

Environmental migrants as victims of 'ecological disorganisation'? Reflections from the Omo-Turkana case study

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Abstract: This article argues that scholarship's attempts to define and protect environmental migration based on a priori categories fail to grasp the complexity of the phenomenon. In particular, most (working) definitions do not recognise environmental victims or victims of ecological disorganisation, as environmental migrants, thus excluding them from recognition and protection. The article deploys an interdisciplinary analysis, based on international human rights law and green criminology to demonstrate that environmental victims may be forced to leave their country and be subjected to severe human rights violations akin to migrants fleeing natural hazards and disasters. Therefore, the article concludes that protection should not be based on labelled environmental causes of migration, rather on their consequences in terms of human rights violations.

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1 Setting the scene for the framing of environmental migration

Despite increasing evidence, data, and awareness of the role played by environmental factors on migration, a legal protection framework for people compelled to flee due to environmentally-related factors is persistently missing at the international level.¹ This is also due to the fact that a holistic definition able to provide comprehensive protection has not been achieved so far, notwithstanding relevant attempts in this direction. In 2007, for instance, the International Organisation for Migration (IOM) set forth a working definition of ‘environmental migration’, which partially reflects the complexity of the phenomenon.² In particular, it covers internal and international movements of both voluntary and forced nature, while stressing the relevant link between changes in the environment, including climate change and migration. Despite these benefits, which justify our choice to use this definition throughout the article, this attempt has not achieved consensus at the international level. Moreover, it does not explicitly refer to environmental harms caused by human activities. Such an exclusion severely limits its scope of application and risks leaving people compelled to flee because of man-made hazards behind. Most other working definitions that have been promoted over the years by scholars similarly neglect the role played by harmful environmental activities in triggering migration and further distinguish between natural or man-made, sudden or slow-onset, environmental or climate drivers.

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- 1 The sources supporting such evidence are increasingly vast. Among many others, see J McAdam ‘Displacement in the context of climate change and disasters’ in C Costello, M Foster & J McAdam (eds) *The Oxford handbook of international refugee law* (2021) 832; DJ Cantor ‘Environment, mobility, and international law: A new approach in the Americas’ (2021) 2 *Chicago Journal of International Law* 263; L van Praag and others (eds) *Migration and environmental change in Morocco* (2021); M Ammer, M Mayrhofer & M Scott ‘Disaster-related displacement into Europe: Judicial practice in Austria and Sweden’ (2022) *ClimMobil Report*; M Mayrhofer & M Ammer ‘Climate mobility to Europe: The case of disaster displacement in Austrian asylum procedures’ (2022) 4 *Frontiers* 1; T Wood ‘Protection and disasters in the Horn of Africa: Norms and practice for addressing cross-border displacement in disaster contexts’ (2013) *The Nansen Initiative*; C Scissa ‘The climate changes: Should EU migration law change as well? Insights from Italy’ (2022) 1 *European Journal of Legal Studies* 5. See also IDMC *Global report on internal displacement* (2021); CB Field and others *IPCC, 2014: Climate change 2014: Impacts, adaptation, and vulnerability. Part A: Global and sectoral aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change* (2014); HO Pörtner and others (eds) *Climate change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* (2022); *The Nansen Initiative Agenda for the Protection of Cross-Border Displaced Persons in the Context of Disasters and Climate Change* (2015).
- 2 IOM *Discussion note: Migration and the environment* (2007) 33: ‘Persons or groups of persons who, for reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or choose to do so, either temporarily or permanently, and who move either within their country or abroad.’

Thus far, academic proposals addressing the issue may be primarily categorised according to (a) the breadth of environmental factors considered, caused broadly by environmental events versus by the sub-category of climate change-related events;³ (b) the nature of the migration trigger, such as natural hazards versus man-made disasters;⁴ (c) the graduality of the event, such as slow-onset versus sudden-onset events;⁵ (d) the protection status to be issued, namely, refugee versus complementary protection statuses;⁶ (e) the spatial dimension, for instance, internal versus international movements;⁷ (f) the temporal dimension, such as temporary versus permanent migration;⁸ (g) the level of willingness to move, meaning voluntary movement versus forced migration;⁹ (h) the prominence given to environmental harm, where environmental harm is seen either as the main cause of migration or one among the complex set of adverse drivers;¹⁰ (i) the legal framework designed to provide protection at the international, regional or national levels.¹¹

Similarly, national provisions providing for protection against environmental causes of migration mostly refer only to natural hazards, thus ignoring the relevance of harmful environmental activities in triggering migration movements. For instance, Angola and Iceland grant protection against natural disasters.¹² Similarly, Cuba foresees protection to persons leaving their country 'due to

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- 3 Among others, F Bierman & I Boas 'Preparing for a warmer world: Towards a global governance system to protect climate refugees' (2010) *Global Environmental Politics* 10; B Docherty & T Giannini 'Confronting a rising tide: A proposal for a convention on climate change refugees' (2009) 33 *Harvard Environmental Law Review* 349; A Williams 'Turning the tide: Recognising climate change refugees in international law' (2008) 30 *Law and Policy* 30; N Myers & J Kent *Environmental exodus: An emerging crisis in the global arena* (1995).
 - 4 Among others, DC Bates 'Environmental refugees? Classifying human migration caused by environmental change' (2002) 23 *Population and Environment* 465; Bierman & Boas (n 3); N Myers 'Environmental refugees: A growing phenomenon of the 21st century' (2002) 357 *Philosophical Transaction B* 609.
 - 5 Bierman & Boas (n 3); F Renaud and others *Control, adapt or flee. How to face environmental migration?* (2007) 5.
 - 6 Among others, E El-Hinnawi *Environmental Refugees* (1985); Bates (n 4); Bierman & Boas (n 3); Docherty & Giannini (n 3); IOM *World Migration report: Managing labour mobility in the evolving global economy* (2008); W Kälin 'Conceptualising climate-induced displacement' in J McAdam (ed) *Climate change and displacement: Multidisciplinary perspectives* (2010) 81; V Kolmannskog & F Myrstad 'Environmental displacement in European asylum law' (2009) 11 *European Journal of Migration and Law* 313; N Subramanian & J Urpelainen 'Addressing cross-border environmental displacement: When can help?' (2013) 14 *International Environmental Agreements: Politics, Law and Economics* 14; Renaud and others (n 5); AH Westing 'Environmental refugees: A growing category of displaced persons' (1992) 19 *Environmental Conservation* 201; JL Jacobson *Environmental refugees: A yardstick of habitability* (1988).
 - 7 D Hodgkinson and others 'Towards a convention for persons displaced by climate change: Key Issues and preliminary responses' (2008) 8 *New Critic* 8.
 - 8 El-Hinnawi (n 6 above); IOM (n 6); Myers & Kent (n 3); UNDESA/DSD & UNU-EHS *Environmentally induced migration and sustainable development* (2011).
 - 9 Kälin (n 6); IOM (n 6).
 - 10 El-Hinnawi (n 6); Bates (n 4); Bierman & Boas (n 3); Docherty & Giannini (n 3); IOM (n 6); Kälin (n 6); Kolmannskog & Myrstad (n 6); Subramanian & Urpelainen (n 6); Renaud and others (n 5).
 - 11 R Zetter *Protecting environmentally displaced people: Developing the capacity of legal and normative frameworks* (2011); Bierman & Boas (n 3); Docherty & Giannini (n 3); Williams (n 3); Myers & Kent (n 3); German Advisory Council on Global Change *World in transition: Climate change as a security risk* (2007).
 - 12 C Hansen-Lohrey 'Assessing serious disturbances to public order under the 1969 OAU Convention, including in the context of disasters, environmental degradation and the adverse

cataclysm or other phenomena of nature'.¹³ Domestic laws in Argentina and Ecuador protect migrants fleeing natural or environmental disasters.¹⁴ The US provides a temporary protection status to persons displaced by, among others, environmental disasters, which may include 'an earthquake, flood, drought, epidemic, or other environmental disaster in the state resulting in a substantial, but temporary, disruption of living conditions in the area affected by the disaster'.¹⁵ An exception is provided for by Italy, which provides different forms of protection to migrants fleeing their country not only on account of 'natural disasters', slow-onset hazards and calamities, but also harmful environmental activities such as irreparable pollution due to oil spills.¹⁶

The phenomenon of environmental migration could hardly be portioned into *ad hoc* legal categories focusing on selected variables. This in fact risks leading to the creation of narrow and fragmented labels, which would ultimately obscure the multifaceted and complex relations between migration and environmental dynamics. In our view, building a definition on *a priori* categories of factors able to trigger environmental migration can hardly reflect the complexity of the phenomenon and risk obscuring societal responsibilities connected to environmental migration. In particular, human activities harming the environment are rarely included among the causes triggering environmental migration, thus excluding people affected by them from recognition and protection.

