Slow Violence and Environmental Racism: Romani Recyclers in North Macedonia's Circular Economy

Jekatyerina Dunajeva

katyadunajeva@gmail.com

Department of Political Science, Pazmany Peter Catholic University and
Department of Public Policy, Corvinus University of Budapest

ORCID: https://orcid.org/0000-0003-1826-6731

Dr Jekatyerina Dunajeva is an expert in inclusive education, minority integration, environmental justice, and the politics of religion. She has a PhD in Political Science from the University of Oregon. Currently, Dr Dunajeva is Assistant Professor at Pázmány Péter Catholic University and Budapest Corvinus University. Her research focuses on the social and political issues facing marginalised communities, with an emphasis on post-socialist societies, and aims to promote social justice and equality, particularly through education and policy reform.

Critical
Romani Studies

Abstract

This article analyses the environmental injustices faced by Romani communities in North Macedonia through case studies of five locations by applying the "slow violence" framework. By examining the long-term and often invisible harm caused by environmental pollution and hazardous working conditions, the paper highlights how Romani waste pickers are disproportionately affected by these slow onset, cumulative forms of violence. Drawing from field visits and secondary sources, it explores the living conditions, financial deprivation, and health issues prevalent in these communities. The analysis reveals that unemployment and inadequate living conditions force Romani families into informal waste recycling as a means of survival. This practice, while providing a necessary income, exposes them to significant health hazards and environmental pollution. The Covid-19 pandemic exacerbated these vulnerabilities, with restrictions limiting access to waste and deepening financial struggles. The study also highlights systemic discrimination and legal challenges faced by Romani waste pickers. By framing these conditions within the concepts of slow violence and environmental racism, the article underscores the long-term consequences of environmental injustice on marginalised communities. The findings call for comprehensive policy approaches that recognise and integrate the contributions of informal waste recyclers into sustainable waste management practices. This research aims to contribute to a deeper understanding of the intersection between environmental sustainability and social justice, advocating for more inclusive policies that address the specific needs and rights of Romani communities.

Introduction

On a global scale, environmental injustice and environmental racism have long been documented and studied among researchers (for example, Godsil 1991; Bullard 1994; Hamilton 1995; Bullard 2002). Robert D. Bullard, an environmental sociologist, who is labelled the "Father of Environmental Justice", referred to victims of environmental injustice as "invisible communities" (Bullard 1994). What renders them invisible is that their issues and struggle for justice are often overlooked or ignored by mainstream society and policymakers. Akin to the invisible communities described by Bullard (particularly African Americans in the United States), European Roma also suffer from multiple forms of injustice, including environmental justice, which often go unrecognised. Within environmental justice research, scholars have increasingly called for placing some overlooked groups at the forefront of discussion – groups such as waste pickers (Amorim de Oliveira 2021). Waste pickers are described by researchers both as a group particularly vulnerable to environmental injustice (for example, Parizeau 2006) and as environmental contributors to urban sustainability and key actors in building just and inclusive societies (for example, Dias 2016). The role of waste pickers in the context of environmental justice merits further research and attention.

The term environmental racism was coined by the former NAACP[1] director Benjamin Chavis in 1982 to describe how people of colour face racial discrimination in environmental policies, laws, and regulations, as well as the disproportionate exposure to toxic waste and pollution in their communities (Lazarus 2000). In Europe, research on environmental justice and environmental racism generated some attention decades ago, when several scholars stressed the importance of addressing the intersection of environmental inequalities and social exclusion (most notably, Varga, Kiss, and Ember 2002 and Harper, Steger, and Filčák 2009). However, this issue has only gained more significant attention from researchers and policymakers in recent years. In particular, Green and pro-Romani organisations have been crucial in emphasising the importance of environmental justice for Romani communities. They have also initiated the collection of first-hand data on the various forms of environmental injustice Roma face (for example, Heidegger and Wiese 2020, Meynen and Marin 2022, and REDI 2023). Since this research is still emerging, a significant challenge is the lack of a clear conceptualisation of environmental justice. This gap necessitates the development of a systematic approach to study the intersections of discrimination and environmental justice.

This article is concerned with filling this gap by theorising the situation of Romani waste pickers, conceptualising their position through the lens of slow violence, and integrating this perspective into the broader environmental justice debate. Namely, the issue analysed in this article is the severe socio-economic deprivation experienced by Romani communities, which forces them into informal waste picking as a primary means of subsistence. Compounded by systemic discrimination and exclusion from social services, Romani waste pickers face a cycle of poverty and marginalisation that

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1 The National Association for the Advancement of Colored People (NAACP) was formed in 1909 as a civil rights organisation in the United States, to advance justice for African Americans.

is perpetuated by their reliance on hazardous informal work. As the World Health Organization aptly highlights: "informal waste management activities can provide income and support the livelihoods of families and local communities, but the price in terms of direct health impact for those involved is likely to be very high" (WHO 2015).

To unpack this paradox, the case of Roma in North Macedonia is used; considering the understudied case of Romani waste pickers in Europe, North Macedonia stands out due to available data generated through a series of studies by international organizations (REDI 2023 and Dunajeva and Marin 2023). The article looks at the following question: how do the environmental injustices faced by Romani waste pickers in North Macedonia reflect broader issues of slow violence and environmental racism? Through the analysis of five locations in North Macedonia, the paper investigates the lives of various Romani communities that rely on waste collection and recycling for survival. This study seeks to elucidate the multidimensionality of the marginalisation of Romani waste pickers and highlight the complex role waste plays in their everyday lives.

