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RETHINKING DISASTERS IN THE MEDITERRANEAN: AN ASSESSMENT ON CRITICAL DISASTER STUDIES FRAMEWORK

Akdeniz'de Afetleri Yeniden Düşünmek: Eleştirel Afet Çalışmaları Çerçevesi Üzerine Bir Değerlendirme

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Abstract

This article examines how Critical Disaster Studies (CDS) can provide an alternative theoretical framework for rethinking disasters in the Mediterranean. It approaches the Mediterranean Basin as a space where multiple hazards, historical inequalities, and fragmented governance configurations intersect, and conceptualises disasters not as exceptional "natural" events but as socially produced and politically shaped processes. Through a review of literature, the article addresses the research question: "How can Critical Disaster Studies provide an alternative theoretical framework for studying disasters in the Mediterranean?" The first part shows that dominant scientific and policy discourses on Mediterranean disasters remain largely hazard-centred, technocratic, resilience-oriented, and security-focused. The second part outlines key contributions of CDS, including its emphasis on the historical production of vulnerability, practices of counting and visibility, hierarchies between expert and local knowledge, and the justice dimensions of disaster governance. The third part applies this perspective to several Mediterranean disaster formations, such as wildfires, seismic and hydrological risks, and drought, highlighting how land-use regimes, housing systems, water governance, and border policies structure exposure and loss. The final part sketches an agenda for Mediterranean research and policy that is more historical, multi-scalar, and justice-oriented. Overall, the article argues that engaging CDS can support more accountable and democratic forms of disaster governance in the Mediterranean.

Keywords: Critical Disaster Studies, Mediterranean, Disaster Governance, Vulnerability, Climate Change.

Öz

Bu makale, Akdeniz'deki afetleri yeniden düşünmek için Eleştirel Afet Çalışmaları'nın (EAÇ) alternatif bir teorik çerçeve olarak nasıl kullanılabileceğini incelemektedir. Çalışma, Akdeniz Havzası'nı çoklu tehlikelerin, tarihsel eşitsizliklerin ve parçalı yönetişim yapılarının kesiştiği bir alan olarak ele almakta ve afetleri istisnai "doğal" olaylar değil, toplumsal olarak üretilmiş ve politik olarak şekillendirilmiş süreçler olarak kavramsallaştırmaktadır. Mevcut literatürün bir değerlendirmesi niteliğindeki bu makale, "Eleştirel Afet Çalışmaları, Akdeniz'deki afetlerin incelenmesi için nasıl alternatif bir teorik çerçeve sunabilir?" araştırma sorusunu ele almaktadır. Makalenin ilk bölümü, Akdeniz'de afet çalışmalarının ve politika söylemlerinin ağırlıklı olarak tehlike odaklı, teknokratik, dayanıklılık ve güvenlik eksenli çerçevelere dayandığını göstermektedir. İkinci bölüm, EAÇ literatürünü özetleyerek kırılganlığın tarihsel üretimi, bilgi ve sayma pratikleri, uzman-yerel bilgi hiyerarşileri ve adalet boyutlarına vurgu yapmaktadır. Üçüncü bölüm, bu kavramsal çerçeveyi Akdeniz'deki yangınlar, sismik risk, hidrolojik aşırılıklar ve kuraklık gibi farklı afet oluşumlarına uygulamakta; arazi kullanımı, konut rejimleri, su yönetişimi ve sınır politikalarının risk üretimindeki rolünü tartışmaktadır. Son bölüm, Akdeniz araştırmaları ve politikaları için tarihsel, çok ölçekli ve adalet odaklı bir gündem çizmektedir.

Anahtar Kelimeler: Eleştirel Afet Çalışmaları, Akdeniz, Afet Yönetişimi, Kırılganlık, İklim Değişikliği.

Introduction

The Mediterranean Basin is widely described as a climate change hotspot that is warming faster than the global average and experiencing multiple, interacting environmental stresses (Cos et.al., 2022, p. 321; MedECC, 2020). Recent assessments underline that rising temperatures, changing precipitation patterns, sea-level rise, and ocean acidification are already reshaping ecosystems, economies, and everyday life

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across Southern Europe, North Africa, and the Eastern Mediterranean (IPCC, 2022). In this context, it is fair to say that disasters are not rare anomalies but recurrent features of regional socio-ecological systems.

Over the last decade, the region has witnessed intense wildfire seasons in countries such as Greece, Türkiye, Italy, and Algeria, prolonged heatwaves with record-breaking temperatures, and destructive floods in both urban and rural areas. In Türkiye, for example, wildfires in 2021 have been recorded as the biggest fires in scope in the history of the country. These climate-related events intersect with high seismic risk, as illustrated by recent large earthquakes in Türkiye and neighbouring states, and with maritime accidents and repeated loss of life along migration routes in the Mediterranean Sea (IPCC, 2022; MedECC, 2020). At the same time, Mediterranean region has been a central corridor for people on the move, where border regimes, search and rescue practices, and humanitarian responses shape who is exposed to danger and under which conditions. Disasters in the region, therefore, bring together climatic hazards, geological processes, infrastructural failures, and violent mobility regimes within the same analytical field.

