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#### Abstract

This paper critically examines the need to uphold corporate due diligence and liability in natural resources supply chains. The paper defines natural resources supply chains. It argues that these supply chains are vital in unlocking the economic benefits of natural resources globally for Sustainable Development. However, the paper also notes that natural resources supply chains are associated with several challenges including corruption, overexploitation of resources leading to resource scarcity, ethical concerns and environmental impacts of resource extraction. Due to these concerns, the paper argues that upholding corporate due diligence and liability in natural resources supply chains is vital for sustainability. It discusses how this agenda can be achieved globally towards sustainable use of natural resources for posterity.

#### 1.0 Introduction

Natural resources play a pivotal role in fostering Sustainable Development<sup>1</sup>. It has been observed that natural resources such as land, water, forests, minerals, metals and oil are important sources of livelihoods, income and influence for countries and communities around the globe<sup>2</sup>. Natural resources are often viewed as key assets driving development and wealth creation<sup>3</sup>. Natural resources are therefore central to human wellbeing and development. They can unlock several economic, social, cultural and health benefits vital

(Accessed on 29/03/2025)

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<sup>&</sup>lt;sup>3</sup> International Institute for Sustainable Development., 'The Sustainable Use of Natural Resources: The Governance Challenge' Available at <a href="https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge">https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge</a> (Accessed on 29/03/2025)

for survival of life on the planet. For instance, it has been correctly observed that humanity cannot live without the clean air we breathe, the plants we eat, or the water we drink<sup>4</sup>. Sustainable use and management of natural resources is therefore fundamental for human well-being and development.

The planet is endowed with natural resources which can unlock the Sustainable Development agenda. For instance, Africa is rich in natural resources ranging from arable land, water, oil, natural gas, minerals, forests and wildlife<sup>5</sup>. It has been noted that the continent holds a huge proportion of the world's natural resources, both renewables and non-renewables<sup>6</sup>. Africa therefore has enormous potential to harness its vast natural resources to finance the continent's development agenda towards greater prosperity<sup>7</sup>.

Despite the abundance of natural resources both globally and in Africa, it has been observed that these resources are often poorly managed, inequitably shared, and often extracted and developed without the consent and consideration of local communities<sup>8</sup>. This leads to underdevelopment and fuels conflicts over natural resources<sup>9</sup>. In addition, population growth and environmental degradation are intensifying competition over already scarce resources, such as land and water, and climate change threatens to increase such competition even further a situation that could spiral into more natural resource-based conflicts globally<sup>10</sup>. Further, it has been observed that the extraction of and trading in natural resources relies on supply chains with significant corruption risks, a situation

<sup>&</sup>lt;sup>4</sup> Ibid

<sup>&</sup>lt;sup>5</sup> United Nations Environment Programme., 'Our Work in Africa' Available at <a href="https://www.unep.org/regions/africa/our-work-africa#:~:text=Africa%20is%20rich%20in%20natural,both%20renewables%20and%20non%2Drenewables">https://www.unep.org/regions/africa/our-work-africa#:~:text=Africa%20is%20rich%20in%20natural,both%20renewables%20and%20non%2Drenewables</a>. (Accessed on 29/03/2025)

<sup>&</sup>lt;sup>6</sup> Ibid

<sup>7</sup> Ibid

<sup>&</sup>lt;sup>8</sup> United Nations Environment Programme., 'Natural Resources and Conflict: A Guide for Mediation Practitioners' Op Cit

<sup>9</sup> Ibid

<sup>10</sup> Ibid

Upholding Corporate Due Diligence and Liability in Natural Resources Supply Chains for Sustainability that undermines the role of these resources in development<sup>11</sup>. In light of these challenges, the sustainable use, management, and benefit sharing of natural resources is paramount if the Sustainable Development agenda is to be realised.