1. Methodology

This research relies on desk research and first-hand data that was collected within the framework of European Environmental Bureau's (EEB) project entitled "Roma and COVID-19: Build Back Better through Sustainable Waste Management". As part of this collaboration, a report entitled "Between Circularity, Environmental Justice & Slow Violence: The Case of Roma Informal Recycler Communities in North Macedonia" was published (Dunajeva and Marin 2023), for which the Roma Entrepreneurship Development Initiative (REDI) generously shared their primary data, analysed and published in February of 2023 in a seminal report entitled "Informal Waste Collectors in North Macedonia: Perspectives, Constraints and Opportunities" (REDI 2023). For this report, REDI interviewed 512 waste collectors in 15 cities of North Macedonia.

The current study builds on the above-described collaborative endeavour and expands on the findings from an academic perspective, focusing on the theoretical underpinnings that elucidate our understanding of waste pickers in the ongoing environmental justice discourse. The author of this paper also wishes to acknowledge the valuable contribution of Diego Marin who is currently works with the Global Policy team at the EEB.

Fieldwork in North Macedonia was conducted in June and July of 2022 in five Romani communities by Mustafa Asanovski, as part of the commissioned research by the EEB. Consequently, the methodological and ethical considerations of fieldwork were arranged by the EEB. The study was guided by exploration purposes and general inquiry, rather than academic standards, posing some limitations on its generalisability. Data gathering primarily involved qualitative data collection: fieldwork observations and unstructured interviews taken on-site. Interviews were recorded or transcribed by the researcher, assuring anonymity and with the informed consent of all participants. The field researcher relied on his best judgment to identify interviewees; 10 people were interviewed per site, in each case addressing as many key informants as possible. Through interviews, the goal was to learn from personal accounts

about the role waste plays for informal Romani recyclers and their families. A key informant is defined as someone who provides information and has a significant connection to the research topic, providing valuable insights (Gilchrist and Williams 1992, 73). In so doing key informants allowed researchers to access information that would otherwise be unavailable and to gain specific insights or interpretations of cultural information (Gilchrist and Williams 1992, 73–74).

The following sites were examined in detail: Municipality of Kavadarci and the Teneke Mahala Community, Municipality of Kočani and the ASNOM Community, Municipality of Shtip and the Old Neurology Ward, Municipality of Bitola and the Petocna Voda Romani Community, and the Municipality of Šuto Orizari. These sites were selected due to the field researcher's familiarity with the communities in order to access key informants and capitalise on the trust between informants and field researcher. Trust between researcher and researched communities is necessary to ensure that opinions are expressed without reservations (Akhter 2022, 392) and to minimise social hierarchy (Dunajeva 2019). Also, these sites were discussed in various earlier reports, which allowed contextualisation of fieldwork data in other findings.

The article uses the term "waste pickers" broadly to describe individuals collecting waste for any purpose, and the term "recyclers" is applied to those who collect waste specifically for recycling as a livelihood strategy. The article emphasises that Romani waste pickers often function as recyclers, particularly because their activities directly contribute to the circular economy and urban sustainability. The author of this article does not intend to inflict any derogatory or demeaning undertones by using any of these terms. In the reviewed literature, there is no consensus on what terminology is the most practical and ethical. In a study by Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), the term "collectors" is used because informants used this term themselves, yet the report makes an appeal to readers to shift to using "informal recycling collectors" to honour their role in recycling (GIZ 2018). The report by REDI, however, uses "informal waste collector" in its title and reverts to the term "green agents" to divert attention from informality and highlight their agency and role in green practices (REDI 2023). Further concepts used in the paper are summarised in the table below.

Table 1. Definitions

Waste pickers	Individuals who collect waste materials from streets, bins, or landfills for various purposes, including but not limited to recycling, reselling, or personal use. This term encompasses all informal collectors of waste.
Recyclers	A subset of waste pickers who specifically collect waste materials with the intention of recycling them for income. This practice forms part of the informal economy and is often driven by socio-economic necessity.
Slow violence	A form of harm that occurs gradually and out of sight, resulting from long-term exposure to environmental hazards, such as pollution and unsafe working conditions. It is cumulative and often unacknowledged as violence in the traditional sense.
Environmental racism	Discrimination in environmental policies, practices, or regulations that disproportionately affect marginalised communities, such as Roma, by exposing them to environmental hazards or depriving them of resources and services.
Critical environmental justice (CEJ)	An analytical framework that examines the multidimensional and intersecting inequalities faced by marginalised groups, emphasising systemic discrimination and its impact on environmental injustice.
Informal waste sector	The economic sector involving waste collection, sorting, and recycling carried out by individuals or groups without formal recognition, regulation, or integration into the official waste management system.
Circular economy	An economic model that aims to reduce waste and environmental impact by promoting reuse, recycling, and sustainable resource management.
Romani recyclers	Romani individuals engaged in waste recycling as part of the informal economy. Their work often lacks formal recognition despite contributing significantly to urban sustainability and the circular economy.

