

# Environmental injustice in the political forests of Romania<sup>☆</sup>

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## ABSTRACT

In this article, we analyze the postsocialist transformations of Romania's political forests through the lens of the environmental justice approach. We do so by examining how environmental injustices are intertwined with the postsocialist processes of land reform, the emergence of conservation narratives, and the reconfiguration of political power throughout this period. We draw on data collected through semi-structured and expert interviews, local ethnographies and various case studies conducted across three research projects from 2016 to 2024. We contend that the precariousness of forest work, the deepening of firewood dependency, and the gendered and racialized experiences of injustice faced by many forest-dependent groups highlight a need to move beyond the recognition versus redistribution dilemma in environmental justice literature. Our analysis reveals that injustices are exacerbated by structural dynamics, suggesting that complex complicities at play in the political forests blur the lines between victims, perpetrators, and harms.

## 1. Introduction

In this article, we examine the recent post-socialist transformations in Romania's political forests through the lens of environmental justice (EJ). We use the EJ approach to expose the uneven social and ecological outcomes of these transformations. Our objective is to show how environmental injustices in the political forests are nested within recent historical processes. By reading the changes in the forest governance through an EJ lens we aim to connect them to broader politico-economical transformations in the country and across the region to show that injustices are not accidental, but structurally produced or amplified during post-socialism. We structure our research around the three central pillars of the EJ framework as developed by Schlosberg (2004): recognition justice, distributive and procedural justice. Recognition justice helps us analyze whose interests were represented and taken into account during the most important turning points in forest governance, such as repeated land reforms and privatization of access. We group the burdens and benefits associated with the post-socialist transformation of forest governance under the distributive justice element. Lastly, a procedural justice analysis helps us understand who influenced or was involved in the decision-making processes that have shaped forest management in post-socialist Romania. Because this tripartite manifestation of EJ has been under intense criticism for failing

to fully engage with different types of power imbalances and for overlooking structural dynamics that amplify environmental conflicts, we show that the injustices at play in the political forests of Romania are further nested in complex complicities that blur the lines between victims and perpetrators, between environmental and social harms and their consequences. We argue that Romania is an exemplary case to study environmental injustice in political forests due to the large scale, complexity and duration of forest restitution which created both ambiguities in ownership regime and multiple levels of dependency on forests for fuel and as a source of livelihoods.

The literature on political forests in eastern Europe has gained momentum over the last decade, partly from a renewed interest in land politics in the aftermath of post-socialist restructuring of access to land, and partly because the tensions between commercial timber exploitation and conservation became more acute as most states in the region joined the European Union (Lawrence, 2009; Blavascunas, 2020; Vasile, 2020a). The neoliberalization of forest extraction has revealed the struggles faced by small-scale loggers, who are caught between local patronage arrangements and a market increasingly dominated by foreign players (Petrova, 2014). Across the region, the aftermath of the collapse of state socialism led to a timber rush, which subsequently resulted in long-term forest degradation (Stahl, 2010). Often, forest extraction involved illicit arrangements, corruption, and collusion on

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behalf of political authorities at various levels (Schlingemann et al., 2017). More widespread was the illegal logging caused by poverty and acute forest dependency of many households from rural areas (Bouriaud, 2005). After they saw their power consolidating in the early years of post-socialism, forest managers fought the expansion of forest conservation and opposed further land privatization (Blavascunas, 2014). In Romania, private conservation initiatives were opposed by both forestry personnel at forestry district level and by various types of forest owners, from commoners to small-holders who accused private conservancies of limiting access to a critical resource (Iordăchescu, 2021, 2022). Throughout these studies, an explicit analysis of the lived experiences of environmental injustice is largely absent.

Forests occupy 29.56% of Romania's territory, representing 6.93 million hectares (National Forest Inventory, 2019). The majority of them are located in the Carpathian Mountains, and due to their high productivity and a close-to-nature forestry model, they have been traditionally a very important source of employment (Nicolescu, 2022). For over forty years, during the communist rule, all forestlands were state-owned. Currently, following successive post-socialist restitution laws, the state remains the largest owner (48.6%), followed by municipal authorities (17.3%). Privately owned forestlands include associations of owners (commons), private individuals, and a variety of other legal entities - together they amount to 34.1% of all forestlands (Nicolescu, 2022).

Forest restitution in this country created the premises for complex legal battles, deepened social divisions in the countryside, and resulted in extreme fragmentation of forestlands that, in turn, made sustainable timber exploitation impossible (Ioras and Abrudan, 2006). The genealogies of environmental conflicts in the political forests of Romania do not originate in the land restitution process alone, but are nested in the processes of power reconfiguration during the transition from a planned economy (state-socialism) to an accelerated economic liberalization (post-socialism) which opened up countless opportunities for primitive accumulation (Verdery, 2003). For example, the often unlawful character of restitution (Dorondel, 2016) was connected to widespread corruption within the state institutions (Bouriaud and Marzano, 2014) and often contributed to the consolidation of local fiefdoms (Vasile, 2019), where timber barons held discretionary powers (Vasile, 2020a). These patronage relations often involved appropriation of common resources, although there were also cases where they did not perpetuate vulnerability in a process labeled as 'accumulation without dispossession' (Vasile, 2020b). As forest privatization advanced, timber extraction accelerated within a frontier-like process (Iordăchescu and Vasile, 2023), during which legal loopholes were exploited by both large and small businesses to avoid compliance with a rapidly evolving forest protection legislation (Buliga and Nichiforel, 2019). While the timber frontier transitioned from boom to bust, rural poverty became increasingly associated with the casualization of forest labor (Herța, 2016), heightened dependency on firewood (Iordăchescu, n.d.), and a general lack of economic security (Cosma, 2017). Although these studies have explicitly unpacked the power relations that shaped policies, a systematic discussion of injustice in these political forests has not yet been put forward.

The forest restitution in post-socialist Romania was framed as an attempt to enact historical justice; however, privatization became a bureaucratic nightmare and was not conducive to sustainable forest extraction (Drăgoi and Toza, 2019). Considering these significant research gaps, we argue that the ensuing legal and policy developments have consistently failed to incorporate EJ elements, despite being updated throughout the period. Likewise, we consider that most grassroots mobilizations against illegal logging had a strong anti-corruption stance, failing thus to engage with the structural roots of injustice in forest governance. Taken together, we contend that these realities led to a blurring of the boundaries between victims, perpetrators, forms of abuse, and complex forms of dependency and marginalization. This paper aims to systematically investigate these injustices by examining

them within their historical context.

Following from this aim to expose the production of environmental injustices in the political forests of Romania by connecting forest governance to broader politico-economic changes, we pose the following questions: What are the environmental justice issues associated with forest governance in post-socialist Romania? To what extent have the legal and policy frameworks for forest governance included environmental justice concerns? Why did environmental justice remain marginal in the fight against illegal logging, itself the most extensive public debate regarding forest governance in recent decades?

In the next section, we draw the contours of the EJ approach to political forests by detailing how recognition, distributive, and procedural justice frameworks could advance the understanding of often unjust outcomes in political forests, before moving on to describe our methodological approach.