This paper critically examines the need to uphold corporate due diligence and liability in natural resources supply chains. The paper defines natural resources supply chains. It argues that these supply chains are vital in unlocking the economic benefits of natural resources globally for Sustainable Development. However, the paper also notes that natural resources supply chains are associated with several challenges including corruption, over-exploitation of resources leading to resource scarcity, ethical concerns and environmental impacts of resource extraction. Due to these concerns, the paper argues that upholding corporate due diligence and liability in natural resources supply chains is vital for sustainability. It discusses how this agenda can be achieved globally towards sustainable use of natural resources for posterity.

## 2.0 Natural Resources Supply Chains: Opportunities and Challenges

A supply chain refers to an interconnected journey that raw materials, components, and goods are taken before sale to and consumption by customers<sup>12</sup>. It can also be described as a network of activities and processes that are involved in creating a finished product and delivering it to the consumer<sup>13</sup>. A supply chain thus entails activities and processes required to deliver goods and services to consumers. It covers core activities required to convert raw materials or component parts into finished products or services<sup>14</sup>.

<sup>&</sup>lt;sup>11</sup> Natural resource commodity supply chains., Available at <a href="https://www.u4.no/publications/natural-resource-commodity-supply-chains">https://www.u4.no/publications/natural-resource-commodity-supply-chains</a> (Accessed on 29/03/2025)

<sup>&</sup>lt;sup>12</sup> What is Supply Chain?., Available at <a href="https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-supply-chain">https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-supply-chain</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>13</sup> Hayes. A., 'The Supply Chain: From Raw Materials to Order Fulfillment' Available at <a href="https://www.investopedia.com/terms/s/supplychain.asp">https://www.investopedia.com/terms/s/supplychain.asp</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>14</sup> What is a supply chain?., Available at <a href="https://www.cips.org/intelligence-hub/supply-chain-management/what-is-a-supply-chain">https://www.cips.org/intelligence-hub/supply-chain-management/what-is-a-supply-chain</a> (Accessed on 31/03/2025)

In the context of natural resources, supply chains involve steps from the extraction of natural resources, to their processing and sale, all the way through to the ultimate use of the revenues<sup>15</sup>. Supply chains therefore cover all steps involved in converting natural resources into finished products including extraction, processing, distribution, and their final use<sup>16</sup>. Natural resources supply chains are vital in harnessing benefits from these vital resources for development.

It has been argued that natural resources supply chains are a valuable tool for tracing raw materials from their source to final delivery to consumers and helps understand the actors and activities involved in the flow of natural resource-based products, information, and finances<sup>17</sup>. Supply and value chains are important in management of natural resources and raw materials to support Sustainable Development<sup>18</sup>. They can identify strategic intervention points and shape and improve corresponding actions that improve natural resource management and achieve multiple sustainability objectives<sup>19</sup>.

Natural resources supply chains are therefore crucial in maximising economic and social benefits associated with natural resources. According to the United Nations Environment Programme (UNEP), well governed supply and value chains can enhance economic activities in a sustainable manner, protect natural resources and improve community resilience<sup>20</sup>. When sustainably developed, natural resources value chains can catalyze economies at all levels including rural economies<sup>21</sup>.

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<sup>&</sup>lt;sup>15</sup> Natural Resource Governance Institute., 'The Value Chain' Available at <a href="https://resourcegovernance.org/publications/value-chain">https://resourcegovernance.org/publications/value-chain</a> (Accessed on 31/03/2025)

<sup>16</sup> Ibid

World Wildlife Fund., 'Supply Chains' Available at <a href="https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/3vnqr7liqa\_Supply\_Chains\_Synthesis\_English.pdf">https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/3vnqr7liqa\_Supply\_Chains\_Synthesis\_English.pdf</a> (Accessed on 31/03/2025)

Overview of the Value-Chain Approach, Available at <a href="https://www.oneplanetnetwork.org/sites/default/files/vc\_approach\_description.pdf">https://www.oneplanetnetwork.org/sites/default/files/vc\_approach\_description.pdf</a> (Accessed on 31/03/2025)

19 Ibid

<sup>&</sup>lt;sup>20</sup> United Nations Environment Programme., 'Green economy and value chains' Available at <a href="https://www.unep.org/topics/disasters-and-conflicts/country-presence/haiti/green-economy-and-value-chains">https://www.unep.org/topics/disasters-and-conflicts/country-presence/haiti/green-economy-and-value-chains</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>21</sup> Ibid