2. Findings

The findings presented in this section are structured into two sections: first, the analytical and theoretical framework of critical environmental justice and slow violence, and second, the empirical insights derived from case studies. The analytical and theoretical framework draws from a comprehensive literature review, exploring concepts of environmental justice through a critical lens that emphasises the systemic inequalities and slow violence experienced by marginalised communities. Building on that, the case studies provide empirical data gathered from field research within Romani communities in North Macedonia. These studies offer a nuanced understanding of how environmental injustices manifest in real-world contexts, particularly focusing on the experiences of Romani waste pickers and their struggles with poverty, discrimination, and health hazards exacerbated by their reliance on informal waste collection for livelihoods. Together, these findings contribute to a deeper understanding of the complex intersections between environmental injustice, social inequality, and human rights violations in marginalised Romani communities.

2.1 Analytical and Theoretical Framework: Critical Environmental Justice and Slow Violence

The evolving environmental justice movement was largely driven by environmental racism claims in the United States, started in the 1960s by Black and minority group who demanded equal environmental protection and rights for their communities. As environmental justice movement and scholarship expanded and took on a global scope, scholars have examined and re-examined the very concept of environmental justice and what it entails. In the recent years, a novel framework was promoted – that of critical environmental justice (CEJ), which advocated for the need to unpack systemic inequalities, while developing a grounded theory that acknowledges environmental racism.

Critical environmental justice (CEJ) analysis examines how environmental burdens and benefits are distributed. CEJ also emphasises the multidimensional and intersecting forms of inequalities (for example, political exclusion, material deprivation, spatial separation, and alike) and conceptualises environmental injustice as a form of social violence. CEJ maintains that environmental racism is a state-sanctioned violence; it targets indigenous and racialised communities by controlling their bodies. This harms their economic, political, and social well-being (Waldron 2018, 19). Moreover, "the critical environmental justice (CEJ) framework contends that inequalities are sustained through intersecting social categories […] the perceived expendability of marginalized populations, and state-vested power" (Carillo and Pellow 2021, 815).

Research on environmental justice has been increasingly applied to the Romani populations of Europe. A (critical) environmental justice framework has been used as an analytical framework to examine more generally the intersection of environmental inequalities and social exclusion of Roma in Central and Eastern Europe (for example, Varga, Kiss and Ember 2002; Harper, Steger and Filčák 2009; Vincze 2013a), or focusing on various issues, such as waste management practices neglecting Roma (Majko 2019; Dunajeva and Kostka 2021). Some scholars have provided detailed accounts through fieldwork about the daily lives of Romani scavengers (Saethre 2020). Other studies specifically looked at the imperative role of Romani informal recyclers, such as that by Vaccari and Perteghella (2016), who argue that "informal recyclers have a central role in the solid waste management system" in the Balkans. More recent studies highlight that not only environmental degradation affects marginalised communities disproportionally but also the imperative importance of empowering a marginalised group to promote sustainability in the future (for example, Saaida and Saaidah 2023; Dushkova and Ivlieva 2024). What is common to these accounts is the understanding that environmental injustice leads to multiple forms of violence, inflicted onto the bodies of racialised and marginalised groups, such as Roma. In other words, instances of environmental injustice are framed as violence.

Erik Kojola and David Pellow (2021, 101–104) called on scholars to examine environmental injustice as a form of violence, as it offers four analytical advances: (1) it frames environmental injustices as "direct assaults on entire communities"; (2) it highlights the importance of long histories of discrimination, disposition and marginalisation of affected communities; (3) it brings to the surface that "unearned

environmental privileges for dominant groups" are maintained at the expense of vulnerable groups; and (4) it focuses on the state, state institutions, and state narratives as drivers of environmental injustice. With that, the authors have unequivocally put the state and violence in the centre of analysis to understand forms of environmental injustice. This article presents several case studies (for example, Šuto Orizari and the Municipality of Shtip), where Romani communities suffer from infrastructural isolation, with no, or limited, access to services such as sewage, electricity, water, or waste management, as well as geographical isolation, which exemplifies environmental racism by disproportionately exposing them to environmental hazards and denying them equitable living conditions.

The current study contributes to this ongoing conversation by framing the environmental burdens of Romani waste pickers as a form of slow violence. Slow violence is defined as "violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all" (Nixon 2011, 2). It is a violence of delayed destruction and often related to environmental pollution and health hazards caused by industries directly, and indirectly by state institutions that allow for such contamination. Considering that the perpetrator is not present during slow violence, culpability becomes difficult to determine. Hence, this type of violence gives a more accurate account of how environmental injustice should be accounted for. Through case studies, the article shows that Romani waste pickers (for example, in the Petocna Voda Romani Community) burn wires to extract metals, as a result of which toxic fumes are released, posing various health risks, alongside environmental degradation from hazardous waste practices. This example illustrates how slow violence manifests as a long-term, cumulative burden on marginalised Romani communities.

 The concept of slow violence has been explored in various environmental justice contexts. Examples include youth-focused environmental organisations in New Jersey, United States (Cairns 2021), organisational disasters (Rice 2016), and toxic pollution (Davies 2022). In addition, resistance to slow violence inflicted through environmental injustice has also been studied by some scholars (Cahill and Pain 2019). However, to the author's knowledge, no research so far has applied this framework in attempting to theorise and understand the situation of Roma in Europe. To demonstrate how this theoretical framework is applicable to the Romani recycler community, this paper uses the case study of North Macedonia.