## 2. Conceptual approach

Studying forests as political spaces has a long tradition inspired by the fields of political ecology, human geography, and anthropology. This scholarship has detailed how the various types of power can influence forest governance arrangements and management, turning them into sites of contestation (Peluso and Vandergeest, 2011, 2020). Simply put, 'political forests' refers to a particular way of thinking about forests as territories shaped through power, politics and social relations, instead of seeing them only as natural ecosystems. Approaching forest governance critically from an EJ standpoint and showing that what is framed as a techno-legal process has in fact complex politico-economic implications can illuminate the unequal ways in which benefits from forest extraction are shared, who bears the costs of forest degradation and how forest protection could be burdensome for the most vulnerable communities (Brockhaus et al., 2024). A common topic in the literature on political forest is the state control over forest management (Blavascunas, 2014, 2020; Niedziałkowski et al., 2025). The state's power is exercised not only through regulating land tenure but also through ever-evolving legal frameworks for timber extraction, conservation, and the use of non-timber forests (Tsing, 2005; McElwee, 2016). This power is often contested from below, by local actors that challenge the state's authority (Scott, 1998), or from above, by international institutions with jurisdiction over nature protection, or by powerful actors in the global economy (Li, 2014). Over the last decade, the role of these forests in climate mitigation and averting biodiversity collapse took center stage, therefore new struggles for global environmental justice and sustainable development have emerged (Devine and Baca, 2020; Brockhaus et al., 2021), often doubled by long-term efforts to safeguard the rights of indigenous peoples and resource sovereignty that have marked the history of political forests from the early days (Peluso, 1992; Peluso and Vandergeest, 2011).

Research on political forests in eastern Europe has been on an upward trend over the last decade (Petrova, 2014; Dorondel, 2016; Blavascunas, 2020; Vasile, 2020a, 2020b; Iordăchescu, 2021). Across the region, forest ownership and management are largely controlled by the state, reflecting the institutional context that prevailed during state-socialism. Poland, in particular, is an illustration of top-down decision-making in forestry, with almost 80% of forests under state ownership and up to 96% of them managed by *Lasy Państwowe* – a state-owned enterprise (Statistics Poland, 2023). This gives the state not only a monopolistic advantage on the national timber market, but it also makes it one of the most powerful actors to oppose the recent EU's attempts to influence forest policy across member states towards increased protection (Niedziałkowski et al., 2025). Similarly, in Bulgaria, after successive forest restitution laws, the state still owns about 74% of the forests. Historical associations of forest owners, organized as common-pool resource governance systems, have repeatedly requested that their rights over forests be restored after the communist authorities nationalized them in the early 1950s. Nevertheless, the Bulgarian state

still fails to recognize this ownership regime (Stoyanov et al., 2015). In Serbia, where the state still controls forest management, forest restitution started much later than in neighboring countries, despite public pressure, and the process has been significantly influenced by EU accession requirements (Živojinović et al., 2025). Slovakia and Lithuania have comparable shares of non-state forest ownership (40% and 41% respectively), but a state command-and-control model also influences most forest-related policies. In both countries, a strict zonation of forests has wide-ranging EJ implications as private landowners cannot appeal the restrictions imposed on their forestlands (Makrickiene et al., 2019). Although power, access, and restoring historical justice are central themes across this scholarship, detailed discussions of the EJ implications of forest governance across the region remain largely absent. With this study we aim to contribute to this literature and unpack the complex genealogies and current manifestations of environmental injustices in the post-socialist political forests taking Romania as a point of departure.

This paper unpacks the political forest concept by bringing together political ecology scholarship and EJ research, as recently advocated by Svarstad and Benjaminsen (2020), to better understand how issues of recognition, fair distribution of benefits and costs, and meaningful participation (Schlosberg, 2004) were considered or not in the recent history of forest governance in Romania. The country is taken as a case study due to its complex recent history of conflict and contestation associated with the governance of some of the most biodiverse and valuable forests on the continent.

Within environmental decision-making, *recognition justice* is one of the first pillars of environmental justice identified as an underlying cause of unjust distribution (Fraser, 2000). The state's failure to recognize the rights, needs, or values of diverse forest-dependent actors is a leading cause of unequal distribution of burdens and benefits. For Fraser, misrecognition serves as a mechanism for institutionalizing social subordination. Often, misrecognition by the state is connected with gender, age, race, ethnicity, and contributes to deepening historical marginalization (Fraser, 2000). Pulido and De Lara (2018) criticize this approach to recognition justice for being too liberal and advocate for exploring forms of recognition that do not depend on state-sanctioned mechanisms and practices. Svarstad and Benjaminsen, while trying to re-center power in this debate, consider that state recognition remains crucial in conflicts over land and resource use (Svarstad and Benjaminsen, 2020). They take the discussion further by arguing for a *sense of justice* approach within the recognition justice, defined as ways to 'reflect and describe the perspectives of subaltern groups or individuals' while also actively avoiding stereotyping and paternalistic analyses (2020:4). Centering on these subjective perceptions and narrations is necessary to better understand how marginalized groups experience environmental injustices and become vulnerable to environmental harms.

Vulnerability is a dimension of *distributive justice*. According to Walker (2012), certain policies disproportionately affect specific groups, and the intersectional experiences of injustice are often reinforced by historical injustices fostered by colonialism, racism, and imperialism. So far, scholarship has predominantly looked at the structural causes of distributive injustice and less at its material manifestations (Svarstad and Benjaminsen, 2020). The lived experiences of environmental injustice deserve increased scrutiny as forests become essential for climate change mitigation and biodiversity conservation. For example, across eastern Europe, limiting access to forests often exacerbates energy poverty for a large population that depends on forests for firewood (Stojilovska et al., 2023). These groups are particularly vulnerable when this process becomes part of a green transition that advocates a shift from burning wood, which is usually affordable and abundant, to more sustainable renewable energy sources, whose cost might be prohibitive for rural communities (Kaswan, 2020). Similarly, states' failure to enforce forest protection legislation in the context of illegal logging leads to disproportionate exposure to environmental harms for the most

vulnerable communities, often living in the close vicinity (Petrova, 2014).

EJ literature seeks to understand some of these injustices by examining how and by whom environmental decisions are made. Central to this *procedural justice* framework is an analysis of power. Even if critics have noted that EJ research poorly engages with various theories of power (Svarstad and Benjaminsen, 2020), the disproportionate power of state or corporate actors remains central within this literature (Pellow, 2017). Moreover, although participation and involvement do not always result in a strong influence on decision-making, both resistance and adaptation can be considered as ways to exercise power (Scott, 1998; Brockington, 2002). Across eastern European rural areas, dependence on firewood for household energy consumption is a stark reality. Despite repeated attempts by state or civil society actors to frame wood burning as inefficient and to criminalize petty timber theft, rural folk developed a moral economy around firewood use, often rooted in customary access to forests (Petrova, 2014; Iordăchescu, n.d.). In countries like Poland, where the State Forests control the majority of forests, commercial extraction of timber is prioritized over conservation (Žuk and Žuk, 2025), despite strong opposition from civil society and international institutions alike (Blavascunas, 2020).

Building on this scholarship inspired by both political ecology and EJ approaches, this paper unpacks the development of political forests in Romania by exploring how environmental injustices are entangled within the post-socialist processes of land reform, the emergence of conservation narratives, and the reconfiguration of political power throughout the period. After describing the methodological approach in the next section, we proceed at examining these three facets of EJ by analyzing a range of conflicts related to forest governance and management. Recognition justice is connected with the politics of invisibility present throughout the unfolding of the forest restitution, and which influenced the fight against illegal logging. Distributive justice is explored through an analysis of the transformation of forest access and benefit sharing. Finally, procedural justice is used to understand the institutional unsteadiness in forest governance, which strongly shaped the enforcement of forest-related legislation.