Despite their important role in deriving benefits from natural resources, supply chains are associated with several challenges. For example, the benefits accruing from natural resources are unevenly distributed, with consumption regions in the Global North benefiting the most at the expense of other regions including Africa<sup>22</sup>. In addition, benefits from natural resources supply chains have often been achieved at the cost of negative impacts on the environment, ecosystems and human well-being<sup>23</sup>. In many cases, indigenous peoples, local communities, farmers, and rural workers have lost access to vital ecosystem services and faced social conflicts that undermine their overall well-being by being placed from their lands due to extraction of natural resources<sup>24</sup>. For example, it has been observed that the investment strategies embraced by Multinational Corporations (MNCs) especially those involved in the extraction of natural resources in Africa have resulted in environmental challenges including the extinction of biodiversity, contamination and destruction of soil and air pollution as a result of oil spillages and social challenges including gross human rights violations and land injustices against local communities<sup>25</sup>.

Corruption is another key challenge in natural resources supply chains globally<sup>26</sup>. It has been observed that the global demand for natural resources including fish, minerals, forest, and wildlife products continues to grow, a situation that incentivizes illegal wildlife trade, fish, timber and forest products, wild animals, and plants and fungi that contravenes either domestic or international laws and regulations<sup>27</sup>. The illegal trade across natural resource supply chains globally is widely facilitated by corruption<sup>28</sup>.

<sup>&</sup>lt;sup>22</sup> United Nations Environment Programme., 'How to Safeguard Human Well-Being across Supply Chains' Available at <a href="https://www.unep-wcmc.org/en/news/how-to-safeguard-human-wellbeing-across-supply-chains">https://www.unep-wcmc.org/en/news/how-to-safeguard-human-wellbeing-across-supply-chains</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>23</sup> Ibid

<sup>24</sup> Ibid

<sup>&</sup>lt;sup>25</sup> Makwana, R., 'Multinational Corporations (MNCs): Beyond the Profit Motive,' Share the World Resources, 3rd October 2006, available at <a href="http://www.stwr.org/multinationalcorporations/multinational-corporations-mncs-beyond-theprofitmotive.html#legalrights">http://www.stwr.org/multinationalcorporations/multinational-corporations-mncs-beyond-theprofitmotive.html#legalrights</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>26</sup> World Wildlife Fund., 'Supply Chains' Op Cit

<sup>&</sup>lt;sup>27</sup> Ibid

<sup>28</sup> Ibid

Corruption is manifested across natural resources supply chains in various ways including through unlawful issuance of permits to facilitate illegal access to natural resources, bribing of officials to facilitate illegal activities such as poaching, use of fraudulent documentation to facilitate illegal trade in natural resources, inadequate customs enforcement which facilitates cross border transportation of illicit goods, and laundering of profits from illegal trade in natural resources due to inadequate due diligence requirements<sup>29</sup>.

Corruption is therefore a major risk in natural resources supply chains undermining development efforts. For example, it has been observed that wildlife crime has grown into a significant and specialized area of transnational organized crime hugely driven by high demand<sup>30</sup>. The illicit trade in wildlife has been identified as a highly lucrative business, with wildlife products commanding high prices on the international, illicit market<sup>31</sup>. This problem is prevalent globally including in Africa. For instance, it is estimated that the continent loses \$195 billion annually of its natural capital through illicit financial flows, illegal mining, illegal logging, the illegal trade in wildlife, and unregulated fishing<sup>32</sup>.

The foregoing challenges are fueling resource scarcity, environmental degradation, and human rights violations,, ultimately undermining the role of natural resources in the quest towards Sustainable Development<sup>33</sup>. It is therefore necessary to foster corporate due diligence and liability in natural resources supply chains for sustainability.