2.2 Case Study: North Macedonia

The case of North Macedonian waste pickers has attracted some attention, albeit mainly by international organisations and media, in addition to the already mentioned REDI (2023) report. For example, in 2005, a report by the World Bank highlighted the importance of the informal market, including "marginal subsistence occupations" such as recycling, that mitigated high unemployment among Roma in the region of Eastern Europe (Ringold, Orenstein, and Wilkens 2005, 40). Shortly afterwards, UNHCR (Galic 2008) published a report about a Roma-Macedonian entrepreneur who turned a garbage dump into a recycling business, employing Romani refugees in Skopje to support UNHCR's self-reliance strategy amidst high unemployment rates. In these reports, rubbish

recycling appears as an activity to replace employment and allow the impoverished Roma to meet their existential needs.

Renewed attention on Romani recyclers was apparent in connection to the intensification of the EU's green revolution: the European Commission adopted the Circular Economy Package in 2015 and the European Green Deal was launched in 2019. The EU's focus on the circular economy and the Green Deal in turn has encouraged North Macedonia to enhance its recycling initiatives, aligning with EU environmental standards. These initiatives not only seek to improve environmental sustainability but also address social equity. This context sets the stage for re-examining the role Romani recyclers play in waste management, and for considering the broader implications for integrating marginalised communities into sustainable development agendas.

Given this revived focus, a 2020 article by Al Jazeera discusses efforts to formalise the grey recycling work of Romani collectors in Skopje, North Macedonia, aiming to highlight their contributions to sustainability and improve their working conditions and societal standing (Saldana 2020). An article by Euronews Albania (2021) discusses the importance of the Sofia Declaration signed on 10 November 2020 by Western Balkan leaders, pledging to make the continent carbon-neutral by 2050 and ensuring the inclusion of vulnerable groups like Roma in the Green Agenda, which could formalise their work in the recycling industry and reduce unemployment. International organisations also maintain their interest in the topic; for instance, the European Environmental Agency (2022) pointed out that Romani informal recyclers play a crucial role in waste collection amidst low recycling rates and inadequate municipal services in North Macedonia, highlighting the need for awareness, increased funding, and infrastructure to improve waste management and integrate marginalised groups.

This article explores the case of North Macedonia further, to contribute to this ongoing discussion. For that, five locations in North Macedonia are analysed. A brief description of the five case studies is summarised in the table below. The table provides information on the community (size, year of establishment), living conditions and social problems of Romani residents. Information is either based on secondary literature with sources provided, or on fieldwork observations.

Table 2. Description of case studies

Location	Number of Romani individuals	Living conditions	Social problems
Municipality of Kavadarci and the Teneke Mahala Community	The neighbourhood of Teneke Mahala was established in 1976, and currently around 200 Romani people reside there in 18 houses, close to some 500 homes occupied by non-Romani families in two nearby streets (ERRC 2015).	Romani families live in substandard living conditions, and there is a general sense of blaming the local authorities for their apathy. Residents recalled only one occasion when the municipality of Kavadarci distributed hygiene and food packages during the pandemic. Houses occupied by Roma lack electricity, water, and sewage systems.	The majority of residents are unemployed and most, including women and children, are engaged in the informal recycling sector, collecting and selling plastics and cardboard.
Municipality of Kočani and the AS-NOM Community	In the 1970s, Romani families were moved into the former ASNOM[2]) army barracks for housing, and 24 families continue to live in the rundown barracks today, which amounts to approximately 100 residents.[3]	The lack of housing maintenance is of significant concern to residents. The area is littered with solid waste and plastic bottles. There is no sewage, no sanitary services, and no access to electricity.	Unemployment is high and residents live in deprivation. Many try to make ends meet through the grey economy and waste picking.

2 ASNOM – Anti-fascist Assembly for the National Liberation of Macedonia, a representative body established by the Macedonian Partisans from August 1944 until the end of the Second World War.

3 The Environmental Justice Atlas (2019) (Environmental Justice Atlas 2019) mentions "more than hundred people", while a report by Marjan Nikolov (2019, 21) in preparation for local road construction mentions "20 households with some 80 citizens."