### 3. Methods and materials

The paper is informed by data collected across several research projects which looked at transformations in the forest governance at both national level and very specifically at how these transformations impacted the livelihoods of rural communities in the Southern Carpathian Mountains. Issues of firewood dependency, access to forests, and labor precarization were investigated within the [redacted] project hosted at [redacted]. In this case, the authors were involved in field based research in a mountain village in the Southern Carpathians over a period of six weeks in the summer of 2024. The municipality was chosen due to its long history of forest extraction starting from the early twentieth century and continuing to the present moment, which made its local economy dependent on tree felling and processing, while a large part of the population still centers their livelihoods around forest resources. Here the team conducted a total of 25 interviews with various authorities involved in forest management ( $N = 2$ ), forest workers ( $N = 4$ ), administrators ( $N = 3$ ), and other persons dependent on forests for their livelihoods ( $N = 16$ ) - of which a significant number self-identified as Rudari, a Roma ethnic group. Prior to this stage of the research, the team assembled semi-structured interview guides centering the three main dimensions of the EJ framework detailed above, to which they added a section about lived experiences to account for the senses of justice approach (Svarstad and Benjaminsen, 2020). Therefore, even if the interview guides were slightly adapted for each of the mentioned interviewee categories, they all contained four main clusters of questions: for the **recognition dimension** the questions focused on interviewee's role in the community and the upholding of their rights and livelihoods needs in relation to various relevant authorities; for the

**distributive dimension** the questions followed issues such as access to forests, accessibility of state's schemes of support, and equity in the distribution of firewood and other benefits; for the **procedural dimension**, the questions sought to uncover local decision-making processes, participation in public consultations and membership in the local forest commons – to name just a few; and lastly, the **senses of injustice** were investigated through questions touching on perceived or experienced harms (by the individual or their household) stemming from changes in access to forests and forest resources, including opportunities to find work in forest extraction on the local level. Aside from expert and semi-structured interviews, this period of fieldwork research, also included participant observation, numerous informal and group discussions with locals involved in forestry work or using forests as part of their livelihoods. The analysis of the impacts of anti-deforestation policy and mobilizations against illegal logging is based on data collected by the first author between January and March 2020 through 19 expert interviews with civil society representatives ( $N = 5$ ), central state authorities ( $N = 4$ ), and forestry specialists ( $N = 10$ ) all active at the national level, as part of the [redacted] project hosted at [redacted]. These expert interviewees were selected, after a rigorous desk research, based on their involvement in the processes that re-defined the legislation and enforcement of anti-illegal logging measures. Finally, the discussion about forest commons and their functioning is based on surveys and case studies collected by the first author as part of the larger research project [redacted] at the [redacted] which took place at the national level from January 2016 to July 2017.

Both semi-structured and expert interviews were carried out by the authors in person, in Romanian, audio recorded and transcribed manually. The transcripts were coded using MAXQDA 24, a software favoring interoperability of data sets and with which the team had previous experience. The code book was produced jointly by the authors, partly in a deductive approach starting from the three pillars of the EJ framework, partly in a bottom-up approach by including themes and key topics which emerged during the interviews. Fig. 1 included at the end of the results section further describes this operationalization. The fieldnotes taken during the periods of participant observation or after informal conversations were not included in the coding process, but were used for better understanding local context and interactions between various actors. In order to cross-check the qualitative data, the team was also involved over the second half of 2024 in a systematic literature review of EJ research in eastern Europe, which informed parts of the analysis in the Discussions section and which is published as a

standalone piece (Vătavu et al., 2026). One of the limitations of this design is the lack of reliable aggregate data regarding long-term transformations of the local economy centered around forest extraction. Drawing on such data would have probably made some inquiries into the historical genealogies of environmental injustice (e.g. the constant precarization of forest labor, or the deepening of forest dependence for firewood) more convincing. The team is planning to fill this gap in the near future using a historical materialism approach which will incorporate available archival data.

Clarifying our positionality as authors is useful since we rely on data and interviews from various projects which did not necessarily centered around EJ as a conceptual approach. The first author has been researching issues of forest governance with a focus on the frictions between conservation and forest extraction in rural mountain communities for over ten years, a period marked by several moments in which forest governance took center stage in the public discussions at EU and national level. This long-term engagement with the topic included episodes of engagement with policymakers in an attempt to make the social implications of forest governance and conservation more central in the public debates. We acknowledge that such prolonged engagement with the political forests of Romania could offer privileged insights into the transformations under scrutiny, and that this could limit the current analysis' reproducibility, but for the purpose of understanding how environmental injustices are nested in the recent historical transformation, we consider this situated knowledge as beneficial to reaching the research objective. The other authors have previously engaged in research on environmental and structural racism, informality and moral economies from anthropological or historical perspectives. Considering the authors' commitment to transformative research, an exploration of the environmental injustices in the political forests of Romania through political ecology lenses became an obvious analytical choice from the onset of this collaboration.

The next section will draw on the rich empirical data to analyze the ways environmental injustices is nested within the most important turning points in the forest governance as they were shaped by post-socialist restructuring. Finally, the discussion section will explore the firewood dependency, the precarization of forest labor, and the marginalization of Roma communities as three processes in which various injustices stem from complex complexities that blur the borders between enrollment, participation, and resistance.

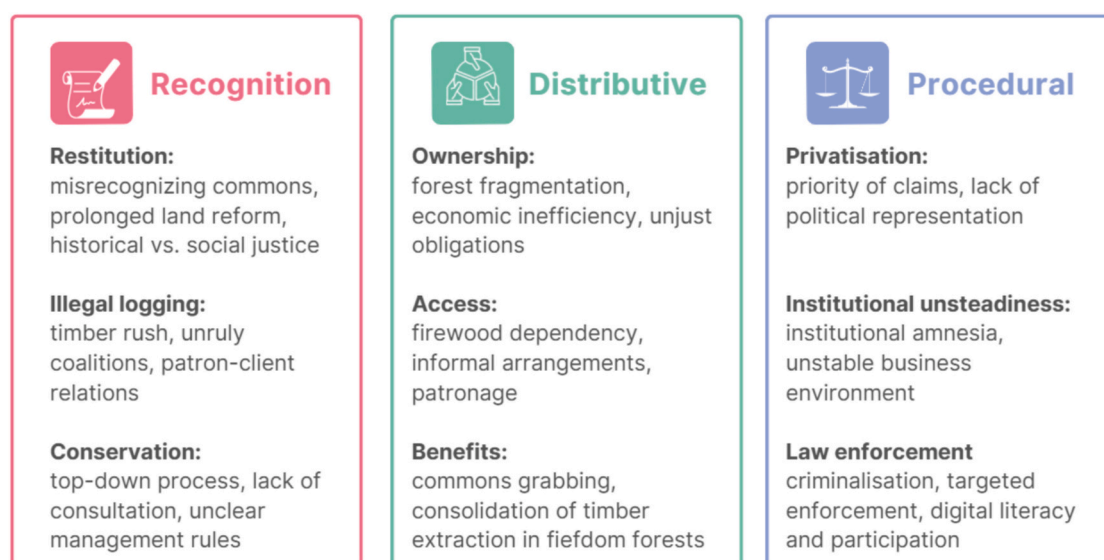


Fig. 1. Sources of environmental injustice in the political forest of Romania, together with the associated codes used in the analysis.