<sup>&</sup>lt;sup>29</sup> Ibid

<sup>&</sup>lt;sup>30</sup> United Nations Office on Drugs and Crime., 'Supply and value chains and illicit financial flows from the trade in ivory and rhinoceros horn' Available at <a href="https://www.unodc.org/documents/data-and-analysis/wildlife/2020/WWLC20\_Chapter\_8\_Value\_chains.pdf">https://www.unodc.org/documents/data-and-analysis/wildlife/2020/WWLC20\_Chapter\_8\_Value\_chains.pdf</a> (Accessed on 31/03/2025)

<sup>31</sup> Ibid

<sup>&</sup>lt;sup>32</sup> United Nations Environment Programme., 'Our Work in Africa' Op Cit

<sup>&</sup>lt;sup>33</sup> World Wildlife Fund., 'Supply Chains' Op Cit

## 3.0 Upholding Corporate Due Diligence and Liability in Natural Resources Supply Chains

It is vital to foster corporate due diligence and liability in natural resources supply chains. The concept of corporate due diligence involves acting with reasonable care, identifying risks and considering appropriate corrective actions before making corporate decisions<sup>34</sup>. It has been pointed out that in the context of natural resources such as minerals and metals, corporate due diligence in supply chains allows companies to check that minerals and metals entering their supply chain are sourced ethically, responsibly and sustainably and act upon it should that not be the case<sup>35</sup>. Corporate due diligence involves identifying, preventing, mitigating and remediating activities in natural resources supply chains that fuel violence, human rights abuses, and negative environmental impacts<sup>36</sup>.

Corporate liability on the other hand refers to the extent a company may be held legally liable its acts and omissions and their impact on the society<sup>37</sup>. In the context of supply chains, corporate liability implies that a company can be held liable for damage-causing events in its supply chain if it fails to prevent or mitigate the damage<sup>38</sup>. A company may therefore he held legally accountable for harms in natural resource supply chains including human rights abuses, environmental damage, corruption particularly in the extraction and processing of natural resources<sup>39</sup>.

The International Law Commission (ILC) has formulated draft principles on protection of the environment in relation to armed conflicts which emphasise the importance of

European Commission., 'What is Due Diligence' Available at <a href="https://single-market-economy.ec.europa.eu/system/files/2021-09/3">https://single-market-economy.ec.europa.eu/system/files/2021-09/3</a>. what is due diligence.pdf (Accessed on 31/03/2025)

<sup>35</sup> Ibid

<sup>36</sup> Ibid

 $<sup>^{37}</sup>$  What is Corporate Liability?., Available at  $\underline{\text{https://brinenlaw.com/corporate/what-is-corporate-liability/}}$  (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>38</sup> Supply Chain Liability: a Primer., Available at <a href="https://corporatefinancelab.org/2016/12/01/supply-chain-liability-a-">https://corporatefinancelab.org/2016/12/01/supply-chain-liability-a-</a>

 $<sup>\</sup>frac{primer/\#:\sim:text=The\%20legal\%20theory\%20of\%20corporate,some\%20duty\%20to\%20do\%20so}{on\ 31/03/2025)}.\ (Accessed on\ 31/03/2025)$ 

<sup>&</sup>lt;sup>39</sup> International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Available at <a href="https://iucn.org/sites/default/files/2024-10/guidance-ilc-principles-10-and-11.pdf">https://iucn.org/sites/default/files/2024-10/guidance-ilc-principles-10-and-11.pdf</a> (Accessed on 31/03/2025)

corporate due diligence and liability<sup>40</sup>. In particular, principle 10 requires states to take appropriate measures aimed at ensuring that business enterprises operating in or from their territories exercise due diligence with respect to the protection of the environment, including in relation to human health, when acting in an area affected by an armed conflict<sup>41</sup>. Such measures aimed at ensuring corporate due diligence in natural resources supply chains include those aimed at ensuring that natural resources are purchased or otherwise obtained in an environmentally sustainable manner<sup>42</sup>. Principle 11 further requires states to take necessary measures aimed at ensuring that business enterprises operating in their territories can be held liable for harm caused by them to the environment, including in relation to human health, in an area affected by an armed conflict<sup>43</sup>. These measures include those aimed at ensuring that a business enterprise can be held liable to the extent that such harm is caused by its subsidiary acting under its control<sup>44</sup>. In order to uphold corporate liability in natural resources supply chains, the ILC draft principles require states to provide adequate and effective procedures and remedies, in particular for the victims of harms arising from acts and omissions of businesses<sup>45</sup>.

