

# The Intersection of Slums and Environmental Justice in Morocco

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## Abstract

The purpose of this research paper is to address environmental justice in Morocco as it relates to slum life and slum relocation efforts. As such, the paper deals with the kingdom's waste management activities in both rural and urban areas, and political policies that shape slum life and slum relocation. The research was gathered through close readings of Moroccan and non-Moroccan academic books and online publications, official reports, newspaper clippings, and websites regarding the topics at hand. After analysis of the data, it was concluded that throughout the past few decades the Moroccan government has been instituting top-down policies that marginalize slum communities and deny them environmental justice. However, evidence collected through this research also shows the government has been taking an increasing interest in environmental protection and waste management since 2006, and hopefully this trend offsets some of the negative impacts of its authoritarian policies on Moroccans' access to environmental justice.

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## Introduction

Mike Davis, author of *Planet of Slums*, argues, "very poor people have little choice but to live with disaster."<sup>1</sup> This simple yet profound statement reveals a side of the social and environmental justice debate that may be hard for some to swallow. Particularly in underdeveloped countries such as Morocco, where authoritarian regimes often exist in the place of democratic institutions, this quote may indeed summarize the seemingly hopeless situations many experience on a daily basis.

Environmental awareness is a relatively new phenomenon in Morocco, and this is even more true for the environmental justice movement. It is unclear whether Moroccans are simply unaware of the implications of environmental degradation on society or whether they are not empowered to make significant changes as a result of the political system. Despite this, there is evidence that the Moroccan government has been slowly but surely moving in the direction of progress in this realm. The few improvements the king has implemented in this regard may have been the result of mounting pressure from foreign powers and investors rather than his own foresight. Either way, it is well-known that Morocco still suffers from many waste management-related issues. This paper will argue that waste mismanagement in Morocco is a serious threat to realizing environmental justice

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<sup>1</sup> Mike Davis, *Planet of Slums* (London: Verso, 2006), 122.

in the kingdom and that both waste mismanagement and environmental justice play out very clearly in Moroccan slums, where poor living conditions both perpetuate and exacerbate social inequalities on a large scale. This paper will also pose the argument that the authoritarian Moroccan government, which controls waste management to a large extent, is quite unconcerned with ensuring environmental justice because it is detached enough from the negative repercussions of its environmentally destructive policies.

These topics will be addressed through a discussion of environmental justice as it relates to the government's policies with slums and the public trash collection system and its shortcomings. These deficiencies include the negative impacts of trash burning on local communities, the presence of landfills, and the government's safety standards for dangerous compounds such as landfills may contain. These subjects will be tied together through the discussion of waste management's intersection with slum life and political policies, because waste mismanagement disproportionately affects poor, disaffected communities such as those dwelling in slums. Another reason for this paper's focus on this particular aspect of waste management in Morocco is that research on the intersection of waste mismanagement and slum life is readily available. This discussion of slums and their relationship with environmental justice in Morocco will also address slum relocation. This subject provides a closer look at the societal impacts of environmental justice, where other research on the human perspective is lacking.

### **Environmental Justice vs. Environmentalism**

First and foremost, it is necessary to address the definition of environmental justice as well as its significance. It is also important to discuss how environmental justice differentiates from the more well-known mainstream environmentalist movement, in order to ensure that the following materials as well as the arguments pertaining to them are absolutely clear. In her contribution to *Uncommon Ground*, Giovanna Di Chiro underlines the differences between environmentalism and environmental justice when she states that the mainstream environmentalist movement creates a strict dichotomy between humankind and nature.<sup>2</sup> This outlook is troublesome for a number of reasons, perhaps the greatest of which is the fact that it endorses a paternalistic domination of humans over the natural world, with humans often ascribing to the ideology that it is their God-given right to regulate, control, preserve, and even extract what they so desire from the environment.<sup>3</sup> Oftentimes these tasks entail the forced separation of humans from what are deemed to be "pure" environmental landscapes in need of protection.

Environmental justice, by contrast, seeks to define the environment as "the place you work, the place you live, the place you play."<sup>4</sup> This point of view notably includes human interaction with their surroundings in its depiction of nature, which in turn leads proponents of the environmental justice movement to approach issues like nature conservation and the preservation and extraction of resources more holistically than

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2 Giovanna Di Chiro, "Nature as A Community: the convergence of environment and social justice," *Uncommon Ground: Rethinking the Human Place in Nature*, ed. William Cronon (United States: W.W. Norton & Company, Inc., 1996), 300.

