the establishment of arbitrary residential zoning will not stop IY's squatting expansion and population density crisis. Also, the physical avoidance of water pollution and solid waste accumulation can inhibit limnological, estuarine and marine ecosystem degradation. This can be done by designing infrastructure and sanitary facilities that resonate with local social demeanours, as well as their real needs and preferences. In turn, the lack of such resonance and harmony is the primary driver of environmental injustice and squalidness in IY. Poverty warrants behavioural desperation; and this counts beyond the Western Cape and South African borders. Hence, this study affirms the fundamental priority of poverty alleviation and socioeconomic development as means to environmental justice and sustainable development in general.

Finally, it is important to emphasize the essentially bottom-up nature of the environmental justice movement. The concept was actualised because of localised, community based movements in which affected people stood up to reject unfair exposure to environmental hazards and restricted access to ecosystem services. In contrast, sustainability and the internationally ratified Sustainable Development Goals are a result of 'top-down' discourses all over the globe -especially in the developed world (Agyeman, et al., 2002). This is what makes the environmental justice movement so powerful and applicable in South Africa – and especially in South African townships. International processes and committees, legislation, think-tanks and international NGO networks might be effective on a global and national scale – but at the grassroots level, more localised forms of decision-making, planning, governance, land use strategies and environmental management can be much more effective in bringing about social and biophysical equality. The basic needs and grassroots approaches to sustainable development are emerging in high level academic and international discourse, but it is essential for governments at the local and regional levels to learn from this and to actively embed the central principles and practical approaches of environmental justice into sustainable development policy (Agyeman, et al., 2002). South African public policy and constitutional legislation is sophisticated and provides for the fair distribution of its own provisions – but this has not been realised in practice because of the severe poverty and overpopulation that ravages squalid informal settlements and townships in urban and peri-urban contexts.

The palpability of environmental injustice is generally remarkable in South Africa. The disproportionate distribution of ecosystem services and -disservices was a legal imperative under the auspices of Apartheid governance. This politico-economic regime facilitated

environmental injustice as the term has been employed here: unjust and unfair spatial distribution of environmental goods and ills amongst people, including the ‘fairness in the distribution of environmental wellbeing’ (Gleeson & Low, 1998; Ernstson, 2013). Historically, this skewed distribution was weighted along racial lines – and the effects of segregated urban development is plain to see to this day. Now, an even greater disparity in the distribution of environmental services (food, social wellbeing, water, shelter, energy etc.) and -disservices (pollution, disease, social pathologies, natural disasters etc.) as well as their impacts are skewed along the lines of financial status. In IY, this skewed distribution is palpable and stark. A diverse community of Africans from Somalia and Nigeria to Namibia and Mozambique all have a common interest and purpose – making money and earning a living because, for them, there simply are not sufficient opportunities for sustainable livelihoods where they come from.

Despite severe environmental degradation and topographic confinement in IY, the population is growing and this exponentially exacerbates the community’s disproportionate vulnerability to environmental and economic perturbations or disservices. In turn, this persistent increase in population can be partially attributed to macroeconomic and socio-political conditions in South Africa and Sub-Saharan Africa in general. Rather than top-down policy-making, -urban planning schemes and -compliance monitoring – innovative socio-economic growth and meaningful institutional transformation orchestrated sincerely through good governance in South Africa can address the plight of IY and urban townships like it throughout the country. Bottom-up development and self-governance is not universally feasible; desperate poverty incentivizes anarchic, unsustainable and exploitative land use practices among homeowners in IY. The need for transformed economic geography, or the geographic distribution of economic activities, cannot be overemphasized in this context. According to the majority of participants who took part in this research project, economic and social problems are more important than environmental problems, this is a fundamentally important aspect of the multifaceted and complex concept of environmental justice – especially in South Africa, and especially in Imizamo Yethu.