Municipality of Shtip and the Old Neurology Ward	In the broader downtown area of Shtip, a small Romani community live in an abandoned neurology ward of a former hospital. Based on field observations and interviews with residents, there are approximately five Romani families who reside there.	Some dwellings are made from scavenged materials, makeshift supplies, cardboard, and wood. The inadequate building lacks basic infrastructure and utilities, such as access to sewage or drainage systems, and Roma live in overcrowded, substandard conditions.	Among the foremost complaints from residents were poor health, discrimination, and financial deprivation. All families receive a meagre social allowance, which is not enough to make ends meet. With no employment opportunities, most families work as plastic bottle collectors.
Municipality of Bitola and the Petocna Voda Romani Community	Roma residents of "Petocna Voda" live in the poorest area in the city of Bitola. Bair is considered "the Romani neighbourhood" in Bitola, with around 95 per cent of Roma living there; Bair is further divided in three areas: Centralen Bair, Ljubojno, and Karaorman. The estimated population of the latter is 700–800 people or 175–200 households (AECOM 2019).	Poor living conditions and lacking infrastructure characterise the neighbourhood. Furthermore, many families suffer an absence of adequate sanitation facilities, electricity, and running water.	Many Roma suffer from health problems, dismal living conditions, and low or no formal income. With high unemployment, respondents stated that the majority of Roma in the community engage in the grey economy, such as collecting waste.
Municipality of Šuto Orizari	Over 11,000 Romani people live in the city municipality of Šuto Orizari (City Population 2021). Fieldwork assessed only some hourseholds that reside mainly on two narrow parallel unpaved streets.	The homes consist of improvised barracks. Some households had no access to water, sporadic access to electricity, and the neighbourhood is exposed to flooding due to the lack of drainage systems. The neighbourhood also lacks a sewage system. Inadequate waste management is a serious problem as well.	Due to the large concentration of waste in the location, nearly all Romani residents make ends meet by collecting and separating waste, excluded from other sources of income.

In terms of social problems, financial deprivation, primarily caused by unemployment, stood out as the most pressing issue, along with inadequate living conditions and poor health. In all cases, it is through improvisation, inventiveness, and resourcefulness that Romani families make ends meet. For example, with no access to basic services, residents of the Municipality of Shtip and the Old Neurology Ward tapped into public services to channel water and electricity into their neighbourhood. In the Municipality of Kočani and the ASNOM Community, with neither sewage, sanitation, nor utility services, the community was forced to connect to the electric grid of a nearby electric pole to access electricity. Unemployment, as one of the most acute concerns of the communities, is mitigated through grey employment, especially waste picking.

Conversations regarding waste embodied the paradox of relying on rubbish to make ends meet, while also recognising that it was a source of health and environmental hazards for the entire community. Reliance on waste for sustenance must then be seen as an act of recycling for income, while simultaneously an environmental and health hazard as well. This paradox is described in more detail below.

2.3 Waste as a Source of Income

In all cases, waste was seen as a source of income, on which entire households depended, despite the health risks and environmental harm this reliance represents – a form of slow violence that accumulates harm over time and perpetuates marginalisation. In addition, during fieldwork many reported barriers to accessing social services (mainly due to lacking documents or bureaucratic concerns), or those who qualified for assistance reported that the amount was significantly lower than basic family needs – reflecting the systemic discrimination and infrastructural neglect characteristic of environmental racism – meaning supplementing income was a question of survival. To make ends meet, most families engaged in waste recycling, as they lacked education for other jobs or complained of "no jobs for Gypsies". In the Municipality of Kavadarci and the Teneke Mahala Community, residents referred to waste collection as a "family business".

An inability to access waste during the Covid-19 pandemic lockdowns highlighted the reliance on waste of these communities, where restrictions and curfews further deepened vulnerabilities, exemplifying the slow violence inherent in systemic poverty and exclusion. Most residents complained that they were unable to collect bottles and scraps due to restrictions and curfews during the pandemic and lost their livelihoods. Attempts to limit access to waste jeopardised waste collectors' survival strategies. The following quote by a 41-year-old informal waste collector from the Municipality of Kavadarci and Teneke Mahala testifies to this:

> Twelve of us live in one room of 30 square meters, none of us are employed, and we are all engaged in the collection of plastic bottles – that is our primary source of income. Our daily earn is about 1000 MKD (€16) and we pay VAT on top of that, which is not enough to survive. We are not entitled to minimal social welfare assistance as we do not have personal documents. In addition, my seven underage children do not attend any educational institution, as one of the criteria to be enrolled in elementary school is having a birth certificate, but my children do not have them.

In all communities, given that many families relied on waste, making access to waste illegal led to further deepening of Romani vulnerabilities. It was also grounds for discrimination by local authorities and police. In all neighbourhoods, concerns over discrimination were voiced with waste picking often framed as criminal behaviour by local authorities and police – an example of environmental racism that stigmatises Romani waste pickers while ignoring their contributions to recycling efforts and sustainability. For example, in Šuto Orizari, a resident explained that two minors from the community were collecting bottles during the pandemic, thus breaking lockdown rules; when they were caught by police officers; they were physically abused and charged with theft, reflecting the violent consequences of social exclusion. In a similar vein, a 32-year-old informal waste collector from the Municipality of Kočani and the ASNOM Community claimed that: "During the pandemic, police officers used to fine us for crossing streets with our carts and were instructing us not to collect bottles from the streets."

These findings were further supported by the field survey conducted by the REDI in North Macedonia, interviewing 512 waste collectors in 15 cities, revealing that waste collecting work is the main source of income for 33 per cent of respondents. This finding then suggests that the inability to access waste, with no additional forms of income provided, threatens the livelihood of one-third of waste collectors. Other studies that looked at Romani recyclers also concluded that, with heavy dependence on the informal solid waste sector, waste collection is seen as "a kind of self-employment and the main source of income for households" and limited access to waste threatens livelihoods of waste recyclers (Vaccari and Perteghella 2016, 866). One study suggested that for Romani recyclers, waste picking is an activity that not only provides them with an income, "but also allows them to assemble their access to the city and its multiple resources – people, objects, spaces" (Rosa and Cirelli 2018, 1407).