3 Ibid., 302.

4 Ibid., 301.

mainstream environmentalists. Environmental justice's main goal, as the name suggests, is to foster justice, particularly as it applies to the relationship between humans and nature. Environmental justice is important in that it showcases the relationship between the government's maldistribution of justice and the high likelihood of disenfranchised communities experiencing less justice than richer communities as a result. In so doing, the environmental justice movement enables policymakers and activists to identify and tackle solutions that have realistic chances of successfully employing equal access to justice everywhere. Some scholars argue that one must focus on more than simply the distribution in order to properly define justice, because failure to do so overlooks factors that "construct maldistribution."<sup>5</sup> However, exploring all these aspects of the Moroccan system of justice in their entirety is not possible due to a shortage of academic research regarding topics of demographics and their relationship with access to environmental justice within the kingdom.

Environmentalism and environmental justice broadly relate to Morocco's treatment of waste management in that Moroccan environmental policies indicate the prevalence of the former movement's definition of nature over the latter. I will demonstrate this by addressing the aforementioned environmental threats in the kingdom, as well as the ways in which the Moroccan government responds to them. I will also shed light on the reactions of the Moroccan people to some of these issues, as they may differ drastically from what the government's actions indicate.

### Slums and Environmental Justice

Let us first analyze the subject of slums and slum relocation in Morocco. In the Middle East in particular, slums and other types of unplanned settlements form due to "a lack of basic services such as infrastructure, schools, hospitals and safe areas." More generally, spikes in the population growth and urban migration are catalysts for the formation of slums.<sup>6</sup> Slums are relevant because they are environments in which generally low-income and disempowered humans are constantly interacting with many social and environmental negatives. The experiences of this particular socioeconomic class with these unfavorable circumstances often perpetuate their existence in such poorly maintained locations.<sup>7</sup> In effect, slums are a prominent focal point for the interaction of government policy with disempowered citizens in an environmental context. Davis demonstrates this point in *Planet of Slums*, in which he elucidates the connection between the Algerian government's anti-terrorist activities in 2001 and the devastation of a local slum built on a precarious risk zone.<sup>8</sup> The reason I am focusing on the poor social stratum in particular is that these communities—especially when they are displaced—are statistically more likely to bear the burden of environmentally devastating or hazardous policies.<sup>9</sup> In addition to

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5 David Schlosberg, "Defining Environmental Justice: theories, movements, and nature," *Oxford Scholarship Online* (2007), 3-4, doi: 10.1093/acprof:oso/9780199286294.001.0001.

6 Naif Alsharif, "Planning for the Unplanned: a case study of slum settlements in Jeddah, Saudi Arabia," (master's thesis, Ball State University, 2013), 2.

7 Davis, *Planet of Slums*, 122.

8 Ibid., 125-126.

9 Ibid., 122.

Davis' support of this claim, Di Chiro makes this observation of American ethnic minority communities—which are politically underrepresented and disempowered,<sup>10</sup> and David Abbot and Sue Porter make a similar observation of disabled people—yet another underrepresented, disempowered social group—in their article “Environmental Hazard and Disabled People: from vulnerable to expert to interconnected.”<sup>11</sup> Therefore, it is reasonable to argue the same for poor, slum-dwelling communities in Morocco.

The Moroccan government's policies and stances toward addressing the topic of slums in the kingdom have evolved throughout the years. For instance, the government initially ignored slum communities and their pressing needs. However, as the government's interest in keeping slums under control escalated, its approach eventually became more authoritarian, and finally it began resorting to means that were more inclusive of slum residents' opinions.<sup>12</sup> The Moroccan government's movement towards a more authoritarian approach to slums and slum relocation came after both the 1981 Casablanca riots and the 2003 Casablanca suicide bombings.<sup>13</sup>

### Slums and Terrorism

As it turns out, Casablanca holds 25 percent of the entire country's slum residents, which is more than any other Moroccan city holds.<sup>14</sup> Perhaps unsurprisingly, eleven out of the twelve suicide bombers from the 2003 incident—which killed thirty-three innocent passers-by along with themselves in the explosion—hailed from a nearby slum on the outskirts of central Casablanca.<sup>15</sup> The environmental conditions in these slums are detrimental to the stability, health, and functionality of the communities they harbor. Thomas Omestad discusses this topic in a news report, in which he describes the shantytowns of Casablanca as being characterized by incredibly unsanitary conditions. For instance, he states that the earth surrounding the ramshackle tin houses of the residents is smothered by rot and garbage, from which their chickens and the occasional cow graze.<sup>16</sup> Their children are also exposed to these deplorable and unsanitary living conditions, which unfortunately create desperate people and provide fertile ground for terrorist cells to spread their hardline conservative doctrines and to gain traction.