However, much of the disaster research still tends to rely on hazard-centred and technocratic frameworks. For example, Ottolini et.al. criticize a hazard-centered approach in their study examining the increasing number of forest fires in Spain's Valencia region, stating that the fires were primarily managed through technocratic approaches (Ottolini et.al., 2024, p. 2). In another case, Suvari et.al., in their study examining the effects of the Kahramanmaraş earthquakes in Türkiye, emphasized that cultural and social dynamics are overlooked in disaster management projects, stating that projects that do not take culture into account and are planned solely on an engineering basis will fail to achieve their objectives (Suvari et.al., 2024). Lastly, Le De et al. found that the prevailing hazard paradigm resulted in highly technical, technocratic, and top-down actions in their study evaluating disaster risk reduction approaches in French literature (Le De et.al., 2023, p. 2).

In such approaches, disasters are treated as the impact of extreme natural events on exposed populations and assets, to be addressed through better risk assessment, early warning systems, and emergency response capacities (UNDRR, 2015). Policy and practitioner discourses rely heavily on terms such as "natural disaster", "risk management", and "resilience", and focus on strengthening institutional capacities, infrastructures, and community preparedness within a managerial logic (Kelman, 2020; Gaillard, 2019). These perspectives have contributed important tools and practices, but they tend to foreground technical expertise, probabilistic modelling, and cost–benefit calculations while treating disasters as external shocks rather than as outcomes of longer historical and political processes.

Critical scholarship has argued that such technocratic and apparently apolitical understandings of disaster are insufficient. They risk obscuring how vulnerability is socially and spatially produced, and how development pathways, labour regimes, land-use changes, and border policies create and distribute disaster risk (Tierney, 2014; Wisner et al., 2004). Therefore, the question of "is there an alternative theoretical basis for disaster studies?" comes to mind, especially for critical social science researchers. Critical Disaster Studies (CDS) has emerged as an interdisciplinary field that questions the category of "disaster" itself and examines how it is defined, named, and governed (Remes & Horowitz, 2021). As a critical interdisciplinary scholarship that challenges the normative framing of disasters as "natural" events, CDS begins with a different premise that disasters are not exceptional ruptures but rather historically produced socio-political configurations where everyday forms of inequality, precarity, and slow violence matter just as much as the spectacular moments of destruction. (Kelman, 2020; Remes & Horowitz, 2021, p. 5).

This article brings the insights of Critical Disaster Studies into dialogue with Mediterranean disaster research. Asking "how can Critical Disaster Studies provide an alternative theoretical framework for studying disasters in the Mediterranean?", this review article evaluates the emerging framework and its core assumptions within the case of the Mediterranean. The central argument is that CDS can help reframe Mediterranean disasters away from a narrow focus on hazards and institutional performance, towards an analysis centred on inequality, power, and justice. By foregrounding how exposure and vulnerability are patterned by land-use regimes, housing and planning systems, labour relations, migration and border policies, and infrastructural investment, CDS enables a shift from "managing" disasters to interrogating the socio-political processes that make them possible and probable.

The article proceeds in four steps. The next section maps the main characteristics of disasters and disaster studies in the Mediterranean, highlighting the region's multi-hazard profile and the dominance of hazard-based, state-centred, and security-oriented approaches. The following section introduces key concepts and debates in Critical Disaster Studies, including its critique of "natural disaster" narratives, its focus on the historical production of vulnerability, and its analysis of how categories such as "vulnerable groups", "at-risk communities", and "resilient cities" function in governance. The third section uses CDS concepts to re-read several Mediterranean disaster formations, including wildfires and land-use change,

housing and informality in seismic risk, hydrological extremes and water governance, and the role of border regimes in producing hazard. The final section discusses implications for Mediterranean research and policy, suggesting how CDS-informed analyses can support more historically grounded, multi-scalar, and justice-oriented approaches to disaster governance in the region.

1. Disasters and Disaster Studies in the Mediterranean

The Mediterranean region is exposed to a wide range of interacting hazards, including wildfires, heatwaves, earthquakes, floods, droughts, maritime accidents, and migration-related tragedies at sea. Climate projections indicate increasing frequency and intensity of heat extremes, longer fire seasons, and heightened risk of hydrological extremes such as heavy rainfall and flash floods (IPCC, 2022; MedECC, 2020). At the same time, the region lies across several major tectonic plate boundaries, which generate recurrent seismic and volcanic activity (Faccenna et.al., 2014), as illustrated by recent large earthquakes in Türkiye, Greece, and Italy. Coastal and island geographies further expose populations to storm surges and sea-level rise, while the Mediterranean Sea remains one of the world's most dangerous migration routes in terms of recorded deaths (IOM, 2023).

This multi-risk profile is embedded in a politically fragmented landscape. The Mediterranean connects member states of the European Union with non-EU countries in the Western Balkans, North Africa, and the Middle East, each with distinct governance systems, economic structures, and administrative capacities. Levels of disaster risk governance, early warning infrastructure, and social protection vary considerably across the basin (MedECC, 2020). While some states have highly institutionalised civil protection systems and long-standing seismic or flood codes, others face chronic underinvestment, limited enforcement of regulations, and overlapping crises of conflict, austerity, or displacement. Regional cooperation frameworks, such as the Union for the Mediterranean or various EU neighbourhood instruments, provide some coordination, but disaster management remains largely organised along national lines.