2.4 Waste as a Source of Pollution and Poor Health

While waste picking was seen as a form of income in the absence of formal work, during fieldwork many residents explicitly connected this practice with the deterioration of their own and their community's health. For example, respondents in the Municipality of Bitola and the Petocna Voda Romani Community described the extraction of metallic and metal-bearing waste for copper, iron, and lead, in which wires are burnt, and recognised it as a hazardous practice for their health and the environment. Consequently, residents of this community complained about the massive air pollution resulting from wire burning and illegal landfills in the vicinity of their houses. Interviewees of the Teneke Mahala community were acutely aware that living in close proximity to waste exposes the community to vermin and viruses – a reality shaped by environmental racism and its neglect of Romani neighbourhoods.

Poor health was mentioned at every field site, sometimes in connection with the waste and sometimes, due to low living standards, or, even more commonly, as a result of the combination of the two. Residents of various communities reported cases of severe respiratory illnesses, skin rashes, tuberculosis, and lung diseases, illustrating the concept of slow violence as harm that unfolds gradually due to prolonged exposure to pollutants. Others complained of pests such as rats and mice, which is a problem especially during the summer months, and respiratory issues due to damp, moisture, and mould. Treating these health conditions was particularly hard, as discrimination deterred them from using any medical services

or facilities. For example, a 31-year-old informal waste collector from the Municipality of Kočani and the ASNOM Community lamented her experience at the pharmacy when buying medication:

> We were not allowed to enter pharmacies. We were told to wait outside […] while non-Roma were allowed to enter. When I had to take my child to a hospital due to a high fever, a doctor asked where I was from, and when I told her that I was from the old military barrack ASNOM, she got scared and angry because she saw me as a transmitter of the [Corona] virus. We were afraid to seek medical assistance during the pandemic, because whenever we needed medical assistance and we went to the local medical centre, we were told that there was not a doctor present to help.

Waste pickers themselves face disproportionate risk factors and hazards during the collection and separation of recyclables (Gutberlet and Uddin 2017). In North Macedonia, the REDI survey also concluded that Romani waste pickers are aware of the unhealthy and risky conditions of performing waste collection, although their health remained relatively good (REDI 2023). Nevertheless, studies in various parts of the world indicated that waste pickers are increasingly subject to developing health conditions, including mental health issues, the more time they spend picking waste (Gutberlet and Uddin 2017; Makhubele et al. 2019; Uhunamure, Edokpayi and Shale 2021). This raises the question whether self-estimation of one's health within the framework of the REDI survey is a reliable measurement, and whether respondents were aware of chronic conditions or were able to assess their mental health issues themselves. Further inquiry is necessary here.

In general, exposure to waste is then associated with poor health and pollution, especially in cases where extraction of recyclables requires skill. As one study notes: "Informal waste pickers' basic techniques and poor management of secondary pollutants worsen environmental pollution of air, soil, and water, while inadequate occupational health measures expose them to health risks and shorten their life expectancy" (Yang, Ma, Thompson, and Flower 2018).

3. Discussion: Culture of Blame and Slow Violence

Analysed case studies have shown that due to rampant unemployment in the examined sites and the abundance of waste nearby, many residents reverted to waste picking as an activity to generate income. Waste then gained a meaning as both a source of income-generation and a source of ill-health at the same time. In some articles, the health-related hazards of waste picking are referred to as "occupational health risks", which in many cases implies a formal recognition, or the ongoing formalisation of waste pickers, such as in the case of South Africa, where cooperatives are actively promoted by the state as a way of formalising the informal waste picking sector (Uhunamure, Edokpayi, and Shale 2021). In the case of Europe's Roma, there is little to no formal recognition of their recycling activities, let alone the risks they face as a consequence. The exclusion of Roma from the labour market and their unrecognised work as informal labourers was criticised by several scholars (many of whom see non-recognition and exclusion tied with neoliberal policies) (for example, Vincze 2013b; Szilvasi and Dunajeva 2021).

In the absence of academic accounts (with a few notable exceptions noted in this paper), the tension between waste constituting a source of sustenance and simultaneously a health hazard and environmental concern has perplexed journalists. For example, a 2021 article about Romani residents of Romania's Bair neighbourhood called it a "contradiction" that Roma would engage in a practice like burning cables, understanding that it causes air pollution, even though waste picking was acknowledged as a "means to have a livelihood and therefore an income" (Barberá 2021). This contradiction lies at the heart of the presented case studies as well, depicting the everyday reality of impoverished Romani waste pickers whose existential needs depend on accessing recyclables. Under current conditions, waste became the only source of survival, despite the immense environmental and health costs – these are not immediate consequences but should be seen as slow-onsetting contamination and direct consequences, which are core to slow environmental violence (Rice 2016).

For example, Romani waste pickers in the Petocna Voda Romani Community who burn wires to extract metal-bearing wastes are victims of slow violence as a manifestation of environmental injustice. While this form of metal extraction is particularly risky to the health of the exposed population, potentially leading to chronic nausea, debilitating headaches, back problems, infected wounds, and respiratory health issues from toxic fumes (Cesaro et al. 2019, 11042), metal (for example, iron, aluminium and electrical waste) is the primary type of waste collected for 39.8 per cent of surveyed waste pickers in North Macedonia, only exceeded by plastic with 43.2 per cent (REDI 2023). It is also a common practice among poor Roma in other countries in Central and Eastern Europe as well, such as Romania, as sporadic accounts demonstrate (McGrath 2021).