In this article, we take a stance against such a fragmented approach as it falls short in considering the structural causes forcing people to flee. In other words, the choice to ground (working) definitions, and related protection schemes, upon narrow and pre-selected options could veil the need to engage in a more structured fashion with the different multifaceted aetiologies underpinning environmental migration. These could obviously include natural hazards. However, a proper understanding of the phenomenon should necessarily consider the role played by systemic processes of 'ecological disorganisation' characterising the Anthropocene. This article focuses on this latter aspect.

Specifically, we argue that environmental migration could be aetiologically connected to processes of 'ecological disorganisation' resulting from (neo-liberal) dynamics of production and consumption. 'Ecological disorganisation' includes an array of potential disruptive factors, including widespread disposal of toxic waste, soil contamination, biodiversity depletion, soil degradation. To highlight such a connection without reproducing case-by-case categorisations,

effects of climate change' (2023) UNHCR Legal and Protection Policy Research Series 7; Parliament of Iceland Foreign Nationals Act 80 of 2016 art (43).

13 Reglamento de la Ley de Migraciones Decreto 26 de 1978 art (80).

14 Reglamentación de la Ley de Migraciones Decreto 616 de 2010 sec 24(h); Ley Organica de Movilidad Humana, Suplemento – Registro Oficial 938 de 2017 art (58).

15 R Bernstein Murray & S Petrin Williamson *Migration as a tool for disaster recovery: A case study on US policy options for post-earthquake Haiti* (2011).

16 Scissa (n 1) 14.

this article suggests shifting the focus from *pre-selected* and potentially misleading lists of triggers of environmental migration to the *ex post* evaluation of the consequences stemming from harmful environmental activities in terms of human rights violations. In short, we suggest shifting the perspective from the remit of abstract labels to the realm of factual environmental harms caused by ecological disorganisation. We believe that a deeper understanding of the complex phenomenon of environmental migration, which goes far beyond natural disruptions, benefits from such a harm-based approach as it succeeds in encompassing also those who are usually left out from (working) definitions of environmental migration. Furthermore, the focus on the consequences of environmental harm instead on the causes of flight puts emphasis on human rights breaches and state obligations to respect, to protect and to fulfil the human rights of environmental migrants. This would allow protection instruments to better tackle comprehensively human rights violations linked to environmental factors.

To do so, we combine a conceptual analysis with a legal mindset. More into detail, our research on the relation between ecological disorganisation and environmental migration situates within the broader horizon of green criminological perspectives on ecological issues and related processes of environmental victimisation. By taking this perspective, we conceptualise people forced to leave due to environmental harm as environmental victims. We then use the case study concerning the Omo-Turkana basin to substantiate our argument. This ultimately allows us to infer that 'environmental migrants' is a broad category that *ought to* embed both those who are 'victims' of natural hazards – who are usually recognised as such and granted protection – as well as those who are victims of harmful processes of environmental disorganisation, and thus fall outside protection.

Methodologically, we adopt a mainly descriptive stance based on socio-legal scholarship developed within the realm of international human rights law and critical green criminological studies. This criminological literature will assist conceptualising environmental victimhood, combined with a legal approach in the discussion of the environmental harm's criteria. We selected the Omo-Turkana basin as case study for it provides exemplificative support to the conceptual analysis of this article. In particular, our analysis of this case study is based upon second-hand sources. Among the vast material on this case, we selected contributions by academic scholarship and civil society organisations that empirically found a link between environmental harms and migration movements. In light of the foregoing, we argue for potential human rights violations against concerned populations grounded on international human's rights instruments such as the United Nations (UN) International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR).

This article is organised as follows. Following this introduction, part 2 introduces the notion of ‘environmental disorganisation’ as adopted within green criminological perspectives. On this ground, part 3 then provides a green criminological harm-based understanding of environmental victimhood. Part 4 illustrates the case study, concerning the construction of mega-dams (Gibe I, II and III) by Ethiopia alongside the Ethiopian Gibe Gibe and Omo rivers and the Kenyan Lake Turkana. This case is emblematic of human-induced alterations of an ecosystem and related acute effects on human beings. By assessing potential human rights violations against indigenous groups in the Omo-Turkana basin, part 5 suggests a connection between environmental victimisation and forced migration. Part 6 argues that considering environmental migrants in terms of environmental victims would not only better reflect the multifaceted nature of the phenomenon, but it would also let protection instruments relying on such definitions to comprehensively tackle human rights violations linked to environmental factors. Part 7 offers some concluding observations.

2 Environmental disorganisation in the green criminological scholarship

Referring to ‘victims of ecological disorganisation’, this article (culturally) situates itself within the horizons of green criminological perspectives,¹⁷ which are ‘broadly concerned with human rights, abuse of power, and human suffering irrespective of whether the circumstances are within the ambit of law’.¹⁸ Differently from orthodox criminology, green criminology explores environmental offences¹⁹ and victimisation in terms of harm, injustice and inequalities in relation to societal structures of power imbalances.²⁰ Specifically, in the so-called age of ‘ecological collapse’,²¹ green criminology is pioneering in tracing the roots of many environmentally-disruptive activities within the founding features of our societies and economies and their underlying power structures and interests.²²

Green criminology has emerged as a multidisciplinary and intersectional perspective, primarily grounded in the observation of reality.²³ Its founding

17 Green criminology is not a theory on its own. It rather unfolds as a multidisciplinary discipline, or rather a perspective. On green criminology, see, among the others, MJ Lynch ‘The greening of criminology. A perspective for the 1990s’ (1990) 2 *Critical Criminology* 3; V Ruggiero & N South ‘Critical criminology and crimes against the environment’ (2010) 18 *Critical Criminology* 245; R White *Global environmental harm. Criminological perspectives* (2010).

18 C Williams ‘An environmental victimology’ reprinted in R White (ed) *Environmental crime: A reader* (2009) 200-202.

19 Offence is here meant broadly as to encompass criminal, administrative, and civil illicit behaviours.

20 A Brisman & S Nigel *Routledge international handbook of green criminology* (2020).

21 MJ Lynch ‘Green criminology and environmental crime: Criminology that matters in the age of global ecological collapse’ (2020) 1 *Journal of White Collar and Corporate Crime* 50.

22 L Bisschop *Governance of the illegal trade in e-waste and tropical timber. Case studies on transnational environmental crime* (2015).