As argued above, disasters in the Mediterranean have often been framed as "natural hazards" or "environmental risks". Policy documents and technical assessments frequently conceptualise these disasters as the result of extreme climatic or geophysical events impacting exposed populations and assets, to be managed through improved hazard mapping, land-use planning, and emergency response (UNDRR, 2015; European Commission, 2021). The language of "natural disaster" remains pervasive in official reports, media coverage, and sometimes in academic work, despite longstanding critiques that it obscures the social and political dimensions of disaster risk (O'Keefe et al., 1976; Wisner et al., 2004). In many national contexts, the primary indicators of disaster performance are still expressed in terms of response speed, number of rescue teams deployed, or volume of relief delivered. For instance, Türkiye's response to the 2021 wildfires exemplifies this tendency, where official discourse prominently emphasized the escalating number of firefighting teams deployed to affected regions, foregrounded material policies aimed at post-fire normalization, and underscored the instrumental role of high-tech equipment in fire suppression efforts (Çöpoğlu, 2025).

Security-oriented discourses also play a significant role. Disasters are frequently linked to national security, border security, and social stability, especially where hazards intersect with migration or contentious politics. Wildfires, floods, or earthquakes can be narrated as tests of state sovereignty and capacity, moments in which governments must demonstrate control, authority, and responsiveness (Boin et al., 2017, p. 1). In some cases, disasters are connected to concerns about terrorism, sabotage, or "hybrid threats", which can fuel securitised responses and exceptional measures. In the maritime context, search-and-rescue operations in the central and eastern Mediterranean are closely intertwined with border management, deterrence policies, and debates about movement towards the European Union (Cuttitta, 2018: 784). Here, risk is not only about storms, shipwrecks, or coastal hazards, but also about the ways in which border regimes structure exposure to danger.

Another central narrative in Mediterranean disaster governance is "resilience". Resilience has become a key term in EU adaptation strategies, national disaster risk reduction plans, and urban policy initiatives across the region (European Commission, 2021). Cities and communities are encouraged to become "resilient" to climate extremes and geophysical hazards through preparedness measures, diversification of livelihoods, and social cohesion programmes. While the resilience agenda has enabled some attention to social dimensions and community capacities, it often leaves broader structural conditions unaddressed. In many cases, resilience is framed as an attribute of local communities, to be strengthened through behavioural change, training, and modest infrastructural upgrades, rather than as a matter of

redistributing resources, reforming housing and land regimes, or challenging unequal labour relations (Joseph, 2018; Chandler & Reid, 2016, p. 28).

These dominant approaches create what can be called an "epistemic boundary" around Mediterranean disasters. Technical expertise, probabilistic models, and standardised indicators of risk occupy a central position in defining what counts as relevant knowledge and what is considered a legitimate policy response. Disaster risk is quantified and mapped, but the historical processes that shape where different groups live, work, and move often receive less attention. Modelling practices can give an impression of objectivity and neutrality, while in practice they rely on many assumptions about which hazards to prioritise, which assets to value, and which populations to include in datasets. As a result, socio-political struggles over land, infrastructure, and mobility may remain in the background of otherwise sophisticated technical analyses.

A related feature of Mediterranean disaster studies is their frequent state-centred orientation. Much research and policy evaluation is organised around the question of how well states and their agencies "perform" during crises. Disasters are used as moments to assess state capacity, coordination among ministries, or compliance with international frameworks such as the Sendai Framework for Disaster Risk Reduction (UNDRR, 2015). Although these are relevant and necessary concerns, they may reduce disasters to tests of administrative efficiency and institutional design. The underlying distribution of exposure and vulnerability across different classes, regions, and legal statuses, including migrants and refugees, may be taken as given. This perspective may also underplay the role of non-state actors, such as informal networks, professional associations, or local civil society organisations, which are central to everyday disaster preparedness and response.

Communities affected by disasters are frequently positioned as "target groups" of risk communication, awareness campaigns, or resilience programmes rather than as co-producers of knowledge. In many Mediterranean settings, local and vernacular understandings of hazards, land, and weather are rich and historically grounded, including among farmers, fishers, forest villagers, and migrant workers. However, these knowledges are seldom treated as authoritative in formal disaster planning or scientific assessments (Marchezini et.al., 2017). Instead, they may be incorporated selectively—for example, as "traditional practices" to be valorised in adaptation projects—without addressing power imbalances between experts and lay people. This dynamic reinforces hierarchies between technical and local knowledge and restricts the space for participatory, bottom-up approaches. Moreover, when local and official perspectives exist in tension or conflict, disasters may escalate into crises, as competing stakeholders enter into contested relationship that further complicate governance of the disaster. The 2021 wildfires in Türkiye offered such a case showing how tensions between state agencies and local people over fire management not only hampered coordination but also deepened mistrust (Çöpoğlu, 2025; Bozok & Bozok, 2025).

Taken together, without a broader approach toward disasters, scholars risk treating these phenomena as isolated events rather than symptoms of deeper societal problems. Historical trajectories of urbanisation, rural marginalisation, land privatisation, and tourism-led development strongly influence who lives in floodplains, fire-prone hillsides, or seismically vulnerable housing. Structural inequalities in income, legal status, and access to social protection shape households' capacity to prepare for, absorb, and recover from shocks. Yet hazard-centred, technocratic, and state-centred analyses tend to treat such conditions as background context rather than as part of the disaster itself (Pelling, 2011; Tierney, 2014). In this way, disasters become framed as misfortunes that strike pre-given societies, rather than as outcomes of decisions about land, labour, infrastructure, and borders.