Case studies also have demonstrated that inability to access waste for those who rely on it for their sustenance puts them in an even more vulnerable position. Romani residents in all case studies described their inability to make ends meet when access to waste was restricted, such as during the pandemic. There have been other studies regarding waste pickers, pointing out the importance of respecting their rights to accessing waste (for example, Dias 2016). Reports on Bosnia and Herzegovina and Serbia also highlight that limiting access to waste, such as through measures leading to the closure or modernisation of municipal rubbish tips, severely threatens the livelihood of Romani waste pickers if they are "pushed out of formal and informal picking of recyclables" (Lehtmets 2021; Hergan 2022). In Serbia, for example, Roma account for up to 80 per cent of the country's overall recycling effort, calling for an inclusion of informal waste collectors into the management system, rather than excluding them or branding them "illegal" or "informal" (GIZ 2018).

Instead, restrictions have intensified in recent years: the case studies have shown that a combination of Covid-era restrictions and racism towards Roma served as reasons for limited access to waste. Global trends show that with waste seen as a commodity and a resource that is increasingly being exploited by private companies, access to municipal waste will be scarce. As one article analysing the case of India aptly put it, "the informal waste recycling sector has been an indispensable but ironically invisible part of the waste management systems," and hence with liberalisation of economy and consequent privatisation of municipal solid waste management, "the long important stakeholder, the informal sector has been side-lined and left to face the adverse impacts of privatization" (Sandhu, Burton and Dedekorkut-Howes 2017, 545). In addition, access to waste may be restricted by bulldozing the waste before waste pickers can

reach it; local authorities, security guards or municipal workers preventing waste pickers from accessing landfill sites; or mechanization of waste processing (Schenck, Blaauw, and Viljoen 2016; Marello and Helwege 2018).

Case studies demonstrated that environmental injustice is often accompanied by racism. In all cases, while reliance on waste stemmed from financial necessity, respondents complained about discrimination, with many instances directly related to waste picking practices. It was also common to describe the visuality of waste and dirt in association with Roma or consider waste picking as an act of stealing, suggesting that the lives of Roma are less valuable and, in fact, superfluous. For example, a 60-year-old informal waste collector from the Municipality of Bitola and the Petocna Voda Romani Community lamented that "the non-Roma in Bitola perceive us, waste collectors, as thieves." In the Municipality of Shtip and the Old Neurology Ward, the Romani neighbourhood was called an "environmental hazard" and a "landfill" by neighbouring non-Romani communities (Alfa TV News 2022). In the same community, a 50-year-old female informal waste collector claimed that "non-Roma do not like us in their proximity, and during the pandemic, they were afraid to get close to us because they thought we would transmit the virus." In this framing, "superfluous life can lead to imagining that there really are disposable people" (Denning 2016). [4]

In addition, "superfluous" people tend to be geographically excluded. In all reviewed cases, Romani communities lived remotely in deplorable housing conditions, at a considerable distance from non-Romani neighbourhoods. This way, they were hidden from public scrutiny, rendered invisible, and, in a symbolic way, uncoupled from the idea of belonging to society. The cases of the Municipality of Kavadarci and the Teneke Mahala Community as well as the Municipality of Kočani and the ASNOM Community well illustrate societal resistance to changing the exclusion of living conditions of people perceived as "undeserving": in the former, a racially charged petition from non-Romani neighbours in June 2015 led to the eviction of the community by the local authorities (ERRC 2015), while in the case of the latter when the mayor of the Municipality of Kočani announced in early 2021 the construction of residential buildings as a site for permanent housing for Romani residents, non-Romani residents protested and argued that Roma were "thieves and criminals" (Muratov 2021). In other words, attempts to provide better housing in each case were met either with resistance from the majority society or not realised due to politicians' reluctance to deliver on their promise due to public pressure.

Case studies in this report also showed that Roma were often associated with criminality and treated as a threat to public security and hence undeserving. State abandonment of Roma – manifested in a lack of basic services such as sewage, rubbish removal, running water, and other services – characteristic of all case studies analysed, is in turn further legitimised by the discursive linkage of Roma with dirt and rubbish This is precisely where the responsibility of the state and state institutions lies as well – in not challenging and in many instances fuelling and upholding racist and discriminatory institutional practice, failing to address instances of discrimination, and not recognizing the short- and long-term consequences – or fast and slow forms of violence – inflicted on Roma through the environmental injustice they face.

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4 The author of the cited article focuses on the economic dispensability of those outside of wage labour capitalist economy.

To summarise the findings, the figure 3.1 depicts below depicts a cycle illustrating how waste acts as a mechanism through which slow violence is perpetuated against marginalised communities, specifically Romani waste pickersDue to inadequate waste management systems and socio-economic disparities, waste becomes a central aspect, which leads to a combination of issues: economic dependence, since Romani waste pickers rely on collecting recyclables from waste as their primary source of income; health and environmental impacts, considering that the process of waste collection exposes them to hazardous materials and contributes to environmental degradation; and social inequities, as stigmatisation further marginalises Romani waste pickers. The combination of these negative consequences perpetuates a cycle where Romani communities remain trapped in poverty, facing ongoing threats to their health and well-being without adequate institutional support or recognition.