23 R Ellefsen and others (eds) *Eco-global crimes contemporary problems and future challenges* (2012); A Brisman *Introdução à criminologia verde: Perspectivas críticas, descoloniais e do Sul* (2022) Tirant Brasil.

aim is to extend the gaze beyond the narrow remit of legally-defined criminal, administrative or civil liabilities to encompass the dimension of what *is* (il) legal as well as, and above all, what *ought to be* illegal.²⁴ To achieve this objective, green criminology investigates hidden forms of victimisation through the interdisciplinary, or inter-sectoral,²⁵ 'harm' criterion.²⁶ This criterion, which traces the social and political origins of certain harmful yet legal behaviours and their factual consequences in the social realm, reflects the broad social harm approach adopted by Hillyard and Tombs. This approach is decoupled from the judicial findings of criminal, administrative or civil liabilities, and draws attention to the interplay between victimisation processes and the societal dynamics prompted by power structures.²⁷ Environmental harm, therefore, includes aspects pertaining to the physical, economic, emotional, psychological, as well as cultural spheres.

Ecological disorganisation is a theoretical approach that intersects with theories of social disorganisation,²⁸ political economy and critical studies, such as green criminology. It has evolved from, and theoretically supports, green criminological empirical research devoted to explore the ontological systemic links between green crimes, injustice, and the structural organisation of capitalism from a political economic standpoint.²⁹ It ties ecological changes and harms stemming from the steering forces of capitalism together by 'drawing attention to the ways in which human preferences for organising economic production consistent with the objectives of capitalism are an inherent contradiction with the health of the ecological system.'³⁰ In other words, ecological disorganisation refers to the capitalist forces that trigger often irreversible alterations in bio-systems through pollution, consumption and exploitation of natural resources. Therefore, this notion discloses the belief that the understanding of green crimes and violence against the planet could not be disentangled from the history of

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- 24 T Spapens, R White & M Kluin *Environmental crime and its victims. Perspectives within green criminology* (2014).
- 25 M Hall *Victims of environmental harm. Rights, recognition and redress under national and international law* (2013).
- 26 A Nurse 'Green criminology: Shining a critical lens on environmental harm' (2017) 3 *Palgrave Communication* 1.
- 27 P Hillyard & S Tombs 'Beyond criminology?' in P Hillyard and others (eds) *Beyond criminology: Taking harm seriously* (2004) 10-29.
- 28 Social disorganisation theories suggest that major changes in urban areas are the result of capitalism-driven large-scale social transitions such as industrialisation and urbanisation. On these theories, and their contribution to cross-cultural criminological studies, see R Bennet 'Development and crime: A cross-national time series analysis of competing models' (1991) 32 *Sociological Quarterly* 346-63. On the connection of these theories with ecological issues, with focus on social impacts of natural resources extraction on local populations, see DS Shoko 'Small-scale mining and alluvial gold panning within the Zambezi basin: An ecological time bomb and tinderbox for future conflicts among riparian states' paper presented at the ninth conference of the International Association of the Study of Common Property The Commons in an Age of Globalisation, Victoria Falls, Zimbabwe (17-21 June).
- 29 MJ Lynch & MA Long 'Green criminology: Capitalism, green crime and justice, and environmental destruction' (2022) 5 *Annual Review of Criminology* 255; MJ Lynch and others *Green criminology and green theories of justice: An introduction to a political economic view of eco-justice* (2019).
- 30 MJ Lynch and others 'Is it a crime to produce ecological disorganisation? Why green criminology and political economy matter in the analysis of global ecological harms' (2013) 53 *British Journal of Criminology* 997.

capitalism and from its inherent contradictory and conflicting relation with nature.³¹

This theoretical construct has then prompted additional strands of research, such as the treadmill of production (ToP) theory.³² The ToP points to capitalism's inherent necessity to destroy nature to fuel the growth of production and, ultimately, profit accumulation. This interpretation of the capitalism-nature relationship resonates strong in the work of McCarthy and Prudham who claim that neo-liberal capitalism *necessarily* is an environmental project, that is, an ontological project of environmental destruction.³³

The connection between green criminological perspectives and the theoretical notion of 'ecological disorganisation' reveals more than a cultural affinity. It rather represents a synergy that uncovers qualified victimisation processes. Green criminology focuses on harms, thereby acknowledging environmental 'victims' even where formal legal violations are absent. Concurrently, 'ecological disorganisation' pinpoints the aetiology of the harms that lead to such victimisation within the extractive capitalist logics at the heart of our societies. On this foundation, Lynch and others pose the though-provoking question on whether 'ecological disorganisation' should not be conceived, from a green criminological perspective, in terms of a crime of capitalism against nature and its related social spheres.³⁴

This theoretical frame allows inferring that forced environmental migrants and environmental victims are intertwined when migration is the direct outcome of such destructive processes of ecological disorganisation. Consequently, 'ecological disorganisation' is hereby referred to as activities transforming nature for economic purposes: The environmental harms pertinent to this article arise from such disorganisation.

3 Environmental victimisation

'Environmental victim' is a complex notion that raises multiple complex issues in terms of legal and procedural recognition of it.³⁵ At the international level,

31 Lynch and others (n 30) 1009.

32 A Schnaiberg *The environment: From surplus to scarcity* (1980); P Stretesky and others *The treadmill of crime. Political economy and green criminology* (2014). Despite differences, ecological Marxism falls within these strands, as it presents capitalism-nature relations in terms of radical contradictions and conflicts. See JB Foster *Marx's ecology: Materialism and nature* (2000); K Saito *Karl Marx's ecosocialism: Capital, nature, and the unfinished critique of political economy* (2017).

33 J McCarthy & S Prudham 'Neoliberal nature and the nature of neoliberalism' (2004) 35 *Geoforum* 275.

34 Lynch and others (n 30) 1005.

35 Hall (n 25); E Skinnider *Victims of environmental crime – Mapping the issues* (2011); H Croall 'Victims of white-collar and corporate crime' in P Davies and others (eds) *Victims, crime and society* (2007) 78.

a definition of environmental victim is still missing except for the 1994 UN Commission on Crime Prevention and Criminal Justice that adopted a resolution on environmental crimes, urging states to consider including 'the rights of identifiable victims in their legal systems, victims assistance, facilitation of redress and monetary compensation'.³⁶

For the purposes of this work, it should be highlighted that most of the issues and uncertainty surrounding environmental victimisation rest within the binomial association victim-crime. Specifically, this is problematic because what 'crime' *is* ultimately depends on how society considers certain conducts. Criminalisation in fact is the outcome of entrenched social, political, economic, and cultural factors that shape the axiological foundations of that society.³⁷ Therefore, the conception of what is '*lawful but awful*' largely varies according to the type of society in which the harmful conduct occurs. Shades characterising what environmental crime entails ultimately determine uncertainty regarding the understanding of environmental victimhood.³⁸

This is where green criminology intervenes by bringing a fresher and critical perspective on the matter, for it questions the legitimacy of this binomial association victim-crime on the empirical and theoretical ground that most polluting and environmentally destructive human practices are not only sanctioned but also promoted by states. Already in 1996, Williams was pioneering in acknowledging the 'limits of law' in addressing environmental victimisation.³⁹ Also drawing from concepts of environmental justice, he coherently advocated a broader definition of environmental victim as 'those of the past, present or future generation who are injured as a consequence of change to the chemical, physical, microbiological or psychological environment, brought about by deliberate or reckless, individual or collective, human act or omission'.⁴⁰

While this definition has long served as the principal reference point for identifying environmental victims, it has become incongruous with the evolving ethos of green criminological research, which extends beyond the confines of legal remit. This is because Williams built such definition upon the legalistic 'injury' criterion to ensure judicial workability within legal systems. However, this criterion is narrower than the social harms advocated by Hillyard and Tombs, for it is bound to judicial determinations of liability. Differently, harms-based criteria, which are disentangled from 'unlawful harms', align better with green criminological perspectives on environmental victims,⁴¹ conceptualised as 'real,

36 UN Economic and Social Council *The role of criminal law in the protection of the environment* (1994).

37 Skinnider (n 35); MJ Lynch & P Stretesky 'The meaning of green: Contrasting criminological perspectives' (2003) 7 *Theoretical Criminology* 217.