Future research into environmental justice (or the lack thereof) in South Africa and other developing countries ought to engage substantively with the imperative of monetary wealth as means to material survival. An array of interconnected, psychosocial and environmental factors sways grassroots human behaviour in township communities so that self-destructive norms emerge; rendering environmental justice practically inviable regardless of legislative sophistication and executive or judicial intent. These issues must be investigated further to conceptualise and materialise environmental justice where it is needed most.

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Appendices

A:

Questionnaire/Lemibuzo

1. Please indicate your gender with an **x**:

Nceda ubonise isini yakho ye x:

Male/Indoda	
Female/Umfazi	

2. Please indicate your age with an **x**:

Nceda ubonise iminyaka yakho ye x:

18 – 21 years	
21 – 30 years	
30 – 35 years	
35 – 50 years	
51+ years	

3. Please indicate your highest education level with an **x**:

Nceda ubonise yakho kwinqanaba lemfundo liphezulu ngokuzoba i x:

Primary School/ Isikolo samabanga aphantsi	
High School/ isikolo esiphakamileyo	
Matric	
Bachelor's Degree	
Master's	
PhD	

4. If you are employed, please indicate your annual income with an **x**:

Ukuba uqeshiwe, nceda ubonise umvuzo wakho wonyaka ngokuzoba i x:

Unemployed/Abangasebenzi	
Less than/Ngaphantsi ko R60 000	
R60 000 – R120 000	
R121 000 – R200 000	
R201 000 – R350 000	
Above/Engaphezulu kwe R350 000	

5. Please indicate how long you have lived in Imizamo Yethu with an **x**:

Nceda ubonise ukuba bahlala ixesha elide kangakanani e-Imizamo Yethu kunye x:

Less than/ Ngaphantsi ko 10 years	
More than/ Engaphezulu kwe 10 years	

Please draw a circle around your answer/ *Nceda wenze isangqa impendulo yakho:*

1.	Is your surrounding environment a source of stress to you? <i>Ngaba nawe indawo elijikelezileyo ngumthombo uxinezeleko kuwe?</i>	Yes/Ewe
		No/Hayi
2.	Are you able to satisfy all your basic needs daily? <i>Ngaba nako ukwanelisa zonke iintswelo zenu ezisisiseko yonke imihla?</i>	Yes/Ewe
		No/Hayi
3.	Do you know of and/or support any environmentally friendly businesses or agencies in your local community? <i>Ngaba uyazi kunye / okanye ukuxhasa naziphi na amashishini nokusingqongileyo okanye arhente kwindawo yakho yasekuhlaleni?</i>	Yes/Ewe
		No/Hayi
4.	Have you experienced any particularly difficult or traumatic experiences in your life related to your environmental conditions? <i>Ngaba nakuphio na amava ezinzima okanye ezibuhlungu ebomini bakho ezinxulumene iimeko zakho lokusingqongileyo?</i>	Yes/Ewe
		No/Hayi
5.	Do you think that there should be a limit to the number of people allowed to live in Imizamo Yethu? <i>Ngaba ucinga ukuba kufuneka kubekho imida kwinani labantu kuvunyelwa ukuba baphile Imizamo Yethu?</i>	Yes/Ewe
		No/Hayi
6.	Do you have access to clean drinking water, clean air to breath and healthy food to eat on a regular basis? <i>Ingaba unayo ukufikelela kumanzi okusela, umoya ococekileyo ukucoca ukuba umoya kunye ukutya okunempilo ukutya rhoqo?</i>	Yes/Ewe
		No/Hayi
7.	Has your community experienced sufficient public service delivery (rubbish removal, sanitation etc.) in recent years? <i>Ingaba uluntu lwakho abaye yokuhanjiswa kweenkonzo zoluntu ezaneleyo (izibi, ucoceko njl) kwiminyaka yakutshanje?</i>	Yes/Ewe
		No/Hayi