This section has shown that Mediterranean disasters are characterised by a dense multi-hazard environment, political fragmentation, and uneven state capacities, and that disaster studies and policy frameworks in the region tend to be hazard-based, technocratic, resilience-oriented, and state-centred. While these approaches provide important tools, they can sometimes sideline questions of historical responsibility, power, and inequality. The next section outlines CDS as a field that explicitly takes these questions as its starting point. By rethinking disasters as processes rather than isolated events, and by scrutinising how vulnerability and resilience are produced and governed, CDS offers conceptual resources for re-framing the analysis of disasters in the Mediterranean.

2. Critical Disaster Studies: A Review

Critical Disaster Studies (CDS) has emerged from several overlapping strands of scholarship, including critical disaster sociology, political ecology, vulnerability studies, and critical development studies. Early work in these fields challenged the idea that disasters are exceptional "acts of natüre" and

instead located them in long-term processes of marginalisation, uneven development, and power relations (O'Keefe et al., 1976; Wisner et al., 2004). CDS builds on this tradition but goes further by questioning the category of "disaster" itself and examining how it is produced, delimited, and used in practice (Remes & Horowitz, 2021).

However, Remes and Horowitz's 2021 edited volume, *Critical Disaster Studies*, appears to be an important reference book that presents the fundamental arguments of this field in a comprehensive manner and introduces it to readers as an alternative approach. It brings together the scattered and interdisciplinary scholarship in this field, establishing the intellectual groundwork of CDS. The book takes a critical stance against the technical and applied traditions of mainstream disaster studies, which treat disasters as "objective realities", and instead centers the historical, political, and epistemological contexts of disasters (Remes & Horowitz, 2021). A central premise of CDS, according to Remes and Horowitz, is actually a radical one, arguing that there is no such thing as a "natural disaster"; in fact, there is no such thing as a disaster at all (Remes & Horowitz, 2021, p. 1). This claim emphasizes that disasters should not be read as natural events independent of social structures. Rather, defining an event as a "disaster" represents an analytical and interpretive choice, and therefore a political act (Remes & Horowitz, 2021, p. 1). It is this political character and approach differs CDS from other disaster studies.

From this perspective, CDS is built upon three fundamental principles: disasters are interpretive fictions, disasters are political, and disasters take place over time (Remes & Horowitz, 2021:2-5). The first principle suggests that disasters are socially constructed both as events and as ideas, and consequently, concepts associated with disasters—such as vulnerability, risk, and resilience—must also be interrogated as social constructs. The second principle reveals that the supposedly technical and objective goals of disaster management are in fact subjective and often contested, showing that even seemingly commonsensical discourses like "restoring order" are actually political maneuvers aimed at reproducing existing power relations. The third principle emphasizes that disasters are not isolated events but rather long-term historical processes; it demonstrates that the image of sudden and unexpected occurrence carried by the disaster idea tends to obscure enduring social inequalities by making structural conditions appear contingent, widespread conditions appear local, and chronic conditions appear acute (Remes & Horowitz, 2021: 2-5). These three principles enable CDS to function as an interdisciplinary intersection and allow for the examination of disasters within the context of broader questions concerning power, inequality, community, trauma, and cultural beliefs.

A central tenet of CDS, then, is that disasters are not primarily events but processes. Rather than starting with a moment of impact—an earthquake, flood, or wildfire—CDS asks how hazard, exposure, and vulnerability have been assembled over time through decisions about land, labour, infrastructure, and governance. Wisner et al. (2004) conceptualise this through the "progression of vulnerability", which traces how root causes, dynamic pressures, and unsafe conditions combine to turn hazards into disasters. Similarly, Kelman (2020) argues that disasters are "by choice" because they result from political and economic decisions that create and maintain vulnerability, even when the initiating hazard is environmental.

CDS also scrutinises how disasters are named and bounded in time and space. Remes and Horowitz (2021) describe "disaster" as an analytical conceit that separates certain forms of harm from the everyday, even though the same structures often underpin both. Decisions about when a disaster begins and ends, which deaths are counted, and which areas are classified as "affected" are political decisions with real consequences for visibility, compensation, and responsibility. This framing aligns with broader debates about "slow violence", which draw attention to gradual, often invisible forms of environmental harm that accumulate over years or decades, such as pollution, toxic exposure, or incremental land loss (Nixon, 2011). Building on this work, scholars of "slow disasters" argue that risk management practices focused on short-term events can neglect long-term, low-intensity harms that shape everyday life (Knowles, 2011).

Within this perspective, vulnerability is not a static attribute of certain groups but a historically produced condition. Vulnerability is shaped by class, race, gender, citizenship, and legal status, as well as by access to housing, health care, labour rights, and social protection (Wisner et al., 2004; Fothergill & Peek, 2004: 90). Disasters disproportionately affect poorer households and marginalised communities, not because they are inherently "weak", but because they are more likely to live in hazardous areas, occupy insecure housing, work in informal or precarious jobs, and lack savings or insurance. (Wisner et al., 2004). CDS foregrounds these structural dimensions and treats vulnerability as a central analytical category rather than a residual "contextual factor".