## 4. Nested environmental injustice

### 4.1. Recognition justice and the politics of invisibility

In this section, we show how the politics of invisibility are rooted in historical dependencies and practices. We analyze several processes that marked the recent history of forest governance: forest restitution, the fight against illegal logging, and the consolidation of forest protection legislation, to show how partial recognition or misrecognition by the state perpetuated a climate of resistance and contestation in the political forests of Romania. These processes constitute the master codes in our analysis (please also see Fig. 1.). We operationalize our main research questions further by asking which values and whose interests were better represented during these processes? How have dominant visions (like neoliberalization, privatization, or economic profitability) created injustice and marginalization? Throughout the section, we center the analysis on the *senses of justice* – the ways people subjectively perceive the consequences of certain forest policies (Svarstad and Benjaminsen, 2020).

### 4.2. Restitution

Post-socialist forest restitution had the double aim of enacting historical justice by returning the formerly nationalized forestlands, and fostering entrepreneurship among the new private owners (Dorondel, 2016). The first restitution law, adopted in 1991 (Law 18/1991), gave the right to private owners to claim up to one hectare of forest, regardless of the size of their nationalized plots by the post-war communist government. Under this law's provisions, 364,379 ha were restituted. This first land reform only recognized two types of ownership – private and public – ignoring from the start more communitarian forms of ownership such as *obști* and *composesorate* – forest commons widespread throughout the country before the forest nationalization (Măntescu and Vasile, 2009). Together with other collective ownership arrangements, these historical institutions were considered a fuzzy, undesirable form of property for the neoliberal project (Verdery, 1999). As a result, commons and commoners were not among the beneficiaries of this first restitution law.

The new private owners had to comply with a set of regulations established by a new Forestry Code adopted in 1996. According to our expert interviews, these included replanting after clear cutting, the obligation to guard their private plots or pay local forestry districts to do it, felling trees only after obtaining authorization from the forestry district and only after a forester would mark specific trees, and deeming all timber transports illegal in the absence of documents of origin. Even if restoring historical justice was the main justification for this first land reform, it ended up only partially attaining this goal due to its one-hectare cap. Pressed by the World Bank, the Romanian government issued a new law in 2000 (Law 1/2000) that would increase the restituted forest surface to up to 10 ha, which roughly translates into the privatization of another 1.2 million hectares (Dorondel, 2016). This time around, historical associations of forest owners were recognized among the law's beneficiaries and had their forests partly restituted. Because these commons were organized as associations of owners, we discovered that some commons councils decided not to claim back the forest as a single juridical entity, but to ask each individual member to claim up to 10 ha, which would then be added to the joint ownership. Several of our expert interviews mention that this legal loophole was seen by the commons as an attempt to remedy the state's unjust delaying of full restitution.

Lastly, another law adopted in 2005 (Law 247/2005) offered all forest owners the possibility to claim back the entire size of the forest owned by their forefathers before the post-war nationalization. By the time this law took effect, the state had had ample time to consolidate its control over forests by adopting and then reforming the Forestry Code, by establishing a network of national parks and protected areas, and by

tightening forest protection legislation (Vasile and Iordăchescu, 2022). A large body of literature confirms our observations and is unequivocal in noting that these successive restitution stages put the local elite in a very favorable position, leading to the strengthening of their power and to pervasive corruption that went up to the highest institutional levels (Verdery, 2003; Dorondel, 2016; Vasile, 2019; Vasile, 2020a, 2020b).

### 4.3. Illegal logging

Romania stood out as a country where illegal logging seemed out of control during the first two decades of post-socialism (Vasile and Iordăchescu, 2022), and the attempts of successive governments to address the issue left an unquestionable mark on forest governance. Green criminology literature defines illegal logging and timber trade as the harvesting, transporting, and selling of timber by not following the laws of the country of harvest (Dickinson et al., 2025). Around the world, illegal logging has been linked with economic precarity, as it frequently deepens social insecurity and perpetuates harms against the communities that depended on forest resources for their livelihoods (Carpio-Dominguez, 2024). Illegal logging in Romania, as in other post-socialist contexts, was fostered by, and evolved in parallel with the post-socialist land reforms (Bouriaud, 2005; Stahl, 2010; Petrova, 2014). Our interviews done in the Southern Carpathian village mirrors similar research from across the country which shows how the restitution process was marked by the development of patron-client relations, widespread corruption, and various forms of violence: “*there was a period of about 20 years of confusion and abuses, that's when jackals and forest profiteers climbed the ladder of power becoming very influential after grabbing the forests*” (Interview\_9/2024) (also see Vasile, 2009; Vasile, 2019; Iordăchescu and Vasile, 2023). An official report of the Romanian Court of Accounts from 2013 uncovered that Romania lost about 280,000 ha to illegal logging between 2002 and 2011, equivalent to a loss of 5 billion euros (Curtea de Conturi a României, 2013). Because the government does not publish official figures about the spread and dimensions of illegal logging and timber trade, beyond occasional statements from campaigning politicians, it is unclear what the social, environmental, and economic costs of this phenomenon are. Nevertheless, throughout our interviews, it transpires that illegal logging lacks a traditional victim, and the lines between winners and losers are very blurred: “*You can get fines for any reason. If all commercial operators in the village get fines, you end up with nobody to do the job. The legislation has become very aggressive. If it were to be applied fully, all local firms should close down and go bankrupt.*” (Interview\_4/2024).

Both local and international NGOs and journalists have long discussed illegal logging in Romania as a serious organized crime, demanding stricter legislation and enforcement (Rise Project, 2016; Schlingemann et al., 2017). Still, the state authorities only recognize illegal logging as a mafia-like phenomenon around political elections, such as the fall of 2019, when this framing took center stage in the electoral debates (G4Media, 2020). Although an Environmental Investigation Agency report from 2015 exposed the organized and corrupt supply chain of a big timber processing company, few cases of forest crime have been prosecuted as serious crimes across the country (Environmental Investigation Agency, 2015). Neag shows through well-documented research that illegal logging involves a variety of actors, often operating independently, opportunistically, and frequently at the local level (Neag, 2022). As the phenomenon persists and spreads beyond the forest management system, our expert interviews show that it becomes increasingly difficult to identify the victims, perpetrators, and the grey zones within which green crime offenders continue to harm the environment and forest-dependent communities.

This crisis of visibility, during which misrecognition resulted in environmental injustice, constitutes the lived experience of many Roma groups across the country. In the early years of post-socialism, the rural poor, of whom many were landless Roma were framed as the scapegoats of illegal logging – a situation mentioned frequently by some of our

interviewees: „Some Rudari used to come as day laborers once or twice to get to know the felling area, then at night they were bringing their entire families to poach and get twigs and branches as firewood.” (Interview\_10/2024) (see also Bouriaud, 2005; and Dorondel, 2009). As forest restitution advanced, the new small owners, unable to guard their forests, were considered responsible for the plight decimating the Carpathian forests (Nichiforel and Schanz, 2011), only to cast the blame on petty thieves operating with horse-drawn carts and small-capacity vehicles (Vasile and Iordăchescu, 2022). With each new phase of blaming and scapegoating, criminalization became more acute, triggering complex forms of violence that inflicted further harm against the rural poor, the powerless rangers, and the forest guards caught in complex patronage relations (Iordăchescu and Vasile, 2023). Both our expert interviews and those conducted on the ground in 2024 show that strengthening nature conservation and legal enforcement was promoted by state authorities and civil society organizations alike as a means to curb illegal logging: “You cannot make do any longer. Since the law became more restrictive everyone has their eyes on you if you have anything to do with timber” (Interview\_5/2024).