Figure 1. Mechanism of slow violence through waste
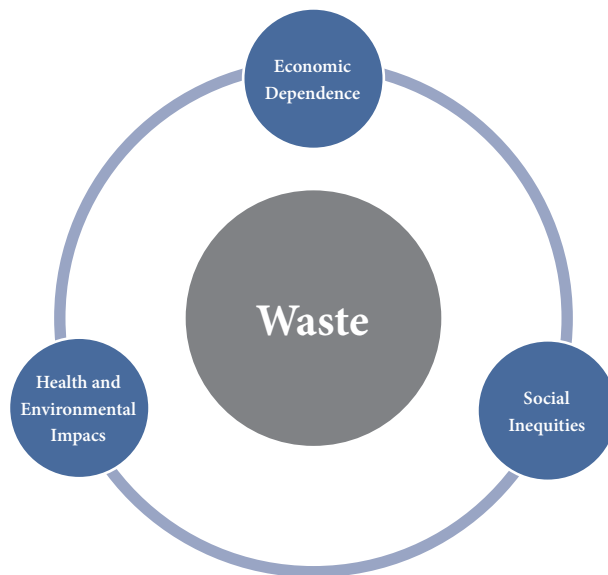
Conclusions and Implications

In summary, this article has framed the environmental injustices faced by Romani waste pickers as forms of slow violence and environmental racism. By synthesising and analysing fieldwork from five Romani communities in North Macedonia, the article highlighted the consequences of environmental injustice. At the beginning of this article, the following question was posed: how do the environmental injustices faced by Romani waste pickers in North Macedonia reflect broader issues of slow violence and environmental racism? To answer this question, this article analysed fieldwork from five Romani communities in North Macedonia to understand the situation of Romani waste pickers from the perspective of environmental justice. For analysis, critical environmental justice was fused with slow violence, generating a more nuanced understanding of the current conditions and long-term consequences of environmental injustice Roma face.

In short, the study found that Romani waste pickers in North Macedonia experience environmental harm and health risks due to their reliance on informal waste collection, a practice driven by socio-economic marginalization and inadequate access to basic services. In particular, informal (labour) practice, while providing essential income, contributes to long-term health issues and environmental degradation, with Romani waste pickers facing systemic discrimination and exclusion from formal waste management systems. These effects can be understood as forms of slow violence, where harm accumulates gradually over time, exacerbating their vulnerability. With that, this study emphasises the need for a critical environmental justice framework that considers both immediate and gradual impacts on marginalised communities, in order to "facilitate a deeper engagement with histories and ongoing practices of domination that devalue life and lead to premature death for marginalized peoples" (Kojola and Pellow 2021, 102).

In lieu of a summary, some policy implications are presented as a way to highlight several important findings from this analysis. First, the conclusions of this study, urging more inclusive policies and recognition of Romani contributions to waste management, align with the EU Roma Strategic Framework for Equality, Inclusion, and Participation (2020–2030), which emphasised the importance of (economic) empowerment, equal opportunities, and social inclusion of Roma in various spheres of life. Second, in light of the Circular Economy Action Plan (2020) and the European Green Deal (2019), with its call to transition to a circular economy, green economy, and reduction of inequalities, Romani informal recyclers emerge as key actors that can foster the goals formulated within this policy.

In particular, for North Macedonia, the Green Agenda for the Western Balkans (2020) provides a policy framework for environmental regulation and a commitment to a circular economy. The circular economy presents an encouraging approach to address the issue of a linear economic model, yet the absence of justice in environmental policy has led to an uneven distribution of environmental benefits and burdens. Thus, there is a need to strengthen social considerations within the concept of circular economy (Corona et al. 2019; de Oliveira 2021). Without explicit consideration of environmental justice, there is a possibility that a circular economy may perpetuate the marginalisation and exclusion of vulnerable groups (Carenzo 2017; Weslynne et al. 2022).

Integrating Romani communities into the Green Agenda requires recognising their role in informal waste management and creating inclusive policies that address their socio-economic challenges. Formalising their contributions through cooperative models, like those in Colombia and Brazil, can ensure their inclusion in municipal waste management plans, providing them with legal protection and access to social services. To that end, educational programmes and vocational training may be implemented to enhance their employment opportunities either beyond waste picking, or to conduct waste picking in a more professional manner. To do so Romani waste pickers can be provided with training on safer waste handling techniques and equipped with appropriate protective gear. This can reduce health risks and environmental hazards, improving their working conditions and enabling them to operate more efficiently and sustainably within the waste management system.

Additionally, addressing systemic discrimination and improving living conditions by providing access to basic services such as electricity, water, and healthcare is crucial. In other words, by incorporating

Romani waste pickers into the circular economy framework, the EU can promote a more equitable and sustainable green transition that values their environmental contributions while improving their quality of life. In so doing, the EU can set a global example of inclusive environmental policy by demonstrating how marginalised communities can be integrated into formalised waste management systems, thereby advancing both social equity and environmental sustainability. This inclusive approach aligns with the principles of the European Green Deal and the Green Agenda for the Western Balkans, fostering social inclusion and economic empowerment for marginalised communities.

Acknowledgment

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