At the same time, CDS examines how policy categories such as "vulnerable groups", "at-risk communities", and "resilient cities" are not neutral descriptors but performative classifications that organise governance. These labels define who is seen as needing protection, who is expected to adapt, and

who is held responsible for managing risk. Remes and Horowitz (2021) show how being named "vulnerable" can sometimes pathologise communities and frame them as passive recipients of aid, while the language of resilience can shift responsibility for coping with structural problems onto individuals and local communities. Critical work on resilience highlights how it has often been aligned with neoliberal forms of governance, encouraging subjects to adapt to risk rather than addressing its structural causes (Chandler & Reid, 2016; Joseph, 2018).

A related concern of CDS is the hierarchy between expert and local or vernacular knowledge. Conventional disaster risk reduction has tended to privilege scientific measurements, modelling, and professional expertise, while local knowledge has often been treated as anecdotal or secondary (Wisner et al., 2004). However, Mercer et.al. show that residents of hazard-prone areas develop detailed understandings of environmental cues, historical events, and safe practices, which can significantly improve early warning, evacuation, and recovery when taken seriously (Mercer et.al., 2010, pp. 214-215). CDS advocates for treating local and indigenous knowledge as a source of theory and critique, not only as data to be integrated into pre-existing expert frameworks. This implies more participatory forms of research and governance, where affected communities are co-producers of knowledge about risk and response.

CDS is also closely connected to political ecology, which studies how ecological conditions and environmental risks are shaped by political and economic structures. Political ecology has long argued that land degradation, deforestation, and flooding cannot be explained only by physical factors or "mismanagement", but must be linked to histories of land tenure, market integration, and state policy (Blaikie & Brookfield, 1987). CDS extends this insight to disasters, examining how resource extraction, agrarian change, urbanisation, and infrastructural development generate and redistribute risk. For example, large-scale dams or coastal tourism projects may protect some groups while exposing others to new hazards. In this sense, disasters become a lens for analysing broader questions of environmental justice and socio-ecological inequality.

Another key theme is the relationship between disasters, capitalism, and post-disaster reconstruction. The concept of "disaster capitalism" captures how crises can open opportunities for capital accumulation, through land grabs, privatisation, or large-scale redevelopment projects that displace low-income residents (Klein, 2007). CDS scholars study how rebuilding processes can entrench or deepen existing inequalities, even when they are framed as "building back better". Decisions about where to rebuild, which infrastructures to prioritise, and which populations to support are shaped by power relations and market logics. This directs attention to the political economy of insurance, credit, construction, and humanitarian aid, rather than treating reconstruction as a purely technical challenge.

CDS also emphasises the importance of linking so-called "everyday" and "extraordinary" forms of violence. Work on slow violence and environmental injustice shows that chronic exposure to pollution, inadequate sanitation, poor housing, and unsafe workplaces can shorten lives and undermine health in ways that rarely appear in disaster statistics (Nixon, 2011; Wisner et al., 2004). When a flood, heatwave, or earthquake occurs, these pre-existing conditions strongly influence who is able to escape, survive, and recover. From a CDS perspective, it is therefore misleading to treat disasters as discrete episodes separated from the normal operation of social and economic systems. Instead, disasters are understood as condensations of ongoing processes of dispossession, racialisation, and exclusion.

Finally, CDS is not only a descriptive or analytical project but also a normative one. It aims to reorient disaster research and policy towards questions of justice, accountability, and democratic governance. By foregrounding how risk is produced and distributed, CDS calls for approaches that address root causes rather than focusing solely on emergency response or individual preparedness. This includes examining how legal frameworks, planning regimes, and financial instruments shape exposure, as well as how affected communities can gain meaningful influence over decisions that affect their safety and livelihoods (Wisner et al., 2004; Remes & Horowitz, 2021).

3. Reframing Mediterranean Disasters through Critical Disaster Studies

This section uses key ideas from Critical Disaster Studies to reinterpret concrete disaster formations in the Mediterranean. Instead of treating hazards as external shocks, it asks how land-use regimes, housing and planning systems, and water governance produce unequal exposure and shape who is counted as a disaster victim. The aim is not to deny the importance of climatic and geophysical processes, but to place them within wider socio-political configurations.

3.1. Beyond Climate Change: Land Use, Forest Policy, and Tourism

Wildfires in Mediterranean-type climates are strongly influenced by land-use change, forest policy, and tourism-driven development, in addition to warming and drying trends (Moreira et al., 2020). Moreira et al.'s study shows that rural depopulation, land abandonment, and the expansion of unmanaged forests have increased fuel loads and continuity, while the growth of wildland–urban interfaces (WUIs) has placed more properties and people directly in fire-prone areas (Moreira et al., 2020). In many Mediterranean countries, forest policy has emphasised fire suppression over landscape-level management, which can further increase the accumulation of combustible biomass. Indeed, there is a growing body of literature called "Indigenous Fire Management (IFM)", arguing that aggressive wildfire-suppression policies are outdated and fail to capture wildfire's complexity (Çöpoğlu, 2025, p. 119). A similar normative stance, moving away from more traditional and technocratic approaches to studying the phenomenon of disasters, also emerges in this IFM literature on wildfires and their management.