#### 4.4. Conservation

One particular provision of several post-socialist land reforms was that forest restitution could not be carried out within the newly established national parks. By not recognizing the ownership rights of private owners within the forest plots included in national parks in the early 2000s, the state opened the gates to prolonged conflicts and strong contestation by private owners and local communities alike (Dorondel, 2016).

Moreover, the establishment of the Natura 2000 network of protected areas at the national level was done hastily as one of the conditions for the 2007 EU integration. The two directives governing Natura 2000 were transposed into domestic legislation by Ordinance No. 57 of 2007, which commenced regulating nature protection in the country without a transitional period. The fast adoption of this legal act coincided, as we have seen above, with the latest stages of land restitution; therefore, many owners got plots of land or forest in newly designated protected areas: „none of the local communities agreed with the establishment of the national park. Currently a new law states that they can be consulted. But why would we only be consulted when we are the ones living here?” (Interview\_4/2024). As was the case in various other eastern European countries that joined the EU in the 2004 and 2007 expansion waves, the new conservation regimes were characterized by top-down processes, which were decided upon with scant participation or no prior consultation (Dorondel, 2016; Iordăchescu, 2022). For many years afterwards, a general lack of clarity persisted regarding the management plans and practices within these new PAs. Soon after the law was adopted, it became clear that the new conservation regimes were to create deep divides between forest owners and the state. Our data shows that private conservation initiatives were among the most contested: “The private foundation who bought forestland in Făgăraș installed fences and barriers, and nobody is allowed inside, not even the local forestry district’s director. It’s their private property now. Not letting people enter the park is an absurdity. This forest has a social role.” (Interview\_4/2024). Among these, the most frequent frictions resulted in legal battles over the justifiability of restitution, compensatory measures for properties under strict protection, and the increased restrictions on timber harvesting “... locking up the mountains behind fences is no joke. Our kids will see these mountains only in pictures” (Interview\_4/2024). Dorondel interprets these long legal battles between landowners and the state as an attempt to contest the legitimacy of the state to impose conservation measures over newly restored forests (Dorondel, 2016:57). In another example we found during the commons’ survey in Vrancea, a region situated in the outer arch of the Eastern Carpathians, shows how several forest commons saw parts of their forestlands overlapped by the newly declared Putna-Vrancea Nature Park. As timber extraction had been historically

central for the livelihoods of those communities, the commons’ governing bodies fought prolonged legal battles against the state, who at the time did not have a clear legal framework for compensating forest owners whose forests were put under strict protection, and hence not allowed to be cut or exploited commercially. The interviews conducted during the same study shows that same frictions were present in many other national parks, such as Piatra Craiului National Park and Cozia National Park, where similar forest commons endured years of hardship in their fight for rightful compensation (see also Dorondel, 2016).

Such grey zones of dispossession stemming from new regimes of conservation and nature protection were maintained and amplified by the fact that most Natura 2000 sites lacked statutory management plans, and often administration or custodianship was unclear or transferred from one institution to another. In short, while recognizing the rights of private owners over their forestlands, the state, by establishing national parks while land restitution was still ongoing, managed to maintain considerable control over the privatized forests.

#### 4.5. Distributive justice and complex dependencies

In this section, we follow Fraser’s observation that misrecognition contributes to the institutionalization of social insubordination, influencing how unjust redistribution can morph into economic injustice and political disenfranchisement (Fraser, 2000). But what does distributive justice mean for Romania’s political forests? Taking again the lived experiences as a starting point, we unpack the ways in which land-use policies related to forest governance (Kaswan, 2020) have impacted the distribution of environmental benefits and harms resulting from forest extraction. We discuss three essential elements of distributive justice in the country’s political forests: ownership, access, and benefits – again, all three being considered as master codes for this EJ dimension within our analysis.

#### 4.6. Ownership

We detailed above how forest restitution unfolded over a long period, during which private owners gradually regained the forests that their ancestors had owned. The act of reclaiming the forests was considered burdensome by many across the country, including several of our participants, as poor access to historical titles and documents precluded them from claiming their rights to the forests within the short legal timeframe prescribed by law. Because this restitution was framed as an act of historical justice, equality principles were never on the table or on the mind of policymakers. As a result, after almost two decades of forest privatization, 99% of the forest plots were smaller than 10 ha, making the planning of commercial harvesting very challenging (Drăgoi and Toza, 2019). In addition, according to the Forest Code adopted in 1996, all smallholders had the same responsibilities and obligations as the other large private owners – an observation made during our field research as well: “The law is very restrictive, as a local resident and forest owner I am not allowed to enter my own forest and cut a tree even if I have a felling authorization. Instead, I need to hire a registered company to do it for me, to register the quantity of wood and the transportation timing ... all this leads to unaffordable costs, a heavy and over-bureaucratized process.” (Interview\_9/2024). Many other studies also note that small owners found these obligations unjust (Dorondel, 2016; Iordăchescu, n.d.), as they were unable to fully dispose of their properties since their forests had to be managed and administered by the local forestry districts: “I have a small forest, but I still have to buy firewood. Costs are hefty, marking the trees, felling, transportation everything. I cannot use my own cart and horse because they’d fine me. If they catch you, you’ll get fined.” (Interview\_10/2024).

#### 4.7. Access

Research inspired by political ecology approaches has long

demonstrated that access to forests does not automatically result from owning the land, nor is it limited solely to the rights derived from exclusive ownership (Ribot and Peluso, 2003; Stahl, 2010). In the Romanian political forests, access has been heavily influenced by the ways in which various actors and institutions have succeeded over time to accumulate a range of powers, including administrative and management power, custodianship of protected areas, powers deriving from game management, economic power and control over timber extraction, and, not least, regulatory and enforcement powers. Forestry districts, state institutions with control and enforcement responsibilities, large timber processing companies, and even conservation foundations (Iordăchescu, 2021) are among these actors that ended up holding the power to control access to privately owned forests as the Carpathian Mountains moved from a timber extraction to a conservation frontier. While planning firewood procurement from their own forest plots, our field research shows, small owners need to navigate these complex institutional arrangements - paying guarding fees, tree marking fees, obtaining felling and transportation authorization, and ensuring that conservation management plans are not infringed, particularly if their plots fall under Natura 2000 sites: *„if I go the the forest to fetch some branches, they are after us. You cannot enter the forest (for firewood), because they put you jail”* (Interview\_16/2024). For a large rural population that has been exclusively dependent on firewood for heating year after year, but which has been given full responsibility over their forests once its ownership was restored, these arrangements seem disproportionate and unjust: *“The forest falls upon us and we are not even able to heat our homes, of course we risk and go in for firewood. We are 12 people in these three rooms, and we need to heat for at least seven months each year, the winter is longer than the summer, firewood is never enough.”* (Interview\_16/2024) (see also Dorondel, 2016; Iordăchescu, n.d.). In the case of those who do not own forests but still need firewood, accessing this resource often involves entering informal arrangements to procure it on the local, and often grey market, or to buy it at slightly lower prices from the local forestry district, when and if it is available. The latter arrangement is far from being perfect according to one of our participants in the 2024 field research: *„I asked a Roma neighbour to bring me some firewood, because he still got his cart and horses. Our agreement was to keep for himself a cart-load of wood as payment for each cart he brought me. But the ranger chased him continuously, so he was not able to take as much as we agreed.”* (Interview\_12/2024). For example, the Forestry Directorates at the county level had, at various times, the authority to regulate the price and the quantity of firewood extracted from the state forests under their management. Whenever firewood shortages hit, rural communities are exposed to higher prices, and their fuel poverty is deepened: *„When the children are not at home we only heat the kitchen where we also cook, and we sleep there too. We need to make do somehow.”* (Interview\_10/2024) (see also Vasile and Iordăchescu, 2022).