8.	Do you think businesses and community members can take better care of the Imizamo Yethu environment than the government?	Yes/Ewe
	<i>Ngaba ucinga amashishini kunye namalungu oluntu unokukunyamekela bhetele-bume Imizamo Yethu ngaphezu urhulumente?</i>	No/Hayi
9.	Do you think people should pay for good environmental conditions?	Yes/Ewe
	<i>Ucinga ukuba abantu kufuneka bahlawule iimeko nokusingqongileyo?</i>	No/Hayi
10.	Did your ancestors have any traditional rights to, or interest in, the Hout Bay environment?	Yes/Ewe
	<i>Ngaba ookhokho benu nawaphi na amalungelo zemveli, okanye nomdla, okusingqongileyo eHout Bay?</i>	No/Hayi
11.	Does/would ownership of land make a difference to your attitude toward the environment in Imizamo Yethu?	Yes/Ewe
	<i>Ngaba / wayeza ubunini bomhlaba kwenza umahluko kwi sakho sengqondo esingqongileyo Imizamo Yethu?</i>	No/Hayi
12.	Do you believe that national and local government respects your right to a healthy environment?	Yes/Ewe
	<i>Uyakholwa ukuba urhulumente wesizwe nowengingqi elihlonipha ilungelo lakho lokuba kwindawo enempilo?</i>	No/Hayi
13.	Would you be willing to smuggle Abalone, if it was necessary, to provide for your family?	Yes/Ewe
	<i>Ngaba ungathanda uthubelezise Abalone, ukuba oko kuyimfuneko, yokunyamekela intsapho yakho?</i>	No/Hayi
14.	Have you or your family members experienced any violent crime or burglary in or near you home in Imizamo Yethu?	Yes/Ewe
	<i>Ingaba wena okanye amalungu osapho lwakho nakuphio na ulwaphulo-mthetho olunobundlobongela okanye zokuqhekeza okanye kufutshane nawe ekhaya Imizamo Yethu?</i>	No/Hayi
15.	Are social and economic problems more important than environmental problems?	Yes/Ewe
	<i>Ingaba iingxaki zentlalo nezoqoqosho kubaluleke ngaphezu iingxaki zokusingqongileyo?</i>	No/Hayi

B:



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Department of Geography, Geoinformatics & Meteorology

Information letter

You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being carried out and what it will involve. Please take time to read the following information carefully.

Please ask us if there is anything that is not clear or if you would like more information. Take time to decide on whether you wish to take part.

1. What is the purpose of the study?

This is a Masters study which the researcher conducting toward completion of a Master of Arts degree in Environment and Society. Its aim is to investigate and understand the causes of disproportionate environmental degradation in Imizamo Yethu – especially behavioural and socio-economic causes.

As part of this project, we are looking at the experiences and perspectives of people living in Imizamo Yethu. I am keen not to restrict our conversation in any way and my project is designed more generally to give voice to the views of people who experience environmental injustices in their daily lives, in the awareness that not everyone will be interested in the topics of environmental justice and sustainable development.

2. Why have I (as participant) been chosen?

You have been chosen because you live in Imizamo Yethu, Hout Bay, Cape Town, South Africa.

3. Do I have to take part?

No. It is up to you to decide whether to take part. If you do, you will be given this information sheet to keep and asked to answer some questions posed in the questionnaire. You are still free to withdraw at any time and without giving a reason.

4. What do I have to do if I take part?

I shall visit you at a place of your choosing to conduct an interview for as long as you feel willing/able to talk. If, at the end of a session, you feel there is more that you would like to

say, it should be possible to meet again. With your consent, the interview will guide my thinking and your perspective will be recorded by means of the questionnaire.

5. What are any possible disadvantages and risks of taking part?

It will take a little bit of time out of your day, but every effort will be made to minimise inconvenience and to ensure your comfort in the interview process.

Many people value the opportunity to talk about their experiences, but it will be possible to take a break or stop at any point during the interview.