Tourism also plays a significant role in this configuration. Coastal development for hotels, second homes, and tourism infrastructures has driven construction into formerly agricultural or forested areas and has altered traditional relationships between rural communities and forests (Colantoni et al., 2020). Seasonal peaks in population density increase exposure during the fire season and place pressure on emergency services. At the same time, rural communities that have historically managed forests through grazing, wood collection, and small-scale agriculture may be marginalised in planning processes and portrayed as potential sources of ignition, for example, through the burning of agricultural residues.

From a CDS perspective, this pattern suggests that wildfire risk cannot be reduced to climate change and individual "carelessness". Instead, risk emerges from decisions about land-use zoning, agricultural policy, forest governance, and tourism development. The "forest villager" may emerge as a contested subject in fire management discourse from a CDS perspective as well. Rather than viewing them merely as populations requiring adaptation to new fire regimes or as sources of ignition and regulatory non-compliance, this study demonstrates that their survival-type relationship with forests positions forest villagers as "organic security providers" (Çöpoğlu, 2025, p. 129). CDS invites questions about whose land-use priorities shape fire regimes, whose homes and livelihoods are protected, and which forms of rural knowledge are recognised in fire management debates.

3.2. Unequal Exposure and Narratives of Blame

Heatwaves, wildfires, and air pollution episodes affect populations unevenly. Studies from European and Mediterranean cities show that older people, low-income households, outdoor workers, and those living in poorly insulated housing are more likely to suffer severe impacts during heat extremes (Matthies et al., 2008). Similar patterns have been documented for wildfires, where socio-economically disadvantaged groups have fewer resources to evacuate, insure property, or rebuild. These inequalities are often linked to past housing policies, labour market segmentation, and welfare systems, rather than to individual characteristics alone.

Public narratives about disasters, however, can shift attention away from structural determinants. Media and political discourses frequently emphasise heroism, national unity, and sacrifice, or focus on individual negligence, sabotage, and "unpreparedness" (Boin et al., 2005, p. ix). In some wildfire episodes, suspected arson or "sabotage" has been foregrounded without equal attention to land-use regulations, enforcement gaps, or systematic underfunding of prevention and civil protection. In migrant shipwrecks, responsibility is sometimes framed in terms of smugglers' criminality, with less discussion of how restrictive mobility regimes constrain access to safer routes (Cuttitta, 2018, pp. 787;792).

CDS directs attention to how narratives of blame and responsibility are constructed. It asks which actors are named as responsible for disasters and which are treated as background conditions. When disasters are explained primarily through individual behaviour or technical failure, the role of planning decisions, austerity measures, and border policies can remain implicit. By contrast, a CDS-informed account treats unequal exposure and the politics of blame as central empirical questions. For instance, it would examine how narratives about "irresponsible residents" or "illegal migrants" may legitimise selective enforcement, forced evictions, or deterrence policies.

3.3. Housing, Informality, and Regulatory Failure

Earthquake disasters in the Mediterranean, especially in Türkiye, illustrate how housing regimes, informality, and regulatory failure shape risk. Scholars and practitioners have long noted that building codes in Türkiye are relatively up-to-date, yet enforcement is uneven and a large stock of non-compliant or

informally built structures persists (Green, 2008). Repeated "zoning amnesties" have legalised buildings that do not meet seismic standards in exchange for fees, despite warnings from engineers and professional associations (Karaca & Dilsiz, 2023). Investigations following the 2023 earthquakes highlighted how amnesties and weak supervision contributed to the collapse of multi-storey residential blocks, with severe loss of life (Horton & Armstrong, 2023).

These patterns are not unique to one country, although their legal forms differ. Across the Mediterranean, informal settlements, non-compliant extensions, and substandard rental housing are common features of urban peripheries and small towns (Chiodelli, 2019). Low-income households, migrants, and precarious workers are often concentrated in older, poorly maintained buildings or in areas with weaker enforcement of planning regulations. When earthquakes, floods, or landslides occur, these groups may face higher probabilities of death, injury, and displacement.

From a CDS perspective, this is not simply a problem of "corruption" or "non-compliance". It is an outcome of housing markets, land speculation, and policy choices that have tolerated or encouraged rapid construction without adequate oversight. Zoning amnesties can be understood as fiscal and electoral instruments that exchange retroactive legality for revenue and political support, while shifting future earthquake risk onto residents. This perspective reframes earthquakes from "natural disasters" that test national character into disasters produced by housing regimes, regulatory practices, and socio-economic stratification.

3.4. Hydrological Extremes and the Hydro-Social Cycle

Floods, flash floods, and stormwater events in the Mediterranean are influenced not only by changing precipitation patterns but also by land-use decisions, river engineering, and urbanisation. Wetlands have been drained, rivers straightened or canalised, and floodplains converted into residential, industrial, or transport infrastructure in many parts of the region (Pelling, 2011; MedECC, 2020). When heavy rainfall occurs, runoff is amplified by impermeable surfaces and constrained channels, leading to urban flooding and landslides. In rural areas, deforestation and terracing collapse can contribute to slope instability and soil erosion.