38 N Passas 'Lawful but awful: 'Legal corporate crimes'' (2005) 34 *Journal of Socio-Economics* 771.

39 Williams (n 18 above) 16.

40 Williams (n 18) 35.

41 R White *Environmental harm: An eco-justice perspective* (2014).

complex, contradictory, and often politically inconvenient victims.⁴² In short, social harm approaches allow detecting environmental detrimental activities that not only stem from entirely lawful activities but also receive the state's political/economic support.⁴³ As further analysed, the Omo-Turkana case exemplifies environmental disruptions that, in Skinnider's words 'are actually legal and take place with the consent of society',⁴⁴ and that often are instrumental in preserving the ruling classes' power, as this article's case study highlights.

In light of the foregoing, we rely upon the environmental harm approach as developed by the green criminological scholarship to showcase the connection between environmental migration and environmental victims.⁴⁵ The choice to assess victimisation from a harm perspective is a path already explored by the international legal framework. In this respect, a promising starting point is the UN Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power, of which article 18 provides a definition for victims of abuse of power that includes actions and omissions that do not constitute crimes, but simply lead to a person or persons suffering harm. In this respect, we shall not attempt to reach a formal definition of this parameter. As White recommends, one should discuss harm on the basis of the real world of conflicts over rights outside formal labels.⁴⁶ However, the assessment of environmental harm and related victimhood cannot be established only by considering individuals' subjective perception of harm, as pointed out by Williams.⁴⁷ Therefore, for the purpose of legal certainty, the following analysis assesses harm by relying upon two objective criteria, entailing both an empirical and a legal dimension: Environmental degradation and human rights.

3.1 Environmental degradation and human rights

As for the empirical criterion, we suggest relating environmental harm with processes of environmental degradation. The UN Office for Disaster Risk Reduction (UNDRR) defines environmental degradation as the reduction of the capability of the environment to meet social and ecological objectives and needs.⁴⁸ This definition highlights both the physical harm against the natural

42 T Kearon & B Godey 'Setting the scene: A question of history' in S Walklate (ed) *Handbook of victims and victimology* (2007) 17.

43 C Gibbs and others 'Introducing conservation criminology: Towards interdisciplinary scholarship on environmental crimes and risks' (2010) 50 *British Journal of Criminology* 124 define the notion of 'deep' green perspective which construes environmental crime as any human activity that disrupts a biotic system.

44 Skinnider (n 35) 2. At 16, Skinnider notes that 'it can be difficult to fully separate the question of what is illegal from what should be illegal'.

45 On this criterion, see White (n 17); T Spapens and others *Environmental crime and its victims perspectives within green criminology* (2014); Hall (n 25); L Natali *Green criminology. Prospettive emergenti sui crimini ambientali* (2015).

46 White (n 17).

47 Williams (n 18) 16.

48 UNDRR *United Nations International Strategy for Disaster Reduction (UNDRR) Secretariat Evaluation* (2010).

matrices and its social dimension. In other words, the sustainability of human livelihood is strictly linked to the preservation of the environment and depends on one another. A non-exhaustive list of examples of man-made processes of environmental degradation includes a 'land misuse, soil erosion and loss, desertification, wild land fires, loss of biodiversity, deforestation, mangrove destruction, land, water and air pollution, climate change, sea level rise and ozone depletion'.⁴⁹ The UNDRR definition, though, falls short in explaining how to assess when 'the reduction of the capability of the environment to meet social and ecological objective' occurs. In other words, it is unclear what is the required threshold of serious or significant degradation for the physical criterion of environmental harm to be met. To address this issue, as later discussed, we will follow a socio-ecological system lens to discuss environmental degradation within the context of the Omo-Turkana case study.

With regard to the legal criterion, Hall discusses the impacts of environmental harm on health, economic, and socio-cultural aspects.⁵⁰ Similarly, Williams and White suggest connecting environmental victimisation with human rights violations and abuse of power.⁵¹ In the same vein, we adopt a human rights-based approach to assess environmental victimhood. To this end, the two 1966 international covenants are of guidance. Notably, ICESCR and ICCPR set forth essential obligations to respect, fulfil and promote human rights, also in the context of harmful environmental activities.⁵² The Committee on Economic, Social and Cultural Rights (ESCR Committee) noted already in 2018 that '[q]uite apart from such voluntary commitments made under the climate change regime, however, all states have human rights obligations, which should guide them in the design and implementation of measures to address climate change'.⁵³

This interpretation has been endorsed also by the ICCPR treaty-monitoring body, the UN Human Rights Committee (UN HRC) in its General Comment 36 on the right to life. In this respect, it made clear the connection between environmental degradation and states' obligation under the international human rights regime, by stating that '[e]nvironmental degradation, climate change and unsustainable development constitute some of the most pressing and serious

49 As above.

50 Hall (n 25) 27.

51 Williams (n 18) and White (n 17) suggest referring to victims of abuse of power as defined by the UN General Assembly's 1985 Declaration of Basic Principle of Justice an Abuse of Power, as 'persons who, individually or collectively, have suffered harm, including physical or mental injury, emotional suffering, economic loss or substantial impairment of their fundamental rights'.

52 A Pillay 'Economic, social and cultural rights and climate change' in OC Ruppel and others (eds) *Climate change: International law and global governance* (2013) 243; UN Economic, Social and Cultural Rights Council General Comment 15 on the Right to Water (2012) para 28; ESCR Committee General Comment 14 on the right to health (2000) para 27.

53 ESCR Committee Climate change and the International Covenant on Economic, Social and Cultural Rights (2018) para 20.

threats to the ability of present and future generations to enjoy the right to life.⁵⁴ It goes further, by stressing:⁵⁵

The implementation of the obligations to ensure the right to life, and in particular life with dignity, depends, *inter alia*, on measures taken by States parties to preserve the environment and protect it against harm, pollution and climate change caused by public and private actors. States parties should therefore ensure sustainable use of natural resources, develop and implement substantive environmental standards, conduct environmental impact assessments and consult with relevant States about activities likely to have a significant impact on the environment, provide notification to other States concerned about natural disasters and emergencies and cooperate with them, provide appropriate access to information on environmental hazards and pay due regard to the precautionary approach.

Increasingly, international and regional monitoring bodies have recognised the environmental implications stemming from the breaches of such international human rights obligations. For instance, in the case *Social and Economic Rights Action Centre (SERAC) & Another v Nigeria (SERAC)* before the African Commission on Human and Peoples' Rights (African Commission), Nigeria was held responsible for the drastic health and environmental impacts of oil exploration in Ogoniland due to the contamination of water on indigenous land with lead and mercury affecting the community's health, particularly that of the children.⁵⁶ Similarly, the UN Commission on Human Rights has stated that the contamination of the areas inhabited by people by various toxic wastes is considered a violation of fundamental social and economic rights.⁵⁷ More recently, the UN HRC observed that Paraguay failed to prevent and control the toxic contamination of indigenous lands in violation with the indigenous community's rights.⁵⁸ The use of fumigation and illicit agrochemicals for a decade drastically reduced the natural resources needed to support their survival, largely based on subsistence crops, hunting and fishing. Environmental harm led to a number of intangible repercussions, such as severe health issues and a loss of traditional knowledge, indigenous rituals as well as community structure as families were forced to leave their land.

4 The Omo-Turkana case study

Ethiopia has for a long time experienced the severe challenges correlated to climate change and harmful environmental activities.⁵⁹ In particular, invasive development projects are further exacerbating Ethiopians' vulnerability and loss

54 ESCR Committee General Comment 36 on the right to life with dignity (2018) para 62.

55 As above.

56 (2001) AHRLR 60 (ACHPR 2001).