Leaving firewood provision aside and focusing on commercial logging, we notice across all stages of this research, that the extreme fragmentation of forest plots precludes small forest owners from planning commercial felling: *„the small folks have no business skills, so they easily sold their small plots for a fast buck to the local patrons. They sold their plots because they were useless, they had no money to exploit them, only few smart ones signed concessions for timber exploitation, without selling the actual land”* (Interview\_9/2024), also *„After the privatization, the patrons bought off the small holders and cut off access to timber. They had large companies and their trucks were pulling out timber day and night”* (Interview\_11/2024). Their lack of capital, machinery, and labor required to make this a profitable business is critical across the country (Herța, 2016). Unable to compete with large players in the timber processing industry, small loggers lack access to global markets and are often forced to sell their timber to the few multinational companies that control the supply chains (Environmental Investigation Agency, 2015; Rise Project, 2016). This predicament of small firms, although common, is not general across the country. Vasile describes such a counterexample of a small family-centered timber industry in her study on the timber boom

in the Western Carpathians (Vasile, 2020a, 2020b), where, despite political patronage, small businesses were able to survive and expand across the region.

#### 4.8. Benefits

The ways in which benefits from timber extraction have been shared during post-socialism warrant further attention. In most eastern European countries, the demise of the state-socialist forest management was followed by a timber rush similar to a frontier boom (Vasile, 2019). As the state's grip on forests began to loosen, this power vacuum opened rent-seeking opportunities for a range of actors that were in the process of consolidating their political power (Dorondel, 2009; Stahl, 2010). Following these transformations in Albania, Stahl describes how petty woodcutters, timber traders, big logging companies, and corrupt foresters were in a competition for appropriating the rents from logging (Stahl, 2010). In Romania, this timber rush led to the consolidation of fiefdom forests, which were ruled by timber barons who concentrated benefits from accessing the machinery of decaying state forest enterprises, from selling timber, and from keeping a tight monopoly over access to markets. (Vasile, 2019; Vasile, 2020a, 2020b). Often Roma people were caught in these patronage arrangements: *“I have my Rudari who are ready to help me (...) when I need it”* (Interview\_5/2024). Across the Vrancea region, such timber barons captured the communal forestlands belonging to forest commons that were excluded from the first restitution laws or were in the process of reconstituting their ownership in the early 2000s. Analyzing these processes of commons grabbing during the boom and bust phase of the timber rush, Vasile notes that these political forests emerged as fiefdom forests (Vasile, 2019). Our interviews contribute to this discussion by showing that even if woodcutting offered most local employment opportunities, under the tight grip of timber barons, illegal logging proliferated, and small acts of timber theft for securing household needs were seen as ways of resisting both the rule of the local forest mafias and the unequal forest restitution set in motion by the central state institutions: *“I risk when I go into the forest, but what choice do I have? If they catch me, they catch me.”* (Interview\_11/2024).

#### 4.9. Procedural justice and institutional unsteadiness

This section details how an ongoing lack of representation, or misrepresentation, in forest governance is linked to other forms of environmental injustice. We believe that addressing power imbalances is crucial for understanding the contours of procedural justice in the political forests, as well as for unpacking the connection between representation, power, and authority (Suiseeya et al., 2022). Three processes relevant for the governance of forests, which, again, also function as master codes, will be scrutinized using the lens of procedural justice: forest privatization, institutional unsteadiness, and the enforcement of forest-related legislation.

#### 4.10. Privatization

In the previous two sections, we demonstrated how forest and land restitution benefited local elites and often led to the consolidation of their political power. Studies of land reforms unfolding in the early days of post-socialism also reveal that the restitution process involved complex hierarchies of claims (Verdery, 1999, 2003). For example, under the provision of the first restitution law adopted in 1991, the forest plots to be returned to private owners were often located on the margins of large state-owned forests, thereby keeping the latter unfragmented and therefore commercially viable (Dorondel, 2016). In our research on the ground, we encountered numerous examples of forests restituted to private owners in different locations than the ones owned by their ancestors: *„The opposition to privatization of local foresters was in vain, because the central forestry districts fell prey to political*

patrons" (Interview\_9/2024). This situation often created conflicts within local communities and sowed division within families trying to split inheritance and use rights (Iordăchescu, n.d.). In addition, because forest privatization had the potential to undermine the powers held by different state institutions in charge of forest management and administration, many individual restitution claims were opposed in court throughout the entire process by the powerful National Forest Administration (Drăgoi and Toza, 2019). From the first restitution law to the last, those who lacked political representation, like the poor Roma, were not only gradually dispossessed of customary access to forest resources – a process described in detail by our participants: „immediately after the Revolution, they decimated the forests here. Now one is not even able to find wood for an axe handle.” (Interview\_11/2024), but also remained increasingly exposed to various risks associated with the forest destruction: “They clearcut the forest without any papers, they nobody replanted it. Now, ravines deeper than our house appeared and with each serious rain, we are flooded.” (Interview\_16/2024) and often suffered from targeted enforcement: „before privatization, nobody asked us anything, we were entering the forest and returning with a sack of mushrooms and a bunch of branches. The forest was rich and beautiful. Now the gendarmerie is upon us even if we enter.” (Interview\_16/2024) (see also Iordăchescu, 2021; Iordăchescu and Vasile, 2023).

#### 4.11. Institutional unsteadiness

After more than three decades of post-socialist reforms, both the forest owners and the commercial actors operating within the forestry sector consider that the governance of forests is over-regulated (Drăgoi and Toza, 2019). For a start, the first Forestry Code was adopted by the Romanian Parliament in 1996, five years after the forest privatization started – a period that was marked by a timber rush across the country and the mushrooming of businesses operating at the border of legality. Then, the state institution in charge of administering the state's forests was moved several times between ministries, as the political power at the central level witnessed various stages of restructuring. As Romania joined the European Union in 2007, the efforts for nature conservation and forest protection experienced a momentum marked by the adoption of timber certification and traceability legislation, tighter prosecution and enforcement of forest crimes, and the democratization of illegal logging monitoring and reporting tools (Iordăchescu, 2020; Vasile and Iordăchescu, 2022). Participants in our expert interviews argue that these legal instruments demanded multiple revisions of the Forestry Code, the latest version being adopted in December 2024. On one hand, such instability created institutional amnesia, resulting in delayed reforms and inefficient governance (Drăgoi and Toza, 2019); on the other hand, it led to an unstable business environment, fluctuating timber prices, and firewood scarcity (Cristian, 2018; Rudnițchi, 2018). Faced with an unpredictable market, a lack of local capital, and labor scarcity, many small- and medium-scale businesses, including some encountered during our fieldwork, were forced to operate at the border of legality: „now the law is very strict, they seize your truck, they size your everything, you are left naked if you're caught – the victims are always the small fish” (Interview\_9/2024) (see also Dickinson et al., 2025; Iordăchescu and Vasile, 2023).