The concept of the hydro-social cycle, developed by Linton and Budds (2014), is useful for understanding these dynamics. It conceptualises water not as a purely natural flow but as part of a socio-natural process shaped by infrastructure, legal regimes, economic models, and everyday practices. Applying this approach to Mediterranean floods directs attention to how water infrastructures, planning regulations, and land markets allocate risk. For example, drainage systems may prioritise certain districts, while informal settlements lack basic protections; new highways or industrial zones may displace floodwaters onto agricultural land or low-income neighbourhoods.

CDS encourages analysis of hydrological extremes through this relational approach. It asks how decisions about wetland reclamation, dam construction, and urban expansion have redistributed exposure over time, and how responsibilities for maintenance and adaptation are assigned. This perspective avoids treating flood disasters as problems of "unusual" rainfall alone and instead situates them within histories of territorial planning, agricultural policy, and infrastructure investment.

3.6. Drought, Agriculture, and Infrastructural Injustice

Drought and water scarcity are central concerns in the Mediterranean, affecting agriculture, tourism, urban supply, and ecosystems (MedECC, 2020; IPCC, 2022). However, water shortages are not only the result of natural variability or climate trends. They are also outcomes of allocation decisions, pricing regimes, and infrastructure choices. Export-oriented agriculture, intensive irrigation, and water-intensive tourism projects can concentrate water use in particular sectors, while rural communities, smallholders, or marginalised neighbourhoods experience restrictions, degraded quality, or unreliable supply (Allan et al., 2013; Linton & Budds, 2014).

From a CDS viewpoint, this configuration can be described as infrastructural injustice. Water infrastructure, such as dams, transfer systems, and distribution networks, can privilege certain users while leaving others more exposed to scarcity and quality problems. During droughts, emergency restrictions and rationing measures may reproduce these hierarchies if they prioritise economic activities over basic household needs or if they fail to protect seasonal workers and informal settlements. These processes rarely appear in conventional disaster statistics, yet they shape everyday vulnerability and coping capacity.

CDS-oriented research, therefore, examines water governance as part of disaster risk production. It explores how legal frameworks, public–private partnerships, and regional cooperation schemes define

rights to water, and how conflicts over allocation intersect with class, gender, and citizenship. Rather than focusing only on technical efficiency or "demand management", it asks whose livelihoods and territories are made more precarious by prevailing water regimes and how these patterns condition the impacts of hydrological extremes.

4. Implications for Mediterranean Research and Policy

Reframing Mediterranean disasters through CDS has several implications for how research is designed and how policy is formulated. Rather than adding a separate "critical" strand to existing agendas, CDS encourages a different way of defining problems, selecting methods, and evaluating interventions. This section highlights key implications in terms of temporal perspective, scale, methodology, justice, participation, and disciplinary dialogue.

First, CDS underlines the need for more historical and longitudinal analysis of Mediterranean disasters. Many studies focus on short time frames around specific events, such as a wildfire season, a major earthquake, or a flood episode. While detailed event studies are important, they often treat pre-existing settlement patterns, land-use regimes, and institutional arrangements as background conditions. A critical perspective instead treats these as part of the disaster itself (Wisner et al., 2004; Pelling, 2011). This implies greater use of long-term archival work, oral histories, and historical political economy to trace how housing markets, agricultural policies, tourism development, or border regimes have shaped exposure and vulnerability over decades. In practical terms, research agendas on Mediterranean disasters could systematically integrate historical land-use change, policy reforms, and infrastructural investment trajectories into their analytical frameworks, rather than treating them as external context.

Second, CDS calls for a multi-scalar approach that systematically connects local experiences to national, regional, and global processes. Disasters in a specific valley, city district, or coastal town are shaped by decisions taken at multiple levels: municipal zoning rules, national housing or migration laws, European Union adaptation and border policies, and global financial and commodity markets (Pelling, 2011; MedECC, 2020). Mediterranean research can therefore benefit from designs that move across scales, for example, by linking ethnographic work in a fire-prone village to analysis of EU forestry and cohesion funding, or by connecting a specific migrant shipwreck to regional search-and-rescue governance and EU externalisation strategies. This multi-scalar orientation aligns CDS with existing work in Mediterranean studies and political ecology, which already examines how the region is produced through transnational flows of capital, labour, and regulation.

Third, CDS has implications for method choice. While quantitative risk modelling and remote sensing will continue to play important roles, a critical approach also foregrounds qualitative, ethnographic, and participatory methods that can capture how people experience and interpret risk, responsibility, and governance (Wisner et al., 2004). In the Mediterranean, this could mean in-depth fieldwork with forest villagers, seasonal agricultural workers, informal settlement residents, or search-and-rescue volunteers. Such methods can document vernacular risk knowledge, everyday coping strategies, and perceptions of state and humanitarian actors that are not easily visible in official statistics or satellite imagery. Importantly, CDS suggests treating these forms of knowledge not only as "local inputs" into technical models but as sources of theory and critique in their own right.

Fourth, CDS directs attention to the justice dimensions of disaster risk reduction (DRR) and climate adaptation policies. Existing strategies often emphasise aggregate risk reduction and cost-effectiveness, but pay less systematic attention to how benefits and burdens are distributed among different social groups, and whose values and identities are recognised (Pelling, 2011; Schlosberg, 2007). Applying a justice lens to Mediterranean disasters would involve evaluating DRR and adaptation measures in terms of distributional justice (who gains and who loses), recognition justice (whose knowledge, identities, and claims are respected), and procedural justice (who participates in decision-making). For example, wildfire prevention campaigns could be assessed not only by reductions in burned area, but also by their effects on forest villagers' livelihoods and their role in shaping management plans. Similarly, coastal protection or water allocation schemes could be evaluated in terms of whose properties and activities are prioritised and which communities are most exposed to residual risk.