The situation is so desperate, in fact, that residents of slums like the ones Omestad describes recall recruiters from a handful of terrorist cells visiting in order to gain the people's favor through various means, sometimes even paying for their sundry medical and

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10 Di Chiro, “Nature as A Community,” 304.

11 David Abbott and Sue Porter, “Environmental Hazard and Disabled People: from vulnerable to expert to interconnected,” *Disability & Society* 28, no. 6 (2013), 840.

12 Christian Arandel and Anna Wetterberg, “Between 'Authoritarian' and 'Empowered' Slum Relocation: Social Mediation in the Case of Ennakhil, Morocco,” *Elsevier*, no. 30 (2013), 142-143.

13 *Ibid.*, 142.

14 Hassan Rhinane, Atika Hilali, Aziza Berrada, and Mustapha Hakdaoui, “Detecting Slums from SPOT Data in Casablanca Morocco Using an Object Based Approach,” *Journal of Geographic Information System*, no. 3. (2011), 217.

15 Thomas Omestad, “Why Morocco Is Producing Some of the World's Most Feared Terrorists,” *U.S. News & World Report*, no.13 (2005).

16 *Ibid.*

educational expenses during times of great need. Omestad writes, "...[t]he young here ... say they haven't seen any of the terrorist recruiters who used to play soccer with the Casablanca bombers and who spun visions of paradise for the would-be martyrs," indicating that the recruiters provided what could have been the only glimmer of hope people like the suicide bombers and other slum residents knew.<sup>17</sup> He continues, "Recruiters or not, the disillusionment is such that it's hard not to see a potential breeding ground for terrorists."<sup>18</sup> His commentary emphasizes a dire need for the Moroccan government to address the threat terrorist cells pose to slum communities, and in the long run, the kingdom as a whole. These terrorist activities are important for the implementation of environmental justice because they act as a catalyst prompting the Moroccan government to take action.

### Slum Relocation Efforts

As stated above, the government recognized this threat and acted accordingly: due to the fears of security risks that slums posed, it expressed after the 1981 Casablanca riots a desire to eliminate all of the kingdom's slums, and after the 2003 Casablanca suicide bombings, its new goal was the elimination of all slums from Moroccan cities, with the desired project completion date set in 2010.<sup>19</sup> Clearly, the first of these plans was authoritarian in nature, and strongly suggests that residents had absolutely no representation in the matter of their new living arrangements. In other words, the Moroccan government was not ensuring the dissemination of environmental justice where possible. The complaints of one slum resident in Ennakhil to a Near East Foundation organizer in 2006 strongly support this paper's postulation of Moroccan slum dwellers' lack of representational justice. The slum resident lamented, "I have been living here for thirty years, I have lost my teeth and my sight in this wretched place, the authorities never came to our help before, and until today nobody ever asked for my opinion."<sup>20</sup> It is worth mentioning that the Ennakhil slum is located in the Greater Casablanca metropolitan area, and therefore, in relatively close proximity to the sites of the 1981 and 2003 incidents.<sup>21</sup>

The government's plan to demolish all of the slums also failed to include the financial capabilities of the displaced communities, and unfortunately, even the heavy subsidies on the new housing sites were still not enough to make the facilities affordable to them.<sup>22</sup> These are both blatant examples of the Moroccan government ignoring its responsibility to implement both environmental and social justice to the greatest degree possible in situations where it could have. Just like the situation Davis cites concerning the Algerian government and the Bab el-Oued slum, in which flash flooding killed approximately 900 people due to government apathy or oversight in its various attempts to weaken Islamist insurgents in the region,<sup>23</sup> the Moroccan government's handling of slum

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17 Ibid.

18 Ibid.

19 Arandel et al., "Between 'Authoritarian' and 'Empowered' Slum Relocation," 142.

20 Ibid., 144.

21 Ibid., 143.

22 Omestad, "Why Morocco Is Producing Some of the World's Most Feared Terrorists."

23 Davis, *Planet of Slums*, 125.

relocation during this period demonstrates similar lack of genuine interest in the wellbeing of slum communities in favor of pumping more resources into curbing terrorism.