If, at the end of the interview, it has brought up issues you wish to discuss further, we shall be able to refer you to more expert sources of support.

6. What are the possible benefits of taking part?

Although this research is unlikely to be of direct benefit to you, it will give you the opportunity to talk about your experiences and express your opinion on a variety of subjects to an interested, non-judgemental listener who is not involved in your daily life in Imizamo Yethu.

7. What will happen if I don't want to carry on with the study?

If you agree to be interviewed, you can withdraw at any time during or after the interview. However, we would ask to be able to use all data collected up to the point of your withdrawal, which would be kept subject to confidentiality procedures.

8. Complaints

We do not anticipate any problems arising during this study. If you do have a concern, however, about any aspect of this study or the conduct of the researcher, please feel free to contact my research supervisor Doctor Daniel Darkey (contact details below).

9. Will my taking part in this study be kept confidential?

All information which is collected about you during the research will be kept strictly confidential.

Every step will also be taken to assure your anonymity. However, in reporting the data we would like permission to refer to some demographic information such as your age, gender etc.

10. What will happen to the data?

The data recorded from the interview in the questionnaire will be analysed for a final written project.

11. What will happen to the results of the research study?

The results of the research study will be written up and form the basis of my Masters mini-thesis. Parts of the study may also be submitted for publication.

12. Who is organising and funding the research?

The research is a Masters project that is organised by the University of Pretoria's Department of Geography, Geo-informatics and Meteorology (in conjunction with myself) and it is funded by the National Research Foundation of South Africa.

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Ileta yolwazi

Uyamenywa ukuba uthathe inxaxheba kwisifundo sophando. Ngaphambi kokuba wenze isigqibo, kubalulekile ukuba uqonde ukuba kutheni uphando luqhutywa kwaye luya kubandakanya ntoni. Kucelwa uthathe ixesha lokufunda ngolu hlobo lulwazi ngenyameko.

Nceda usibuze ukuba kukho na into engacacanga okanye ukuba ufuna ukwaziswa okwengeziwe. Thatha ixesha lokuthatha isigqibo malunga nokuba unqwenela ukuthatha inxaxheba.

1. Iyintoni injongo yesifundo?

Olu luhlolo lweMasters apho umphandi oqhuba ngokubhekiselele ekugqityweni kwegradu yeSifundo soBugcisa kwiNdalo kunye noMbutho. Injongo yalo kukuphanda nokuqonda izizathu zokuchithwa kokungcoliseki kokusingqongileyo kwi-Imizamo Yethu-ngakumbi iimeko

zokuziphatha nezentlalo.

Njengengxenywe yale projekthi, sijonge kumava kunye neembono zabantu abahlala kwi-Imizamo Yethu. Andizimisele ukukhawulela ingxoxo nangayiphi indlela kwaye iprojekthi yenzelwe ngokubanzi ukunikela ilizwi kwiimbono zabantu abafumana ukungabi nabulungisa kwendalo kwimihla ngemihla, ekuqapheliseni ukuba bonke abantu abanomdla kuzo zonke izihloko zobulungisa bendawo Nophuhliso oluzinzileyo.

2. Kutheni ndikhethele (njengothathi-nxaxheba)?

Ukhethe ngenxa yokuba uhlala eMizamo Yethu, eHout Bay, eKapa, eMzantsi Afrika.

3. Ngaba kufuneka ndithathe inxaxheba?

Akunjalo kuwe ukugqiba ukuba ngaba uthathe inxaxheba. Ukuba ukwenza, uya kunikwa eli phepha leenkukacha ukugcina kwaye ucele ukuba uphendule imibuzo ethile ebuzwa kwimibuzo yam. Ukhululekile ukuhoxisa nanini na ngaphandle kwaye unike isizathu.