#### 4.12. Law enforcement

Not only did a coherent legal framework for forest governance fail to be adopted in a timely manner, but the proper enforcement institutions were established almost a decade after the start of the forestland restitution (Drăgoi and Toza, 2019). Once established, these regional inspectorates for forest control also underwent frequent changes in their organizational structure and attributions, often being underfunded and understaffed, and were eventually dissolved at the height of the government's fight against illegal logging, which replaced them with Forestry Guards. The reform was an attempt by a technocratic

government to respond to increasing demands from civil society to improve the enforcement of forest protection legislation (Iordăchescu, 2020). The same government adopted in 2016 a series of reforms aimed at expanding opportunities for civil society and the general public to participate in monitoring and reporting of alleged forest crimes, making the European Timber Regulation (EUTR) one of the most discussed pieces of legislation. This regulation stipulates that companies introducing timber on the market are obliged to certify the origin of products, thus eliminating the possibilities of laundering timber of unlawful provenance. However, in the first years after its adoption, the implementation of EUTR by the Romanian authorities was less than perfect (Environmental Investigation Agency, 2015). For example, some of our interviewees gave the example of certain timber products such as wood chips which have been kept outside the scope of the regulation, and the entire enforcement chain suffered from a lack of transparency (Neag, 2022). The new government provided the general public limited access to the timber traceability platform through mobile phone apps and to a real-time system of deforestation alarms. The move was revolutionary, and after years of low participation of civil society in policymaking, an entire movement coalesced across the country demanding an expansion of transparency in the timber industry, strengthened protections for old-growth forests, and a renewed sense of participatory justice (Vasile and Iordăchescu, 2022). But, as we observed throughout various research stages, this participatory effervescence was mostly felt in the big cities, by a large group of predominantly young people whose environmental sensitivities had been forged in the anti-mining struggles against the proposed gold mining operation by a Canadian company in Roșia Montană (Velicu and Kaika, 2017). The movement also revealed a growing disconnect between the anti-deforestation coalition and rural folk dependent on forests for livelihoods, firewood, and employment (Vasile, 2020a, 2020b; Vasile and Iordăchescu, 2022), showing that a larger participation fostered by digital literacy does not necessarily lead to more justice in the political forests: „There are very few who risk felling wood without papers these days. Because of the public pressure, the gendarmerie is organising daily check-up filters on the village's main road. So people are afraid” (Interview\_1/2024).

Taken together, these lived experiences of injustice tie to the amble transformations social and political transformations felt across the Romanian countryside, many of which being contingent of regional reconfigurations of political and economic power. Before moving to the discussion section, the image below summarizes the master codes involved in the analysis of EJ dimensions and offers a synthetic view on the many injustices at play in the political forests of Romania:

## 5. Discussion

After unpacking the recognition, redistributive, and procedural elements that led to various injustices in the Romanian forests, we bring together these empirically rich observations to discuss three processes that challenge the dualist moral frameworks often implied by a liberal approach of EJ. Circling back to the conceptual framework laid out at the beginning of the paper, we examine how injustices related to forest work, dependency, and intersectionality are deepened by structural dynamics, to argue that complex complicities at work in the political forests blur the lines between victims, perpetrators, and harms.

### 5.1. Firewood dependency

Firewood dependency in Romania is a much-discussed topic, but one that remains poorly documented (Cristian, 2018; Rudnițchi, 2018). Despite a modernizing political discourse and a much fainter state support for increasing energy autonomy and efficiency, most rural households are left outside the major infrastructural projects regarding gas grid connectivity or nationwide subsidies for renewable energy. In one of the few recent studies available, Baban and Popa (2021) note the difficulty in properly estimating firewood consumption based on the

reported data, given that large quantities of wood biomass for energy generation are not included in official reports nor taxed accordingly. Nevertheless, the numbers advanced in various studies and reports say that close to 45% of the households in Romania employ wood as the main fuel, 90% of which are situated in the rural areas of the country (Baban and Popa, 2021). These numbers are well above similar estimates for other countries in Eastern Europe and the EU, and given this high rate of dependency, limiting or halting consumption seems like an impossible feat (Popa et al., 2020). However, as we described above, keeping rural households almost completely dependent on firewood increases their vulnerability and exposes them to various risks associated with fluctuating market prices or firewood shortages (Iordăchescu, n.d.). Over the recent years, firewood prices spiked as part of a wider regional energy crisis (Scarlat, 2022), deepening a prolonged shortage resulting from a demand that is significantly higher than the supply in most rural areas (Baban and Popa, 2021). We show that, because firewood is not only used for heating homes, but also cooking, drying, and heating water for sanitation, cutting back on its use is not an option. We argue that this acute reliance on firewood is part of a complex moral economy within which many are forced to procure the resource through informal arrangements, which sustain them over the winter months, but exposes them to criminalization or complex dependence on local networks of patron-client relations. Our interviewees see these strategies as ways to resist or contest the decisions taken by policymakers to limit the quantity of available firewood and thus create artificial scarcity.

The lines between recognition and distributive injustice are blurred even further when examining how firewood is framed in the broader discussions on the green transition. Although the high usage of firewood in Romania's rural areas could have been promoted as an advantage in the transition towards renewables (Popa et al., 2020), this was not only insufficiently evidenced in official policies, but the households' dependency on firewood was often openly portrayed as a leading cause of deforestation (Agent Green, 2020). The strong correlation between firewood consumption and unemployment (Baban and Popa, 2021) and between illegal logging and poverty (Bouriaud, 2005) shows again that the causes of firewood dependency as injustice, are structural and go beyond the classical recognition versus redistribution dilemma.

## 5.2. Work precarity

Aside from being spaces of contestation, dependency, and essential resources to understand the reconfiguration of political power, Romania's political forests are, first and foremost, spaces of extraction. The cumulated impact of forestry on the country's economy represents about 4.5% of the GDP, and the sector employs approximately 330,000 people (PWC, 2022). Although this figure ranks Romania as the second EU country, after Sweden, in terms of staff employed in forestry activities (Eurostat, 2022), the low technological development hints at a largely low-skilled workforce (Ciornei and Munteanu, 2020). A recent study has shown that the sector is dominated by small operations with low production capacity, old machines and equipment, where work safety standards are often violated (Hălălișan et al., 2022).

To understand the unjust and precarious nature of forestry work in the political forests of Romania, we looked at both its material realities and at workers' self-perception and the ways they narrate the sense of injustice. A large majority of those involved in our research see work in the forest as dirty, demeaning, dangerous, and demanding, reflecting similar views observed across the region (Šporčić et al., 2025). Often, our interviewees evaluate their current work conditions against the stability and predictability of forest work during state-socialism. An essential part of the planned economy, forest extraction during state-socialism was organized centrally and involved a careful professionalization of workers and a well-kept infrastructure that integrated logging, wood processing, and domestic consumption and export. Once this mode of extraction collapsed and forestlands were privatized, forest workers lost the security and predictability once afforded to them, and

slowly became cheap and disposable labor with an uncertain status. Despite involving intense physical effort, imminent dangers, and a high incidence of occupational diseases, forestry work is not legally recognized as heavy work – as mining is, for example, therefore workers cannot benefit from early retirement and the same social protections. Moreover, because safety standards are poorly enforced, we found out that severe accidents and even death have increasingly become a dimension of forest work (Cosma, 2017; Iftime et al., 2022). From the perspective of the Romanian forest economy, frequent accidents involving forest workers are blamed on the practices of small businesses to purchase outdated machinery due to a lack of support for mechanization at the national level (Hălălișan et al., 2022). Because forest work is often the last resort economic activity in rural areas such as the one we studied, workers who do not want or cannot emigrate to the city or abroad have to face its demeaning and demanding nature. At other times, the precarious or seasonal nature of work contracts provides them with enough space to remain flexible in case better jobs become available, but not enough to live decent lives.