At this point, it is quite clear that slums are a point of intersection for the arenas of social and environmental justice, and that the Moroccan government, though keen on solving many of the problems that these shantytowns produce, is exercising its power in a way that distances its people from any semblance of control over these factors and that in turn perpetuates the disempowerment of its people. The solutions the government has sought for terrorist threats and mounting discontent—namely, dismantling all of the kingdom’s slums and plucking out its former residents in order to move them to more tightly controlled locations, serve first and foremost the government’s interests while sidelining those of the people. One of the primary reasons the government’s top-down policies continually shortchange slum residents is that policymakers are distanced enough from the repercussions of these decisions that they do not have to experience them first-hand as do slum communities.<sup>24</sup> Environmental justice proponent Leanne Simpson succinctly describes this relationship in an interview with Canadian social activist Naomi Klein on the topic of globalization and resource extraction. As a result of this distance between policymakers and shantytown residents, the government has very little incentive to approach the topic of slums in a more democratic way that takes into consideration the opinions of residents.

It is safe to say that this top-down approach fits academics Christian Arandel and Anna Wetterberg’s definition of the authoritarian method of slum relocation, on which I will elaborate when I discuss the intersection of waste mismanagement, slum life, and political policies in Morocco. But that fact still leaves the question of where all the rotting garbage and squalor—such a definitive part of slum life as Omestad described it - came from. Also, another question remains: why does this waste exist to such a degree in these particular areas, while the more elite residential areas of Morocco—some of which are actually in striking proximity to the slums, particularly in Casablanca—enjoy picturesque vistas, classy metropolitan centers resembling those in Europe, and streets that are regularly maintained and cleaned?<sup>25</sup>

The answers to these questions lie in a combination of two factors: the amount of money or funding that is available to said communities, and the deficiencies in the waste management system in Morocco. Though some scholars have provided detailed descriptions of Morocco’s economic situation on a macroeconomic level,<sup>26</sup> there is unfortunately not much scholarly research available that provides a clear comparison of the amount of government or private funding across various Moroccan communities. Such an account would have been useful in determining some of the reasons behind waste management in richer versus poorer areas of Morocco. Despite that, there is a surprising abundance of information concerning Moroccan slums and the welfare of the communities

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24 Naomi Klein and Leanne Simpson, “Dancing the World into Being: a conversation with Idle No More’s Leanne Simpson,” *Yes! Magazine*, last modified March 5, 2013, <http://www.yesmagazine.org/peace-justice/dancing-the-world-into-being-a-conversation-with-idle-no-more-leanne-simpson>.

25 Ibid.

26 Christian Morrisson, “Adjustment, Incomes and Poverty in Morocco,” *World Development* 19, no.11 (1991), 1633.

residing in them. Research and statistics on topics that link both waste management and financial status of residents can help draw a more detailed picture of the reality of the waste management situation in the kingdom. Examples of such resources include slum demographics indicating average family income; and designated risk areas in Morocco, which could overlap with areas in which slums are located, affecting investments in these impoverished regions. The next section will integrate information from these types of sources with research relating to waste management. From there this paper will draw educated conclusions in response to the questions posed earlier in the absence of in-depth scholarly research regarding certain aspects of the subject.

### Waste Management in Morocco

The vast majority of scholarly research regarding waste management in Morocco focuses on chemical and bacterial contamination of the environment rather than an overview of the government's waste-collecting institutions themselves.<sup>2728293031</sup> While this research is important, not many of these scholars who focused on environmental contamination addressed topics of environmental justice along with their findings. In fact, even the *Country Report on Solid Waste Management in Morocco* is rather vague on the specifics of the waste collection process,<sup>32</sup> though it is worth mentioning that the report does provide many helpful yet broad statistics regarding this topic.<sup>33</sup> According to the report, "Urban solid waste collection is regular and almost daily for an estimated 5.5 million metric tons [MT] per year," but at the same time it fails to make any mention of waste collection in rural areas or in slums aside from vague statements about the necessity of improving "waste collection and disposal services" for these communities.<sup>34</sup>

Despite this drawback, it does provide that waste generation in urban areas is about "0.76 kilos per day per capita." whereas in rural areas it is approximately "0.3 kilos per day," indicating that urban areas have a more pressing need for a functioning waste management system than do rural ones, and that in the absence of sufficient financial resources, the Moroccan government should perhaps allocate the majority of its funds

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27 K. Ibenyassine, R. Ait Mhand, Y. Karamoko, B. Anajjar, M. Chouibani, and M. M. Ennaji, "Bacterial Pathogens Recovered from Vegetables Irrigated by Wastewater in Morocco," *Journal of Environmental Health*, no. 69 (2007), 47.