A fifth implication concerns the meaningful participation of the most affected and marginalised groups in disaster governance. Mediterranean disasters disproportionately affect groups such as migrants, informal workers, forest villagers, and rural communities dependent on fragile ecosystems (Wisner et al., 2004; MedECC, 2020). Yet these groups often have limited influence over land-use planning, housing policy, border regimes, or water governance. CDS suggests rethinking participation beyond consultation exercises or awareness campaigns, towards forms of co-decision and co-production where such groups help define

problems and design interventions. In practice, this could include institutionalised roles for representative organisations in planning committees, support for community-led monitoring and mapping initiatives, and funding schemes that enable local organisations to shape research agendas and pilot projects.

Finally, if disasters are not primarily caused by extreme natural events but are produced through long-term decisions about land, housing, infrastructure, and borders, then research agendas need to reflect this understanding. Instead of asking "how can we better predict wildfires, floods, or earthquakes?", Mediterranean disaster research should also ask "which planning decisions, property regimes, and labour arrangements have placed particular populations in harm's way?" and "whose interests are served by current patterns of exposure and protection?".

This does not mean abandoning hazard science or technical expertise. Climate projections, seismic monitoring, and hydrological modelling remain essential tools. However, CDS suggests these tools should be placed in dialogue with historical, political, and economic analysis. For example, wildfire risk assessments might be combined with studies of rural depopulation, agricultural policy shifts, and tourism development trajectories. Earthquake vulnerability mapping could be linked to research on housing markets, zoning amnesties, and informal settlements. Flood risk models might incorporate analysis of wetland conversion, infrastructural investment priorities, and the distribution of drainage systems across different neighbourhoods and social groups.

In practical terms, this means that interdisciplinary collaboration becomes not just desirable but necessary. Geophysical scientists, climate modellers, and engineers need to work alongside sociologists, geographers, historians, anthropologists, and legal scholars. Funding agencies and research institutions in the Mediterranean could support such collaboration by designing calls for proposals that explicitly require integration of natural and social science perspectives, and by valuing outputs that speak to both technical and socio-political dimensions of disaster risk.

In summary, applying CDS to the Mediterranean does not replace existing risk analysis tools, but reorients research and policy towards historical, multi-scalar, and justice-oriented perspectives. It foregrounds the social production of vulnerability, the politics of knowledge and participation, and the links between emergency management and wider structures of housing, labour, water, and border governance.

Conclusion

This article has argued that CDS offers a necessary and productive reorientation for understanding disasters in the Mediterranean. By challenging the naturalisation of disaster, foregrounding the historical production of vulnerability, and interrogating how categories such as risk, resilience, and emergency are deployed in governance, CDS provides conceptual tools that can reshape both analysis and policy in the region.

The Mediterranean's complex disaster landscape, encompassing wildfires, earthquakes, floods, droughts, heatwaves, and migration-related tragedies, has often been approached through hazard-centred, technocratic, and state-centred frameworks. These approaches have generated valuable knowledge and institutional capacity, but they tend to treat disasters as external shocks testing societal preparedness rather than as outcomes of decisions about land, housing, infrastructure, labour, and borders. As this review has shown, such frameworks risk obscuring how exposure and harm are socially produced and unequally distributed, and how apparently technical interventions carry political consequences for whose safety is prioritised and whose precarity is normalised.

CDS begins from a different premise: that disasters are not events but processes, not natural but socio-political, and not anomalies but expressions of deeper structural conditions. Adopting this perspective does not mean dismissing the importance of climatic trends, seismic activity, or hydrological extremes. It means situating these physical processes within the social relations and power structures that determine who lives in fire-prone forests, earthquake-vulnerable buildings, flood-exposed neighbourhoods, or along militarised maritime borders. It means asking not only how to improve early warning systems or building codes, but also why certain populations remain systematically exposed despite decades of disaster risk reduction efforts.

The implications of this shift are significant. Mediterranean disaster research would benefit from longer historical time horizons that trace how land-use regimes, housing markets, agricultural policies, and border governance have assembled present-day vulnerabilities. It would gain from multi-scalar designs that connect local experiences to national regulations, EU policy instruments, and global economic pressures. It would be enriched by greater use of qualitative, ethnographic, and participatory methods that foreground the knowledge and agency of those most affected by disasters, rather than treating them primarily as objects of technical intervention or humanitarian care.

Ultimately, the question posed at the outset, how can Critical Disaster Studies provide an alternative theoretical framework for studying disasters in the Mediterranean?, can be answered as follows: CDS provides a framework that refuses to naturalise disaster, that insists on the political character of risk and vulnerability, that foregrounds historical processes and structural inequalities, and that centres questions of justice, participation, and accountability. In doing so, it does not replace existing tools and methods but reconfigures the problems they are meant to address. It shifts attention from managing the impacts of hazards to interrogating the conditions that make certain populations and places vulnerable in the first place, and from building resilience within existing systems to challenging the systems that produce and distribute risk.

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