Beyond the official forest economy, a significant rural population is involved in poorly paid, seasonal, and often informal forest-related work, including those associated with local firewood provision, collection of non-timber forest products, and domestic wood craftsmanship. We showed that due to their historical reliance on forests, often resulting from a lack of access to better livelihood opportunities, many rural Roma heavily depend on these sources of income, making them a surplus pool of labor, at best recognized as unskilled workers by the official statistics.

Moving the attention from the extraction towards the management and administration segment of forestry work, we notice that forestry personnel have consistently witnessed an erosion of their social status as a result of the forest crisis and anti-illegal logging narratives (see also Vasile and Iordăchescu, 2022), and a growing lack of public trust in their expertise (Lawrence, 2009). As political forests increasingly become a space of extreme violence, foresters and rangers alike fall victim to slander, assault, and even murder (Iordăchescu and Vasile, 2023). As a result, we argue that understanding the complex complexities around forest work must involve a disentanglement of the harmful structures that constrain and keep forest workers and others dependent on forests for energy or livelihoods, in ambiguous situations where they are both victims and are associated with the ongoing forest destruction.

## 5.3. Intersectional experiences of injustice

In the previous sections, we discussed several patterns of control and access in the political forests. The EJ literature helps us understand these patterns as deeply gendered, racialized, and patriarchal (Fraser, 2000; Ogden et al., 2013). This line of research has consistently shown that exposure to environmental risks is unequal, the impact of pollution and environmental degradation is disproportionate, and often, the compensation and remediation mechanisms are unjust (Heynen et al., 2006). In the Romanian case, many groups that have forest resources as a central livelihood strategy have suffered from intersectional experiences of injustice. We detailed above how the forest work is done predominantly by men who are poorly paid, often with short-term contracts, and exposed to work accidents that result in injuries and even death. While these men are the primary victims of such precarious work, their families remain the invisible victims. We have often encountered in our fieldwork women and mothers who lost their husbands and sons in forest accidents, and were left as the sole supporters of their families. Moreover, because often work contracts are vague or totally absent, the victims are left without protection and at the mercy of those profiting from the timber extraction operations.

Roma people, on the other hand, are often considered cheap and disposable workers, but are essential in the local informal firewood economy. This dual role played by the Roma, whose activities are often unrecognized as work, highlights the complex dependencies embedded

in the local political economy of timber. The misrecognition during the land restitution, and the mal-distribution of forestlands that we detailed above, implied for them further marginalization – they are poorly paid, confined to specific labor, and dispossession – they were denied access to land, to forests, and often to non-timber forest products (Iordăchescu, 2021). These groups have experienced repeated violence and targeted enforcement in the early years of forest restitution (Dorondel, 2009). As a response to criminalization and often brutal enforcement, many Roma engaged in acts of resistance, including trespassing and harvesting or selling timber without permits. By illegally harvesting timber, they are protesting the sudden imposition of rules that transform their previously licit livelihoods into criminal activities. This example, like many others detailed throughout the paper, is part of broader changes to Romania's political forests since the collapse of state-socialism in 1989 which have had disproportionate impacts on forest-dependent communities across the country (Dorondel, 2016; Vasile, 2019; Iordăchescu and Vasile, 2023).

## 6. Conclusion

Unpacking the power relations that shape policy-making, the reconfiguration of access and use rights, and the ways in which vested interests are interconnected in the governing of political forests have been central foci in recent research inspired by political ecology approaches. While predominantly focusing on the political economy of forest extraction, these studies have only marginally addressed the nested injustices present in political forests worldwide. We used Romania, an eastern European country that hosts some of the most valuable forests on the continent, as a case study to address this research gap.

Firstly, following our main research question, we argued that there is a need to acknowledge the historical dependencies in forest management and the multiple forms of marginalization stemming from unsteady forest governance. Examining over three decades of post-socialist transformations in the political forests of Romania, we demonstrated that injustice was embedded in the restitution legislation, augmented by power imbalances in the policymaking processes, and its contours became blurred as forest protection legislation took a tough-on-crime turn.

Secondly, to answer our second research question, we showed how during the post-socialist period, forest policy remained largely reactive, responding to crises and demands from the international market, civil society, or as part of legal requirements under EU law, but failed to address EJ concerns such as the highly impactful firewood scarcity that resulted from tightening legislation. As a result, the moral economy of timber theft remained essentially unchanged from the early restitution phases to the latest stages of tight regulation in the forestry sector. Stealing from the forests around the village, and in particular bringing wood from their own forests without a permit from the forestry district, were ways of resisting unjust and overburdening bureaucratic processes. Far from being considered an immoral or criminal act, these practices were akin to a form of protest and essential part of the local moral economy of forest resources.

Thirdly, we asked why EJ concerns remained marginal in the anti-deforestation movements. While we reiterated the importance of including the forest-dependent communities in decision-making, we also demonstrated that participation does not always lead to greater justice. EJ issues remained marginal in the fight against illegal logging across scales. Framed within a technocratic process, public participation in the monitoring and reporting of unlawful timber harvesting and transportation created a crisis of visibility, exposing those driven by poverty to engage in illicit behavior. Coupled within a general anti-corruption framing, the fight against illegal logging diverted attention from harmful practices within the formal economy, thereby exposing the most vulnerable to environmental injustices. Moreover, while many cases of high-level corruption in the forestry sector are stalled in the

justice system, legal justice becomes another grey area where prosecution lags behind and the punishments are not dissuasive.

We contend that while examining these transformations through an EJ lens, injustices in political forests are difficult to place in a box. The precariousness of forest work, the deepening of firewood dependency, and the gendered and racialized experiences of injustice felt by many, point to a need to move beyond the recognition versus redistribution dilemma. Victims are suffering from intersectional experiences of injustice, many of which are social rather than environmental in nature. Within these greyzones, what is just and what is legitimate restrictive forest policy remained blurred. As forest governance becomes over-regulated, the perils of criminalization persist, leading to a fear of prosecution and a general sense of unfairness.

Relying to a greater extent on sound historical data about the dependency of the local economy on forest resources, would have made the genealogies of current environmental injustice more salient, and hence, some of our arguments more convincing. While we appreciate that the lack of historical data is a limitation of this study, we are working towards filling this gap by identifying and researching regional and local archives of state-socialist forestry enterprises, with the aim to cast more light on the transformation of forest governance from state-socialism to post-socialism.

Looking forward, we notice that European forests are subject to increasing regulation. The increased demand to assess the forest's role in climate mitigation, sequestering carbon, safeguarding water cycles and air quality, while also sheltering valuable wildlife, has led to a surge in forest-related legislation – recently associated with the green transition. As this green transition slowly makes its way into the European peripheries, the new forest policies have material consequences for the lives of those living with, caring for, and living from these forestlands. We argue that it is essential for effective and just policymaking to consider the complexity of ownership and access rights, as well as the disproportionate forest dependency across class, ethnic, and rural-urban divides. It is crucial that new policies do not perpetuate environmental injustices or deepen the marginalization of those most vulnerable.

## CRedit authorship contribution statement

**George Iordăchescu:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Formal analysis, Data curation, Conceptualization. **Gabriel Girigan:** Writing – original draft, Data curation, Conceptualization. **Bogdan Vătavu:** Writing – original draft, Data curation, Conceptualization.

## Declaration of competing interest

The authors declare that they have no competing financial or personal interests that could have influenced the work reported in this paper.

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