28 Loubna Amahdar, Adbellah Anouar, Bouchra Ababou, Luc Verschaeve, and Abderraouf Hilali, "In Vitro Genotoxicity of Settled Town Landfill Leachate, Morocco," *Arh Hig Rada Toksikol*, no. 60 (2009), 179.

29 Fatima-Zahra Moubarrad and Omar Assobhei, "Health Risks of Raw Sewage with Particular Reference to *Ascaris* in the Discharge Zone of El Jadida (Morocco)," *Desalination*, no. 215 (2007), 120.

30 Ameziane Nour-Eddine, Hassouni Taoufik, Benaabidate Lachen, and Chahlaoui Abdelkader, "Evaluation of the Effect of Solid Waste Burning at Moulay Ismail Hospital of Meknes City on the Soil," *European Scientific Journal*, no. 10 (2014), 188.

31 Meriem El Bakkali, Meriem Bahri, Said Gmouh, Hassan Jaddi, Mohammed Bakkali, Amin Laglaoui, and Mohammed El Mzibri, "Characterization of Bottom Ash from Two Hospital Waste Incinerators in Rabat, Morocco," *Waste Management & Research*, no. 31 (2013), 1228.

32 Nicole Perkins and Abdelkader Ajir, "Country Report on the Solid Waste Management in Morocco," *Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ)* (2014), 23-24.

33 Ibid., 11-2.

34 Ibid., 51.

intended for waste collection to urban areas.<sup>35</sup> But the fact that Moroccans residing in rural areas produce less waste compared to urban Moroccans does not excuse the government from neglecting poor regions in its handling of waste management policies.

### Waste Posing an Environmental Threat

Regarding the topic of governmental negligence of poor slum communities in favor of wealthier communities established on similarly danger-prone areas, Davis argues that “[f]ragility”—referring to untreated vulnerability of slum locations in the face of both natural and manmade disasters—“is simply a synonym for systematic government neglect of environmental safety, often in the face of foreign financial pressures.”<sup>36</sup> On that note, it is unclear whether many of the controlled landfill sites the *Country Report on Solid Waste Management in Morocco* boasts—in addition to the dumpsites it lists as closed, rehabilitated, or planned for remediation—spill over into areas that poor, disenfranchised communities occupy.<sup>37</sup>

According to these findings, it may seem like both waste management and environmental justice in Morocco are highly segregated along classist lines, but in reality, the situation is not so clear-cut. Widely-practiced solid waste disposal activities such as trash burning—a cheap alternative to safer disposal methods—affect not just certain social strata or ethnic groups, but entire ecosystems.<sup>38</sup> Without the implementation of safe filtering methods<sup>39</sup>, incineration of solid waste can produce highly toxic dioxins, which then seep into plant leaves on which farm animals later feast and subsequently ingest. The toxins lodge themselves in the fatty tissue of these livestock, which humans across all social classes later consume as part of their regular diet.<sup>40</sup>

Unfortunately, ingestion of these toxins is not the only danger waste burning poses to upholding environmental justice in Moroccan society. The chemical particles this process produces threaten human and animal health in that they are liable to be inhaled into the lungs, where they can cause illnesses such as asthma and bronchitis.<sup>41</sup> What is more is that these chemicals, which the incineration process releases into the air, can travel far distances - affecting more than simply a select segment of Moroccan society - and can even contaminate the soil.<sup>42</sup> This is not to mention the host of other medical issues particle pollution may wreak on the body, such as cancer, skin irritation, and damage to internal organs such as the liver and kidneys.<sup>43</sup> While the Moroccan government has been working

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35 Ibid., 11.

36 Davis, *Planet of Slums*, 125.

37 Perkins et al., “Country Report on the Solid Waste Management in Morocco,” 12.

38 Catherine Hansen, “Waste Management in Morocco,” *EcoMENA: echoing sustainability*, last modified April 29, 2014, <http://www.ecomena.org/waste-management-morocco/>.