57 UN Commission on Human Rights *Adverse effects of the illicit movement and dumping of toxic and dangerous products and wastes on the enjoyment of human rights by the Special Rapporteur on Toxic Waste, Fatma-Zohra Oubachi-Vesely* (2001).

58 *Portillo Cáceres v Paraguay* Communication 2751/2016 UN Human Rights Committee (20 September 2019) UN Doc CCPR/C/126/D/2751/2016.

59 NA Webster 'Ethiopia, climate change and migration' (2019) *DIIS Comment*.

of livelihood. Ethiopia, in fact, has massively invested in hydropower dams.⁶⁰ The development of such infrastructures has been pursued since 2005 by the former ruling coalition, the Ethiopian People's Revolutionary Democratic Front (EPRDF), to exploit the country's enormous hydroelectric capability, estimated to range between 30 000 and 45 000 MW.⁶¹ The Ethiopian government aimed to fulfil its economic and political ambitions to make Ethiopia the main energy provider of the region, able to export electricity to neighbouring countries, such as Kenya, Djibouti and Sudan. Such expansive policies reflected EPRDF's attempts to resort to an authoritarian model of 'developmental state', which grounded its political legitimisation and popular consent upon the achievement of ambitious growth objectives.⁶²

The Ethiopian government presented the Gibe III mega-dam, Africa's third-largest hydroelectric plant, as the main flagship of its whole hydropower programme, essential to support its energy exportation goals.⁶³ However, no environmental impact assessment was conducted prior to the approval of the construction of Gibe III.⁶⁴ As Woldergebrael reported, national authorities cut off public participation, impeding the involvement in the decision making of local communities, including around 500 000 indigenous pastoralists, agropastoralists and fishers who lived along the Omo-Turkana basin and largely depended upon the preservation of the fragile ecosystem of the Omo river.⁶⁵ In addition, a no-bid engineering procurement and construction contract was granted to the Italian corporation Salini Impregilo SpA, following derogatory and fast-track decision-making procedures.⁶⁶ The massive Gibe III plant vividly portrayed the EPRDF's developmentalist strategy aimed at reshaping the use of natural resources according to the party's own power interests.⁶⁷ In light of foregoing, the next sub-section tests the previously-discussed harm-based conceptualisation of environmental victim against the impact of Gibe III on the Omo-Turkana basin. The analysis presents this case as an example of 'ecological disorganisation'. Precisely, it stands as a capitalist-driven form of nature exploitation, which effects could be appreciated in terms of environmental degradation as well as of human rights impacts, consistently with the environmental harm sub-criteria earlier seen.

60 National Planning Commission 'Growth and transformation plan ii' (2015) *Federal Democratic Republic of Ethiopia*.

61 Campagna per la Riforma della Banca Mondiale *The Gilgel Gibe affair. An analysis of the Gilgel Gibe hydroelectric projects in Ethiopia* (2008); CJ Carr *River basin development and human rights in Eastern Africa – A policy crossroads* (2017).

62 F Gebresenbet 'Securitisation of development in Ethiopia: The discourse and politics of developmentalism' (2014) 41 *Review of African Political Economy* 64; C Clapham 'The Ethiopian developmental state' (2018) 39 *Third World Quarterly* 1151.

63 The official assessment on Gibe III environmental and social impacts was completed only in 2009, three years after the inception of the project. EEPSCO 'Gibe III Hydroelectric project' (2009).

64 Campagna per la Riforma della Banca Mondiale (n 61).

65 EH Woldegebrael 'The materialisation of 'developmental state' in Ethiopia: Insights from the Gibe III Hydroelectric Development Project Regime, Omo Valley' (2018) 35 *L'Espace Politique*.

66 Woldegebrael (n 65) 15.

67 E Fantini & L Puddu *Ethiopia and international aid: Development between high modernism and exceptional measures* (2016).

This allows to infer a connection between potential processes of environmental victimisation and migration phenomena occurred in the area.

4.1 The Omo-Turkana basin as social-ecological system

Hodbod and others conducted empirical research of the social and environmental consequences arising from the dam projects, utilising the social-ecological system (SES) as their theoretical framework.⁶⁸ An SES is the result of complex adaptive systems characterised by dynamic interactions cross-scale interaction, self-organisation, and the potential for abrupt shift, such as regime changes. The resilience of an SES is a central notion of this theoretical frame, referring to its ability to withstand disturbances and alterations while continuing to supply essential ecosystem services, such as fresh water or favourable climate conditions, to the society it sustains.⁶⁹ Resilience, therefore, underscores the reciprocal links between human and ecological domains constituting SESs.⁷⁰ As previously mentioned, environmental harm is predicated on the ‘environmental degradation’ sub-criterion. Yet, there is a lack of clarity in both international and academic text regarding the definition of ‘degradation.’ For this reason, we adopt the socio-ecological analysis by Hodbod and others, which provides empirical and comprehensive evidence of the impacts that the Gibe III project – here meant as an exogenous human factors – have on the interrelated humane and natural aspects, in line with the broader concept of ecological disorganisation.

Under these premises, Ethiopia could be considered a macro-SES, characterised by a number of sub social-ecological systems, among which the Omo-Turkana basin. In this regard, Gibe III represents an exogenous technological driver, the aim of which is to extract certain essential services, that is, electric power from local rivers, to the benefit of the macro-system Ethiopia. This energetic exploitation of the Omo-Turkana sub-system, however, is not sustainable from a resilience perspective. Indeed, while the energy policy could lead to economic and strategic advantages to the macro-system Ethiopia in the long-term, it also jeopardises, in a potential irreversible way, the capability of the Omo-Turkana sub-system to be resilient and to provide local populations with traditional and essential services.

Several studies have substantiated the environmental damages caused by the construction of Gibe III.⁷¹ This dam, because of its position and dimension, is

68 J Hodbod and others ‘Social-ecological change in the Omo-Turkana basin: A synthesis of current developments’ (2019) 48 *Ambio* 1099.

69 B Walker and others ‘Resilience, adaptability and transformability in social-ecological systems’ (2004) 9 *Ecology and Society* 5; CS Holling ‘The resilience of terrestrial ecosystems: Local surprise and global change’ (2009) *Policy Problems and Approaches* 64.

70 E Biggs *Principles for building resilience sustaining ecosystem services in social-ecological systems* (2015) 251.

71 Hodbod and others (n 68); Carr (n 61); S Avery *Lake Turkana ad the lower Omo: Hydrological impacts of major dam and irrigation developments* (2012); Human Rights Watch *What will*

deemed to have reduced consistently and, if not halted, the Ethiopian Omo river's flow. The Omo river being the main tributary of the Kenyan Lake Turkana, Gibe III consequently also affected this lake.⁷² As available data demonstrate, Gibe III has caused several environmental damages affecting both the quality and quantity of water available to the down-stream regions. In particular, hydrological, ecological and biological adverse impacts have been found.⁷³ Indeed, the filling of the Gibe III reservoir has determined a drastic reduction of water inflows in Lake Turkana, whose water levels declined by more than 1,5 meters between 2015 and 2017.⁷⁴ Furthermore, Gibe III has damped seasonal flow variability in the Omo river constraining the annual flood pulse. From an ecological point of view, the decrease of water from the Omo river has affected the microbiological structure of Lake Turkana's waters. Indeed, since the Omo river supplies 90 per cent of the inflows of Lake Turkana, its water reduction also caused a significant decrease of vital nutrients and of cyanobacteria, which are vital for sustaining the lake's fish species.⁷⁵ On this behalf, Lake Turkana is home to over 60 species of fish, ten of which are endemic to the lake. The hydrological regime change is expected to reduce the lake biomass by up to 50 per cent.⁷⁶ This is because reduced inflow from the Omo river will lead to a concomitant increased salinity of the water and a reduction in the lake's nutrient levels, damaging several fish species' capability to reproduce and to survive.⁷⁷

Such ecosystemic changes determined social and economic damages indigenous communities' main economic means of survival. Fisheries – which constitute a traditional and flourishing source of interregional trade among indigenous populations in Kenya, Uganda and the eastern Democratic Republic of the Congo (DRC) – have been affected by the hydrologic changes in Lake Turkana.⁷⁸ Other traditional livelihood strategies – such as agriculture, pastoralism and rainfed farming – have been also endangered by the reduction in the river flows and by the degradation of wildlife habitat.⁷⁹ The disruption of these traditional livelihoods is expected to irremediably hamper the food security of the populations settled along the Omo-Turkana basin.⁸⁰

In light of the foregoing, the fierce exploitation for energetic purposes of the Omo river has affected the equilibrium of that system by hampering its

happen if hunger comes? Abuses against the indigenous peoples of Ethiopia's lower Omo Valley (2012); International Rivers *La diga Gibe 3 in Etiopia: fonte di carestie e conflitti* (2009).