4. Yintoni endiyenzayo xa ndithatha inxaxheba?

Ndiya kukutyelela kwindawo okhethe ngayo ukuqhuba udliwano-ndlebe xa nje uziva uthanda / ukwazi ukuthetha. Ukuba, ekupheleni kweseshoni, uziva ukuba kukho into ongathanda ukuyithetha, kufanelekile ukudibana kwakhona. Ngemvume yakho, udliwano-ndlebe uya kubakhokela ukucinga kwam nombono wakho kuya kubhalwa nge-questionnaire.

5. Ziziphi na iingozi kunye neengozi zokuthatha inxaxheba?

Kuya kuthatha ixesha elincinane kwimihla yakho, kodwa yonke inzame iya kwenziwa ukwenzela ukunciphisa ukuphazamiseka nokuqinisekisa intuthuzelo yakho kwinkqubo yodliwano-ndlebe.

Abantu abaninzi bayayixabisa ithuba lokuthetha ngamava abo, kodwa kuya kwenzeka ukuba bathathe ikhefu okanye bayeke nayiphi na into ngexesha lodliwano-ndlebe. Ukuba, ekugqibeleni udliwano-ndlebe, uye wakhupha imiba ofuna ukuxoxa ngayo, siya kukwazi ukukuthumela kwiinkukacha ezininzi zenkxaso.

6. Ziziphi iingeniso ezinokwenzeka zokuthatha inxaxheba?

Nangona lo uphando awunakwenzeka ukuba ube yinzuzo ngokuthe ngqo kuwe, kuya

kukunika ithuba lokuthetha ngamava akho kwaye ubonise uluvo lwakho ngezifundo ezahlukeneyo kumphulaphuli onomdla, ongenamgwebo ongabandakanyeki ebomini bakho bemihla ngemihla. Imizamo Yethu.

7. Yintoni eya kwenzeka xa ndingenakufuna ukuqhuba isifundo?

Ukuba uyavuma ukuba udliwano-ndlebe, unako ukurhoxisa nanini na ixesha okanye emva kokuba udliwano-ndlebe. Nangona kunjalo, siza kucela ukuba sikwazi ukusebenzisa yonke idatha eqokelelwe ukuya kwindawo yokuhoxiswa kwakho, okuya kugcinwa phantsi kweenkqubo zobumfihlo.

8. Izikhalazo

Asilindele ukuba kukho naziphi iingxaki ezivela kulolu cwaningo. Nangona unenkxalabo, nangona kunjalo, malunga naluphi na umxholo wolu phofu okanye ukuziphatha komphandi, nceda ukhululeke ukudibana nomphathi wam uphando uDkt Daniel Darkey (iinkcukacha zoqhagamshelwano ngezantsi).

9. Ngaba ukuthatha inxaxheba kweso sifundo kuya kugcinwa ngasese?

Yonke ingcaciso eqokelelwa ngawe ngexesha lophando iya kugcinwa ngokuyimfihlo. Zonke iinyathelo ziya kuthathwa ukuze ziqinisekiswa zakho. Nangona kunjalo, ekubikeni idatha esingafuna imvume yokubhekisela kolwazi oluthile lwezentlupheko ezifana nobudala bakho, ubulili njl.

10. Yintoni eya kwenzeka kwi data?

Idatha ebhalwe kwingxoxwa-ndlebe kwiphepha lemibuzo liya kuhlaziywa kwiprojekthi ebhaliweyo yokugqibela.

11. Kuya kwenzeka ntoni kwiziphumo zophando?

Iziphumo zophando zophando ziya kubhalwa kwaye zenze isiseko se-Masters mini-thesis. Icandelo lophando lungafakwa kwakhona ukuze lipapashwe.

12. Ngubani olungelelanisiweyo kunye nenkxaso yophando?

Uphando luyiProjekthi yeMasters ehlelwe yiYunivesithi yasePitoli kwiSebe leJografi, iGo-informatics kunye neMeteorology (ngokubambisana nam ngokwam) kwaye ixhaswa ngeSiseko soPhando lwaMazwe eMzantsi Afrika.

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