39 Nour-Eddine et al., “Evaluation of the Effect of Solid Waste Burning at Moulay Ismail Hospital of Meknes City on the Soil,” 188.

40 Hansen, “Waste Management in Morocco.”

41 Ibid.

42 Nour-Eddine et al., “Evaluation of the Effect of Solid Waste Burning at Moulay Ismail Hospital of Meknes City on the Soil,” 189-90.

43 Hansen, “Waste Management in Morocco.”



since 2006 to create laws aiming to control the disposal of hazardous waste, it is unclear to what extent authorities are ensuring their implementation.<sup>44</sup> This disconnect between the written law and the ways in which it is carried out could further complicate efforts to bring environmental justice to the disenfranchised poor of Morocco, including slum communities.

### Landfills

While a great deal of waste—much of which is probably hazardous—eventually ends up in landfills, the *Country Report on the Solid Waste Management in Morocco* suggests that attempts at landfill regulation have been largely successful. As indicated earlier, the report refers to numerous dumpsites, many of which are rehabilitated and some of which are not.<sup>45</sup> Additionally, it outlines—albeit quite vaguely—plans to “[r]ehabilitate or close all existing disposal sites (100 percent) by 2020.”<sup>46</sup> Although the report does not specify what exactly it means by “rehabilitate,” other sources addressing the status of Moroccan landfills make frequent use of the term “sanitary landfills,” which is a positive term meaning landfills that have “completely degraded biologically, chemically, and physically.”<sup>47</sup> Based on the context in which the report discusses the Moroccan government’s goal of 100 percent dump site rehabilitation as well as the government’s broad policies aiming to somehow achieve these goals, it is safe to assume that the term “rehabilitated landfills” is synonymous with “sanitary landfills.”

While it is good news for environmental justice proponents that the government has high hopes for the future of waste management in the kingdom and for ensuring high safety standards for the treatment of dangerous waste materials, quite a few sources note that in order for these plans to truly be effective, the government must first strengthen its “legal and organizational framework.”<sup>48</sup> Also, though the *Country Report on the Solid Waste Management in Morocco* refers multiple times to recently instituted legal citations - of which it notes there exist 855, the link it provides in order for readers to view these laws on the official government website is not functional, and intensive internet searches in both English and Arabic do not turn up any sign of such citations either.<sup>49</sup> Therefore, it is likely that the government’s comprehensive list of environmental laws is either not available to the public, or it is available but only in French.

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44 Perkins et al., “Country Report on the Solid Waste Management in Morocco,” 11-2.

45 Ibid., 12.

46 Ibid., 15.

47 “Solid Waste,” *Massachusetts Institute of Technology*, accessed November 4, 2015, <http://web.mit.edu/urbanupgrading/urbanenvironment/sectors/solid-waste-landfills.html>.

48 Ej'ir Abdelqader, “The Moroccan Experience in the Realm of Managing Waste,” 167, <http://www.msc.gov.jo/pdf/9.pdf>.

49 Perkins et al., “Country Report on the Solid Waste Management in Morocco,” 13.

## Intersection of Waste Mismanagement, Political Policies, and Slum Life

Now that a relatively substantial background on waste management in Morocco has been provided, this paper will now address the ways in which the topics of environmental justice, slum life, and government policies interact with one another. According to authors Lisa Sun-Hee Park and David Naguib Pellow, it is impossible to discuss environmental injustice without also accounting for environmental privilege, for the two concepts are strongly and intrinsically interconnected, and one cannot exist without the other.<sup>50</sup> Their discussion of the environmental degradation experienced by disaffected immigrant communities living on the outskirts of one of the wealthiest communities in the United States of America compels one to imagine the iteration of that same socio-ecological dynamic playing out in other parts of the world. Park and Pellow's argument largely pertains to the racist, xenophobic tendencies of entitled white American communities.<sup>51</sup>

Circumstances in Morocco are only partially comparable. While Morocco has its fair share of immigration-related problems,<sup>52</sup> the North African country differs from the United States in terms of the ways in which citizenship is defined or established, and this is exemplified in the simple well-known fact that the US is a nation of immigrants whereas Morocco is not. For that reason, one can assume that environmental privilege in Morocco generally takes on a non-racialized form. In fact, the majority of scholars writing on slums and slum relocation in Morocco describe money as a factor in their substandard living situation as opposed to race, of which they make no mention at all.<sup>53,54</sup> This is true also of local news sources' accounts.<sup>55</sup> It is otherwise unclear whether residents of Moroccan shantytowns are more likely to be nomadic or immigrants.