72 S Avery *What future for lake Turkana: The impact of hydropower and irrigation development on the world's largest desert lake* (2013).

73 Hodbod and others (n 68) 1103.

74 USDA Foreign Agricultural Service 'Lake Turkana' (2017).

75 NJ Gownaris 'Fisheries and water level fluctuations in the world's largest desert lake' (2017) 10 *Ecohydrology* e1769.

76 Avery (n 71).

77 Hodbod and others (n 68) 1104.

78 Hodbod and others (n 68) 1106.

79 Hodbod and others (n 68) 1105-1106.

80 EG Stevenson & L Buffavand 'Do our bodies know their ways? Villagisation, food insecurity, and ill-being in Ethiopia's lower Omo Valley' (2018) 61 *African Studies Review* 109.

capacity to fulfil local populations' essential needs. Therefore, Gibe III illustrates the dire consequences of policy failure in implementing adequate resource governance consistent with SES's adaptation capacity.⁸¹ The former government's reorganisation of society's livelihood in the Omo-Turkana system triggered a forced and disruptive transformation process affecting the whole Omo-Turkana SES, whose economic, social and cultural conditions are no longer tenable.⁸² Reported cases of migration and conflicts in the area under review – exacerbated by food insecurity, economic crisis, and increasing competition over natural resources – are clear indicators of such a violent transformation process towards a new social equilibrium.⁸³ In the next part we suggest a connection between such migrations flows and processes of environmental victimhood, here conceived as the failure to build resilience and to strengthen adaptability to changes.

5 Human rights violations as outcome of environmental victimisation and migration

Arguably, Ethiopia has not taken into duly account the severe socio-economic, cultural, and environmental impacts of the construction of mega-dams along the Omo river. This led to, among others, severe environmental degradation and water scarcity within and across national borders, which irremediably affect the ecosystems of flora and fauna as well as the survival of indigenous populations living alongside the Omo river. Whereas internal and international migration movements have been used traditionally by indigenous groups as coping strategies to adapt to traditional semi-arid areas, the increasing dispossession of their land, prolonged droughts and water scarcity triggered by the mega-dams over the last years have been reportedly driving migration as measure of last resort. The majority of Ethiopia's nearly 110 000 million inhabitants are dependent on agriculture for their livelihoods. According to a recent study, emigration from Ethiopia between 2018 and 2020 has, among others, been 'potentially attributable to the region's comparative vulnerability to climate-related disasters such as floods, cyclones, and droughts during this period.'⁸⁴ Indeed, almost 2 000 survey respondents indicated that their reason to leave Ethiopia was related to natural hazards. In such a dire context, the recent construction of Gibe III is deemed to have disrupted further their means of survival. According to Carr's findings, '[w]hole segments of these indigenous groups have been forced to migrate to lands along the Omo river and around the shores of Lake Turkana in recent years.'⁸⁵ In particular, Carr found

81 T Plieninger & C Bieling *Resilience and the cultural landscape understanding and managing change in human-shaped environments* (2012) 283.

82 B Walker and others 'Resilience, adaptability and transformability in social-ecological systems' (2004) 9 *Ecology and Society* 5.

83 Stevenson & Buffavand (n 80); L Buffavand "The land does not like them': Contesting dispossession in cosmological terms in Mela, south-west Ethiopia' (2016) 10 *Journal of Eastern African Studies* 476.

84 E Nelson & S Khan 'Climate and migration in East and the Horn of Africa: Spatial analysis of migrants' flows data' (2021) *Harvard Humanitarian Initiative* 14.

85 Carr (n 61) 11.

that thousands of people belonging to the Dasanech's indigenous community were compelled to migrate from Ethiopia to the north-eastern shores of Lake Turkana in Kenya and joined other members of their community. In other words, since the inception of Ethiopia's aggressive development projects, indigenous groups have allegedly been forced to move across international borders primarily due to harmful environmental activities. This part explores potential violations of core human rights of indigenous groups due to environmental harm under international human rights law. The analysis benefits from leading cases decided by the UN HRC on similar matters.

Both Ethiopia and Kenya are parties to ICCPR and ICESCR and, thus, have been bound to respect, fulfil and promote the human rights enshrined therein. In the case of the Omo-Turkana case study, there seems to be strong evidence of disruption of a core set of human rights respectively protected under the two covenants. To begin with, well-documented episodes of forced relocation carried out by the Ethiopian authorities have been reported together with violent repression of indigenous' protests. In addition, the government is deemed to have failed to conduct genuine and comprehensive community consultations prior to the inception of the mega-dam projects in the region nor a transparent impact assessment.⁸⁶ Thus, Ethiopia seems to have disregarded the international requirement of collecting the free and informed consent of concerned indigenous communities, who have been not sufficiently informed about the dramatic socio-economic, cultural and environmental impacts of Gibe III on their livelihood. The construction of Gibe III deprived Indigenous Peoples of their main economic activities and sources of survival, which seems not compliant with article 1 of both international covenants, that enshrines the right to self-determination, the inherent freedom of all people to pursue their economic, social and cultural development, as well as the prohibition to be deprived of their own means of subsistence.

The harmful consequences on the local populations' sources of survival could also be of relevance under the right to life under article 6 of ICCPR, which the UN HRC defined as 'the supreme right' and established that no derogation is admissible under any circumstances.⁸⁷ Given its foundational character, scholars have argued that the right to life is part of customary international law, has the character of a *jus cogens* norm, and creates obligations *erga omnes*.⁸⁸ The UN HRC also noted that a state's failure to take appropriate measures or to exercise

86 International Rivers (n 71); Survival International *National contact point for the OECD guidelines. Specific instance submitted to the Italian NCP on 11 March 2016 by Survival International Italia against Salini Impregilo SpA* (2016).

87 UN Human Rights Committee (n 52).

88 P Gormley 'The right to life and the rule of non-derogability: Peremptory norms of *jus cogens*' in B Ramcharan (ed) *The right to life in international law* (1985) 120; R Higgins 'Derogations under human rights treaties get access arrow' (1976) 48 *British Yearbook of International Law* 281.

due diligence to prevent, punish, investigate or redress the harm caused by its agents, private persons, entities may also breach article 6.⁸⁹

Article 27 of ICCPR protects the rights of minorities, who shall not be denied the right, in community with the other members of their group, to enjoy their own culture, to profess and practice their own religion, or to use their own language. As indigenous groups can be minority groups, state parties must ensure their full protection as well.⁹⁰ Arguably, Ethiopia might have violated article 27 of ICCPR insofar as the construction of Gibe III deprived Indigenous Peoples of their main economic activities and sources of survival. Forced migration and relocation from areas traditionally inhabited by indigenous groups are further elements substantiating the claim. The UN HRC has recently decided a similar case.⁹¹ In its views, adopted in September 2022, on the case of *Daniel Billy & Others v Australia (Torres Strait Islanders Petition)*, the UN HRC held that the unavailability of natural resources, alternative means of subsistence and humanitarian aid had direct repercussions on the Indigenous Peoples' homes, private and family lives, their collective ability to maintain a traditional way of life and to transmit their customs and culture to future generations in a matter that is incompatible with article 27 of ICCPR.⁹² Similarly, the construction of megadams along the Omo-Turkana basin has reportedly damaged indigenous groups' way of life, customs, and traditions and restricted access to their traditional livelihoods.