The ILC draft principles therefore put emphasis on corporate due diligence and liability in natural resources supply chains especially in areas affected by armed conflicts including through appropriate monitoring and accountability mechanisms to ensure that businesses are held accountable for human rights abuses. In order to implement these principles and achieve the ideal of corporate due diligence and liability in natural resources supply chains, there is need to strengthen monitoring and tracing of resource

<sup>40</sup> International Law Commission., 'Draft principles on protection of the environment in relation to armed conflicts' Available at https://legal.un.org/ilc/texts/instruments/english/draft articles/8 7 2022.pdf

<sup>(</sup>Accessed on 31/03/2025)
<sup>41</sup> Ibid

<sup>42</sup> Ibid

<sup>43</sup> Ibid

<sup>44</sup> Ibid

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<sup>45</sup> Ibid

extraction especially in conflict-affected areas<sup>46</sup>. Monitoring and tracing of resource extraction has been identified as vital in promoting transparent and accountable trade in natural resources<sup>47</sup>. This is of fundamental importance especially in conflict-affected areas, where natural resources extraction may finance conflict or contribute to human rights violations and environmental harm<sup>48</sup>. For example, proceeds from illegal activities in the natural resources sector including illicit financial flows, illegal logging, illegal trade in wildlife and illegal mining of resources have been used to fund a series of wars and conflicts in Africa including the civil wars in Liberia and Sierra Leone where 'blood diamonds' played a huge role in financing armed conflicts<sup>49</sup>.

It is also imperative for businesses to adopt strategies that integrate environmental and social well-being into their supply chains<sup>50</sup>. This includes embracing eco-innovation and circular economy practices<sup>51</sup>. Such practices include the use of renewable energy in resource extraction, promoting energy and material efficiency in supply chains, and sustainable water management<sup>52</sup>. Through this, it is possible to reduce health risks from environmental degradation through the decrease in the use of hazardous and toxic chemicals in resource extraction while also creating jobs, improving social welfare and attracting financial resources for businesses<sup>53</sup>.

In addition, there is need for businesses to embrace public participation and stakeholder engagement across natural resources supply chains<sup>54</sup>. Public participation and

<sup>&</sup>lt;sup>46</sup> International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Op Cit

<sup>47</sup> Ibid

<sup>48</sup> Ibid

<sup>&</sup>lt;sup>49</sup> Fagbadebo. O., Binza. M., Kabange. M., 'Resource-Based Conflicts in Africa' Available at <a href="https://link.springer.com/chapter/10.1007/978-3-031-25151-1\_6">https://link.springer.com/chapter/10.1007/978-3-031-25151-1\_6</a> (Accessed on 31/03/2025)

<sup>&</sup>lt;sup>50</sup> United Nations Environment Programme., 'Value chains, including Eco-innovation and circular economy' Available at <a href="https://www.unep.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/value-chains-including-eco">https://www.unep.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/value-chains-including-eco</a> (Accessed on 31/03/2025)

<sup>51</sup> Ibid

<sup>52</sup> Ibid

<sup>53</sup> Ibid

<sup>&</sup>lt;sup>54</sup> International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Op Cit

stakeholder engagement has been identified as an essential part of environmental due diligence obligations<sup>55</sup>. Businesses must therefore conduct meaningful consultations and respect the Free Prior Informed Consent (FPIC) of local communities and indigenous peoples who are most affected by natural resource supply chains especially the extraction and processing of resources<sup>56</sup>. FPIC has been described as a fundamental right of selfdetermination that ensures participation by indigenous peoples and local communities in development projects including the extraction of natural resources in order to ensure that such projects are conducted in a sustainable manner taking into account their economic, social and cultural impact<sup>57</sup>. It has been argued that embracing FPIC in natural resources supply chains including in the extractive industry demonstrates a deeper commitment to engage with local communities to reach shared agreement, allowing people to have a meaningful voice in deliberative decision-making processes related to their own development<sup>58</sup>. By holding FPIC throughout their supply chains, companies can foster long-term well-being, integrate traditional and local knowledge into their strategies and practices, and create solutions that benefit both communities and business operations<sup>59</sup>. It is therefore vital to uphold FPIC in order to foster corporate due diligence in natural resources supply chains.