But money is not the only factor in slum dwellers' persistence in living in unsanitary shantytowns; their representation or lack thereof in political policies concerning their living situation also play a major role in the affordability of government-subsidized housing during the relocation process, for instance. This note brings us back to an earlier point on the Moroccan government's evolving approach toward slum relocation, as it further elaborates on the reasons people reside in such substandard living conditions as those existing in slums. As such, clarification on the government's approach to slum relocation will supplement Park and Pellow's description of environmental privilege and environmental injustice.

Arandel and Wetterberg argue that there are three possible types of approaches to slum relocation: authoritarian, empowerment, and social mediation, and that the social

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50 Lisa Sun-Hee Park and David Naguib Pellow, *The Slums of Aspen: immigrants vs. the environment in America's Eden* (New York: New York University Press, 2011), 4.

51 Ibid., 9.

52 Fou'ad El-Fatehy, "The Challenges of Illegal Immigration into Morocco," *El-Araby El-Jadid* (September 25, 2014), doi: <http://tinyurl.com/gw5a8rr>.

53 Arandel et al., "Between 'Authoritarian' and 'Empowered' Slum Relocation," 141.

54 Rhinane, "Detecting Slums from SPOT Data in Casablanca Morocco Using an Object Based Approach," 217-224.

55 Ibrahim, "Slums in Morocco. A Suffering That Never Ends."

mediation approach produces the best results for the displaced communities and governments alike.<sup>56</sup> The authoritarian method, which the Moroccan government has traditionally wielded, results in the complete disempowerment of slum dwellers, and is driven by both political and financial ends.

Meanwhile, the empowerment approach includes slum residents to the largest extent possible in negotiations for new living arrangements.<sup>57</sup> Both of these methods risk a disproportionately high chance of failure. On the other hand, the social mediation approach is supposedly ideal because it allows for the optimal amount of resident inclusion in negotiations without overwhelming them with information in which they have no education or background knowledge, and because it seeks the relative satisfaction of the displaced residents.<sup>58</sup>

Arandel and Wetterberg's argument seems plausible, but their differentiation between the empowerment and social mediation approaches is rather unclear and significantly lacking. Both methods require consultation of slum residents, which they regard as risky when describing the empowerment approach,<sup>59</sup> yet deserving of commendation when describing the "social dimension."<sup>60</sup> Despite these vague points in their argument, their portrait of Moroccan slum policies throughout the past three decades is clear and rather straightforward. In short, this is one example for how the government plays a role in slum life, which logically intersects with poor waste management policies by virtue of policymakers' lack of interest in prioritizing waste collection in slums.

### **Risk Zones, Slums, and Preventative Safety Measures**

Additionally, there remains the issue of risk zones and how they overlap with slum communities, on which this paper cites Davis earlier. The point is worth reiterating here because Davis' examples were not specific to Morocco, nor did this paper clarify how they intersected with political policies and waste management. According to the research of some scholars who studied pictures of Moroccan slums from high-resolution satellite images of the region of Tanger Tetouan, the primary slum of their focus (Moulay Bouselham) intersected with a wide variety of ecological threats, including salt water contamination from the Atlantic Ocean, water pollution, risk of collapse, risk of erosion, risk of flooding, and close proximity to seismic zones.<sup>61</sup> Moulay Bouselham was the only slum the scholars chose to label on the risk map they provided, so it is unclear how many Moroccan slums likewise intersect with dangerous risk zones. However, supplementing these gaps with Davis' *Planet of Slums* paints a very clear image of what the situation in Moroccan slums probably resembles—and it is not far from the example of Moulay Bouselham.

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56 Arandel et al., "Between 'Authoritarian' and 'Empowered' Slum Relocation," 140-141.

57 Ibid., 142.

58 Ibid., 144.

59 Ibid., 141.

60 Ibid., 144.

61 R. Dahmani, A. Ait Fora, and A. Sbihi, "Extracting Slums from High-Resolution Satellite Images," *International Journal of Engineering Research and Development* 10, no. 9 (2014), 4.