With specific reference to ICESCR, article 12 on the right to water state that all state parties should ensure adequate access to water for subsistence farming and for securing the livelihoods of indigenous and nomadic communities. The UN Economic, Social and Cultural Rights Council argued that state parties have substantive obligations to prevent threats to health from unsafe and toxic water conditions, ensure that natural water resources are protected from contamination by harmful substances and pathogenic microbes.⁹³ Moreover, states must refrain from unlawfully diminishing or polluting water, air and soil and must adopt necessary and effective legislative and other measures to restrain third parties from polluting and inequitably extracting water. This interpretation has been recently endorsed by the OHCHR, which recognised that safe, sufficient water

89 UN Human Rights Committee General Comment 31: The nature of the general legal obligation imposed on States Parties to the Covenant (2004) para 8.

90 UN Human Rights Committee General Comment 23: Article 27 on the Rights of Minorities (1994) para 1.

91 *Daniel Billy & Others v Australia* Communication 3624/2019 UN Human Rights Committee (18 September 2023), UN Doc CCPR/C/135/D/3624/2019, paras 8.9-8.14. For an analysis of the case, see M Cullen "Eaten by the sea": Human rights claims for the impacts of climate change upon remote subnational communities' (2018) 9 *Journal of Human Rights and the Environment* 171; M Feria-Tinta 'Torres strait islanders: United Nations Human Rights Committee delivers ground-breaking decision on climate change impacts on human rights' (2022) *EJIL: Talk!*; C Voigt 'UNHRC is turning up the heat: Human rights violations due to inadequate adaptation action to climate change' (2022) *EJIL:Talk!*

92 Human Rights Committee in *Billy & Others* (n 91) paras 8.9-8.14.

93 UN Economic, Social and Cultural Rights Council (n 52).

and healthy aquatic ecosystems are essential for protecting basic human rights, such as the right to health and to food, and to eradicate poverty.⁹⁴ However, Indigenous Peoples in Ethiopia have reportedly been forced to drink dangerously polluted water, as they have been deprived of healthy water by the mega-dam plantation. Indeed, the regulation of Omo river flow has eliminated the annual flood pulse of the river, with a consequent significant drop in the Lake Turkana's water levels.⁹⁵

It has been estimated that Gibe III could reduce the Omo river's downstream flow volume by at least 60 to 70 per cent with a consequent dramatic retreat of 8 to 10 kilometres of the northern and central portions of Lake Turkana. This radical reduction would destroy entire vegetal and animal ecosystems, which are vital to the survival of indigenous pastoralists, agropastoralists and fishers. Additionally, no specific health measure has been provided to the indigenous communities, whose access to traditional natural medicaments, made of plants and herbs, has been restricted given the lake retreat. Furthermore, there have been reports of diseases and deformity spreading among the communities because they had no alternative but to drink the fluoride water of Lake Turkana. These omissions and severe health impacts seem to disregard the right to health, also protected under article 16 of the African Charter on Human and Peoples' Rights (African Charter). Already in 2000, the ESCR Committee called on states to provide Indigenous Peoples with specific, culturally-appropriate measures to improve their access to health services and care, while condemning development-related activities that lead to forced displacement and eviction of Indigenous Peoples.⁹⁶ In doing so, Ethiopia may have also damaged Indigenous Peoples' rights to an adequate standard of living that, pursuant to article 11 of ICESCR, includes the rights to food, clothing, housing, and to the continuous improvement of people's living conditions as well as to be free from hunger and malnutrition. Additionally, and contrary to the official presumption that local populations would benefit from the mega-dams, the intense production of electricity have almost exclusively supported the industrial, agro-industrial and commercial sectors along with government entities. The unaffordable electricity costs in Ethiopia, estimated to rise at least of 200 per cent according to the World Bank, is projected to persistently leave marginalised groups without electricity, whose living standards thus will probably worsen.⁹⁷

Beyond international obligations, Ethiopia may be considered to be responsible under two specific provisions of the African Charter, the main regional human rights treaty. The mega-dam plan may be held accountable of violation of article 21 of the African Charter on the right of all peoples to freely dispose of their

94 UN Human Rights Office *Human rights and the global water crisis: Water pollution, water scarcity and water-related disasters* (2021) 4.

95 Hodbod (n 68).

96 UN Economic, Social and Cultural Rights Council (n 52).

97 World Bank *The eastern electricity highway project under the first phase of the Eastern Africa power integration programme* (2012).

wealth and natural resources. As prescribed by the African Charter, this right shall be exercised in the exclusive interest of the people, who shall never be deprived of it. Similarly, according to Survival International, article 24 on right to a general satisfactory environment favourable to people's development had been disregarded. To date, the case is still pending before the African Commission.

In light of the foregoing analysis, the construction of Gibe III may have led to severe violations of the human rights of hundreds of thousands of indigenous groups settled along the Omo river, who in the near future might have no other choice but to systematically move to Kenyan Lake Turkana, thus potentially giving rise to cross-border movements of environmental migration.⁹⁸

6 A case towards a holistic protection

White conceptualises 'environmental harm' in terms of 'ecological harm', namely, a social harm that affects the relational realm between human beings and the environment.⁹⁹ This conceptualisation is grounded on the philosophical understanding of socio-ecological relations based on ecocentrism¹⁰⁰ and endorses the idea that social justice is intrinsically related to ecology. While ecocentrism does not neglect human needs, such as economic necessities, it rather attempts to strike a fair balance between an instrumental use of nature for human purposes and the biocentric conceptions of nature as enjoying an inner value. In building the environmental harm parameter on the above-discussed concurring criteria, we aim to echo White's perspective. Coherently with the notion of 'ecological disorganisation', environmental harm could be conceptualised as the failure of developing non-exploitive relations between human beings and the non-human realms, being ecological destruction and human misery intrinsically intertwined.¹⁰¹

It follows that environmental victims are the outcome of such a failure, that is, of 'ecological disorganisation' due to economic-driven processes of nature alternation. More into detail, 'environmental victimhood' enshrines the thick conceptualisation of environmental harm in ecological terms and manifests a unique complexity that differentiates such category of victims from others falling under more neutral labels, such as 'victims of environmental crimes' or 'victims of environmental illicit behaviours'. Whereas these latter notions generically refer to people somehow affected from whatsoever activities in violation of environmental laws and regulations, the green criminological notion of 'environmental

98 E Nabenyo 'Climate-induced involuntary migration: Nomadic pastoralists' search for elusive pastures in Kenya' (2020) 64 *Forced Migration Review* 10.

99 See also White (n 41).

100 Ecocentrism supports the idea that 'humans and their activities are inextricably integrated with the rest of the natural world in communal or communal-like arrangements'. BK Steverson 'Ecocentrism and ecological modelling' (1994) 16 *Environmental Ethics* 71.