Finally, it is vital to strengthen mechanisms towards addressing human rights and environmental concerns raised by the activities of corporations through both civil and criminal liability<sup>60</sup>. It is therefore imperative to foster access to civil remedies including compensation for victims of human rights violations and environmental damage

<sup>&</sup>lt;sup>56</sup> United Nations Environment Programme., 'How to Safeguard Human Well-Being across Supply Chains' Op Cit

<sup>&</sup>lt;sup>57</sup> Owen, J.R. and Kemp, D., "'Free Prior and Informed Consent', Social Complexity and the Mining Industry: Establishing A Knowledge Base," Resources Policy, Vol.41 (2014): 91-100

<sup>&</sup>lt;sup>58</sup> Buxton. A., & Wilson. E., 'FPIC and the Extractive Industries: A Guide to Applying the Spirit of Free, Prior and Informed Consent in Industrial Projects' Available at https://www.iied.org/16530iied (Accessed on 31/03/2025)

<sup>59</sup> Ibid

<sup>60</sup> International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Op Cit

associated with natural resources supply chains<sup>61</sup>. Further, there is need to hold corporations criminally liable for environmental harm including through prosecuting ecocide as a crime. The activities of businesses in natural resources supply chains including mining and oil extraction are associated with damage to the environment globally<sup>62</sup>. For example, mining activities including mine exploration, construction, operation, and maintenance may result in environmental harm including deforestation, erosion, contamination and alteration of soil profiles, contamination of local streams and wetlands, and an increase in noise level, dust and emissions<sup>63</sup>. The extraction of oil also comes at a cost due to its environmental impacts including climate change as a result of carbon emissions, pollution, and biodiversity loss<sup>64</sup>. Ecocide provides a possibility of prosecuting these acts as crimes under international law<sup>65</sup>. It is therefore necessary to accelerate global efforts towards adopting the crime of ecocide in order to foster corporate liability in natural resources supply chains.

#### 4.0 Conclusion

It is vital to foster corporate due diligence and liability in natural resources supply chains. This ideal can be achieved through strengthening, monitoring and tracing of resource extraction, integrating environmental and social well-being into natural resources supply chains, embracing public participation and stakeholder engagement across natural resources supply chains including through FPIC, and strengthening civil and criminal

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<sup>61</sup> Ibid

<sup>&</sup>lt;sup>62</sup> Haddaway. N et al., 'Evidence of the impacts of metal mining and the effectiveness of mining mitigation measures on social–ecological systems in Arctic and boreal regions: a systematic map protocol' Available at <a href="https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-019-0152-8">https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-019-0152-8</a> (Accessed on 31/03/2025)

<sup>63</sup> Ibid

<sup>&</sup>lt;sup>64</sup> United Nations Environment Programmee., 'Why does Extractives Matter?' Available at <a href="https://www.unep.org/explore-topics/extractives/why-does-extractives-matter#:~:text=But%20the%20economic%20benefits%20come,has%20caused%20significant%20water%3B%20pollution.">https://www.unep.org/explore-topics/extractives/why-does-extractives-matter#:~:text=But%20the%20economic%20benefits%20come,has%20caused%20significant%20water%3B%20pollution.</a> (Accessed on 31/03/2025)

Why is an International Crime of Ecocide Necessary?., Available at <a href="https://internationallaw.blog/2023/06/01/why-is-an-international-crime-of-ecocide-necessary/#:~:text=International%20criminalisation%20of%20the%20most,not%20captured%20by%20this%20crime (Accessed on 31/03/2025)</a>

*Upholding Corporate Due Diligence and Liability in Natural Resources Supply Chains for Sustainability* liability in natural resources supply chains<sup>66</sup>. Upholding corporate due diligence and liability in natural resources supply chains is a pertinent agenda which can be realised globally for sustainability.