When it comes to identifying risk zones, the government has an obvious role in monitoring these disaster-prone areas out of safety and national security concerns. One of the reasons the Algerian government failed to ensure the safety of residents of Bab el-Oued in 2001, according to Davis, is that it shirked this responsibility, “to deny insurgents hiding places and escape routes, the authorities had deforested the hills above Bab el-Oued and sealed the sewers.”<sup>62</sup> Davis continues, quoting social scientist Azzedine Layachi, “The blocked drains...left rain waters with nowhere to go. Corrupt authorities also gave permits for shoddy housing and other construction in the riverbed, enriching individual contractors at the expense of public safety.”<sup>63</sup> This simple quote perfectly sums up the relationship between the government, slum residents, and waste management. Because the government is distanced enough from the negative consequences of its environmentally unfriendly anti-terrorism measures, and because terrorism perhaps seemed more urgent than environmental degradation, it did not empathize enough with the residents of Bab el-Oued.

Despite the Moroccan government’s past tendency to deal with slums and slum relocation in an authoritarian manner as shown above, there is evidence that Moroccan activist groups exist and voice their concerns over government actions that exacerbate negative social and environmental conditions in the kingdom.<sup>64</sup> Additionally, some Moroccan communities have demonstrated that they are proactive about initiating informal environmental cleanup activities where the government has failed to follow through. For example, the Douar el-Koura slum on the periphery of Rabat consists of a conglomeration of run-down tin houses that reek of sewage due to the lack of a running sewage system, although government policies did institute a communal water faucet and working electricity. One resident of this slum describes how the youth take it upon themselves to frequently clean up the alleys of their community in order to make their environment more livable.<sup>65</sup>

## Conclusion

Returning to the central argument of the research, the examples provided throughout this paper clearly demonstrate that there is much more ground the Moroccan government must cover before it can truly implement environmental justice. For instance, the government could make more measures to ensure sturdy and working basic infrastructure in poor neighborhoods and slums, and particularly those that are located in designated risk zones, in order to significantly raise their standard of living to more acceptable levels. While antiterrorism activities are important, and although the government may not feel a pressing need to address issues that don’t directly impact it

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62 Davis, *Planet of Slums*, 125-126.

63 Ibid., 125-126.

64 “Because of its Environmentally Destructive Repercussions in the Region: Moroccan associations and organizations demand the cancellation of Moroccan-American military maneuvers throughout the month of Nisan in Tan-Tan,” *Horizons of the Environment and Growth: Environmental Problems.. National Priorities.. Collective Solutions*, no. 53 (Nisan 2013), <http://www.maan-ctr.org/magazine/Archive/Issue53/news.php>.

65 Muhammad Ibrahim, “Slums in Morocco: A Suffering That Never Ends,” *El-Araby El-Jadid*, (September 23, 2014), doi: <http://tinyurl.com/goubsjt>.

negatively, Moroccan officials should also consider investing resources into disempowered communities to improve the overall quality of life in the kingdom. Instead, we have seen a trend throughout the past few decades of the Moroccan government instituting top-down policies that tend to marginalize slum communities and devalue their opinions. But the government's increasing interest in environmental protection and waste management since the year 2006 has hopefully offset some of the negative impacts of its authoritarian policies on Moroccans' access to environmental justice. This scenario is a possibility, since access to environmental justice is largely determined not only by the amount of funding available in individual communities, but also by the efficiency of the government's waste management system. Therefore, fixing the system is a necessary part of the solution. As observed in the case of antiterrorism activities in North Africa, governments often experience a conflict of interest that divides their attention and prevents them from addressing environmental justice issues to the best of their abilities. It is important for leaders and policymakers to keep in mind during these times that, though environmental justice may appear trivial or non-time sensitive, its repercussions are actually quite serious and grow more threatening the longer they are ignored. Access to justice, healthy and affordable food, education, representation, and a clean environment all play vital roles in the ultimate mental and physical health of a given nation, and denying that access leaves people—especially the financially and environmentally vulnerable—susceptible to threats that could otherwise be prevented. Moroccan slum dwellers' accounts of recruitment attempts from various terrorist cells demonstrate this fact rather clearly. Despite this, the fact of the matter is that governments appear to be prioritizing their own interests over the interests of their citizens and the environment, and the Moroccan government in particular is guilty of this behavior. The continuation of this pattern will further aggravate the slum-dwelling populations of Morocco and may also affect other communities. There is a possibility that this has already begun to happen, since the 2003 Casablanca suicide bombings were likely fueled by terrorist recruitment efforts in disadvantaged slum communities. As such, ignoring the environmental justice concerns of Morocco's slum communities could eventually lead to a dissatisfied nation.

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