101 M Halsey & R White 'Crime, eco-philosophy and environmental harm' (1998) 2 *Theoretical Criminology* 345.

victimhood' conceives affected persons as living entities in-between nature. In other words, it refers to the harm to the net of relations that, in Friskics' words, constitute the 'relational milieu of actual concrete being-with-others', in which relation refers to 'physical, sensorial action experiences with living beings, human and non-human alike'.¹⁰² For example, environmental victimhood can be assessed with regard to communities living on a river's delta shore devastated by decades of oil leakage provoked by oil-drilling activities or to urban communities living in the proximity to maxi-industrial sites.¹⁰³ As a corollary, environmental victimisation entails a supra-individual dimension, because it does not stem from single inter-individual violent actions, rather from an act of violence perpetrated against an entire ecosystem. As such, environmental victimhood is not socially neutral. Precisely, in White's words, environmental victimhood is 'a social process that involves dimension of time and space, behaviours involving acts, omissions, and social features pertaining to powers and collectivises and, as such, is never socially neutral'.¹⁰⁴

This deep understanding of human beings as living entities in-between nature meaningfully characterises the harm-based status of forced environmental migrants as the outcome of violent processes of 'ecological disorganisation'.¹⁰⁵ The Gibe case study exposes a connection between migration and processes of environmental victimisation that occurs when a certain ecosystem is so disrupted (or 'disorganised') by human driven activities that it can no longer provide its essential resources, that is, services, thus undermining human well-being and potentially violating core aspects of the human rights protected under ICCPR and ICESCR.

More in detail, the Gibe case demonstrates that migration is not solely the consequence of abstract processes of victimisation. Rather, environmental migrants *are* environmental victims, specifically because environmental harms erode their capabilities to adapt to human-driven transformative processes of ecosystems. The connection between environmental victimisation and migration highlights a dynamic process, which reflects the degree of people adaptability to environmental disruptions. The lower the persons' adaptation capability is, also due to concurring pre-existing layers of vulnerabilities, the more serious the compromising of their fundamental rights becomes, together with a higher risk of being forced to flee.

102 S Friskics 'Dialogical relations with nature' (2001) 23 *Environmental Ethics* 395. On this, see also S Porfido 'Restorative justice for environmental crimes: Who is the victim?' (2021) 2 *Mediavares – Journal on Conflict Transformation, Restorative Culture and Mediation* 1.

103 Amnesty International 'Niger delta negligence' (2018); European Court of Human Rights, App 54414/13 e 54264/15 (Judgment) *Cordella & Others v Italy* (2019).

104 R White *Transnational environmental crime. Toward an eco-global criminology* (2011).

105 According to Hall (n 25), environmental victimisation, like other forms of victimisation, is an active social process.

With this as a backdrop, protection should apply not only to those falling under recognised categories, but also to those persons who suffer from environmental harm. In other words, recognising the connection between environmental victimisation and environmental migration allows to prioritise the person's material ground of vulnerability over abstract legal categories. The ultimate importance of advocating the shift from an *a priori* perspective to an *ex post* harm-based one rests in the possibility to highlight the human rights dimension characterising the phenomenon of environmental migration.

In this respect, one could here refer, for instance, to the aforementioned article 6 of ICCPR as interpreted by the UN HRC in its General Comment 36 on the right to life with dignity, where it recognises that, in principle, environmental factors can violate the right to life. Specifically, the GC 36 states:¹⁰⁶

The duty to protect life also implies that States parties should take appropriate measures to address the *general conditions in society* that may give rise to direct threats to life or prevent individuals from enjoying their right to life with dignity. These general conditions may include ... industrial accidents, degradation of the environment, deprivation of land, territories and resources of Indigenous Peoples.

The 'general conditions in society' thus encompass also those harmful environmental activities falling under the notion of 'ecological disorganisation'. In the specific case of Ethiopia, there is room to argue that the state failed to strike a fair balance between the legitimate goals of economic development and its human rights obligations towards affected local populations. Migration may be arguably seen as the outcome of such failure.

When applied to the context of environmental migration, the right to life with dignity may give rise to the duty to protect the person concerned from removal back in dire environmental conditions.¹⁰⁷ In the landmark case *Teitiota v New Zealand*, the UN HRC asserted that 'without robust national and international efforts, the effects of climate change in receiving states may expose individuals to a violation of their rights under articles 6 or 7 of the Covenant, thereby triggering the non-refoulement obligations of sending states.'¹⁰⁸

106 UN Human Rights Committee (n 54) para 26 (our emphasis).

107 For its part, the ESCR Committee has noted that a failure to prevent foreseeable harm to human rights caused by climate change, or a failure to mobilise the maximum available resources in an effort to do so, could constitute a breach of states' obligations under the covenant. UN ESCR Committee *Committee releases statement on climate change and the Covenant* (2018).

108 *Ioane Teitiota v New Zealand* Communication 2728/2016 UN Human Rights Committee (23 September 2020) UN Doc CCPR/C/127/D/2728/2016, para 9.11. For an analysis of the case, see E Sommaro 'When change and human rights meet: A brief comment on the UN Human Rights Committee's Teitiota decision' (2021) *Questions of International Law* 51; C Scissa 'The principle of non-refoulement and environmental migration: A legal analysis of regional protection instruments' (2022) 3 *Diritto, Immigrazione e Cittadinanza* 1; JH Sendut 'Climate change as a trigger of non-refoulement obligations under international human rights law' (2020) *EJIL:Talk!*; A Maneggia 'Non-refoulement of climate change migrants: Individual human rights protection or 'responsibility to protect'? The Teitiota case before the Human Rights Committee' (2020) *Diritti umani e diritto internazionale* 635.

As a result, states shall refrain from removing a third country national in any manner whatsoever back to a country where their life and liberty could be at serious risk, thus confirming the applicability of complementary forms of protection against environmental causes of migration under international human rights law. Therefore, by taking a harm-based approach, non-refoulement obligations may arise not only in the context of climate change, but also in the context of harmful environmental activities, industrial accidents, as well as in all those situations where the 'general conditions in society' may cause a violation of the right to life with dignity protected under the Covenant.

7 Concluding remarks

The nexus between environmental threats and migration is increasingly investigated in the literature and is high in the political agenda of several international fora. However, both working definition advanced by different stakeholders and national provisions addressing the matter have often failed to grasp its complexity, as environmental migration has been constrained by pre-selected causes referring to space, time, typology of movement, drivers, and protection status, among others. Moreover, much of the present literature on the matter focuses on climate change and extreme weather events, excluding the role that harmful environmental activities can play in compelling people to leave. Against this background, we relied upon the conceptualisation of environmental victimhood, which offered a fertile ground to assess the connection between environmental harm and human rights violations under the 1966 ICCPR and ICESCR.

We first correlated environmental victimisation, as intended in green criminology, to cross-border migration and looked at potential human rights violations against affected groups. We then illustrated the Omo-Turkana case study as concrete materialisation of such a linkage. By analysing existing literature on the topic, the case study seems to substantiate our assumption according to which victims of harmful environmental activities – in the present case, indigenous groups affected by the construction of mega-dams along the Omo river in Ethiopia and the Lake Turkana in Kenya – can be forced to migrate cross-borders due to unbearable environmental conditions, triggering severe human rights violations. The ongoing construction of other mega-dams on the site confirms the relevance and the timing of this research analysis and calls for further studies on the matter to shed light on states' responsibility to protect people from environmental harm as well as on the possibility for environmental migrants to find protection in other countries.

The Omo-Turkana case study therefore leads to three final observations: (i) the state-backed economic-oriented activities impacting the environment could result in processes of 'ecological disorganisation' and cause environmental harm; (ii) persons affected by such 'disorganisation' arguably fall within the harm-based

green criminological notion of ‘environmental victims’; (iii) at the same time, such victims can be also subject to human rights violations and can sometimes be compelled to flee due to environmental harm, as shown by evidence-based research and recent views. These findings urgently call for the endorsement of a holistic *ex post* assessment of human rights violations of people compelled to flee due to any environmental threats in order to provide for comprehensive and effective protection responses to environmental migration.