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<sup>&</sup>lt;sup>66</sup> International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Op Cit

#### References

Buxton. A., & Wilson. E., 'FPIC and the Extractive Industries: A Guide to Applying the Spirit of Free, Prior and Informed Consent in Industrial Projects' Available at <a href="https://www.iied.org/16530iied">https://www.iied.org/16530iied</a>

European Commission., 'What is Due Diligence' Available at <a href="https://single-market-economy.ec.europa.eu/system/files/2021-09/3">https://single-market-economy.ec.europa.eu/system/files/2021-09/3</a>. what is due diligence.pdf

Fagbadebo. O., Binza. M., Kabange. M., 'Resource-Based Conflicts in Africa' Available at <a href="https://link.springer.com/chapter/10.1007/978-3-031-25151-1\_6">https://link.springer.com/chapter/10.1007/978-3-031-25151-1\_6</a>

Haddaway. N et al., 'Evidence of the impacts of metal mining and the effectiveness of mining mitigation measures on social–ecological systems in Arctic and boreal regions: a systematic map protocol' Available at <a href="https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-019-0152-8">https://environmentalevidencejournal.biomedcentral.com/articles/10.1186/s13750-019-0152-8</a>

Hayes. A., 'The Supply Chain: From Raw Materials to Order Fulfillment' Available at <a href="https://www.investopedia.com/terms/s/supplychain.asp">https://www.investopedia.com/terms/s/supplychain.asp</a>

International Institute for Sustainable Development., 'The Sustainable Use of Natural Resources: The Governance Challenge' Available at <a href="https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge">https://www.iisd.org/articles/deep-dive/sustainable-use-natural-resources-governance-challenge</a>

International Law Commission., 'Draft principles on protection of the environment in relation to armed conflicts' Available at <a href="https://legal.un.org/ilc/texts/instruments/english/draft\_articles/8\_7\_2022.pdf">https://legal.un.org/ilc/texts/instruments/english/draft\_articles/8\_7\_2022.pdf</a>

International Union for Conservation of Nature., 'Corporate Due Diligence and Liability for Natural Resources Supply Chains in/from Conflict-Affected Regions' Available at <a href="https://iucn.org/sites/default/files/2024-10/guidance-ilc-principles-10-and-11.pdf">https://iucn.org/sites/default/files/2024-10/guidance-ilc-principles-10-and-11.pdf</a>

Makwana, R., 'Multinational Corporations (MNCs): Beyond the Profit Motive,' Share the World Resources, 3rd October 2006, available at <a href="http://www.stwr.org/multinationalcorporations/multinational-corporations-mncs-beyond-theprofitmotive.html#legalrights">http://www.stwr.org/multinationalcorporations/multinational-corporations-mncs-beyond-theprofitmotive.html#legalrights</a>

Muigua. K., 'Natural Resources and Environmental Justice in Kenya' Glenwood Publishers Limited, 2015

Natural resource commodity supply chains., Available at https://www.u4.no/publications/natural-resource-commodity-supply-chains

Natural Resource Governance Institute., 'The Value Chain' Available at <a href="https://resourcegovernance.org/publications/value-chain">https://resourcegovernance.org/publications/value-chain</a>

Overview of the Value-Chain Approach., Available at <a href="https://www.oneplanetnetwork.org/sites/default/files/vc\_approach\_description.pdf">https://www.oneplanetnetwork.org/sites/default/files/vc\_approach\_description.pdf</a>

Owen, J.R. and Kemp, D., "'Free Prior and Informed Consent', Social Complexity and the Mining Industry: Establishing A Knowledge Base," *Resources Policy*, Vol.41 (2014): 91-100

Supply Chain Liability: a Primer., Available at <a href="https://corporatefinancelab.org/2016/12/01/supply-chain-liability-a-primer/#:~:text=The%20legal%20theory%20of%20corporate,some%20duty%20to%20do%20so">https://corporatefinancelab.org/2016/12/01/supply-chain-liability-a-primer/#:~:text=The%20legal%20theory%20of%20corporate,some%20duty%20to%20do%20so</a>

United Nations Environment Programme., 'Green economy and value chains' Available at <a href="https://www.unep.org/topics/disasters-and-conflicts/country-presence/haiti/green-economy-and-value-chains">https://www.unep.org/topics/disasters-and-conflicts/country-presence/haiti/green-economy-and-value-chains</a>

United Nations Environment Programme., 'How to Safeguard Human Well-Being across Supply Chains' Available at <a href="https://www.unep-wcmc.org/en/news/how-to-safeguard-human-wellbeing-across-supply-chains">https://www.unep-wcmc.org/en/news/how-to-safeguard-human-wellbeing-across-supply-chains</a>

United Nations Environment Programme., 'Natural Resources and Conflict: A Guide for Mediation Practitioners' Available at <a href="https://peacemaker.un.org/sites/peacemaker.un.org/files/NRCMediation\_UNDPAU">https://peacemaker.un.org/sites/peacemaker.un.org/sites/peacemaker.un.org/files/NRCMediation\_UNDPAU</a> NEP2015\_0.pdf

United Nations Environment Programme., 'Our Work in Africa' Available at <a href="https://www.unep.org/regions/africa/our-work-africa#:~:text=Africa%20is%20rich%20in%20natural,both%20renewables%20and%20non%2Drenewables">https://www.unep.org/regions/africa/our-work-africa#:~:text=Africa%20is%20rich%20in%20natural,both%20renewables%20and%20non%2Drenewables</a>

United Nations Environment Programme., 'Value chains, including Eco-innovation and circular economy' Available at <a href="https://www.unep.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/value-chains-including-eco">https://www.unep.org/explore-topics/resource-efficiency/what-we-do/responsible-industry/value-chains-including-eco</a>

United Nations Environment Programmee., 'Why does Extractives Matter?' Available at <a href="https://www.unep.org/explore-topics/extractives/why-does-extractives-matter#:~:text=But%20the%20economic%20benefits%20come,has%20caused%20significant%20water%3B%20pollution">https://www.unep.org/explore-topics/extractives/why-does-extractives-matter#:~:text=But%20the%20economic%20benefits%20come,has%20caused%20significant%20water%3B%20pollution</a>

United Nations Office on Drugs and Crime., 'Supply and value chains and illicit financial flows from the trade in ivory and rhinoceros horn' Available at <a href="https://www.unodc.org/documents/data-and-analysis/wildlife/2020/WWLC20\_Chapter\_8\_Value\_chains.pdf">https://www.unodc.org/documents/data-and-analysis/wildlife/2020/WWLC20\_Chapter\_8\_Value\_chains.pdf</a>

What is a supply chain?., Available at <a href="https://www.cips.org/intelligence-hub/supply-chain-management/what-is-a-supply-chain">https://www.cips.org/intelligence-hub/supply-chain-management/what-is-a-supply-chain</a>

What is Corporate Liability?., Available at <a href="https://brinenlaw.com/corporate/what-is-corporate-liability/">https://brinenlaw.com/corporate/what-is-corporate-liability/</a>.

What is Supply Chain?., Available at <a href="https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-supply-chain">https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-supply-chain</a>

Why is an International Crime of Ecocide Necessary?., Available at <a href="https://internationallaw.blog/2023/06/01/why-is-an-international-crime-of-ecocide-necessary/#:~:text=International%20criminalisation%20of%20the%20most,not%20capt ured%20by%20this%20crime</a>

World Wildlife Fund., 'Supply Chains' Available at <a href="https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/3vnqr7liqa\_Supply\_Chains\_Synthesis\_English.pdf">https://files.worldwildlife.org/wwfcmsprod/files/Publication/file/3vnqr7liqa\_Supply\_Chains\_Synthesis\_English.pdf</a>