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# State Responsibility for Environmental Damage from Climate Change under the No-Harm Principle

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#### Article

#### **Abstract**

#### **Keywords:**

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This research delves into the critical role of states in addressing environmental damage stemming from climate change, underpinned by the fundamental principle of "no harm". Climate change represents a profound threat to both the global ecosystem and human welfare, necessitating concerted action from all nations. The no harm principle places an obligation on states to undertake effective measures to mitigate greenhouse gas emissions, facilitate adaptation to climate change impacts, and mitigate adverse effects on vulnerable communities. This research uses normative legal research methods with a regulatory and contextual approach. By examining both theoretical frameworks and legal instruments, the study aims to elucidate the responsibilities of states and the mechanisms through which they can fulfill these obligations. A central focus of this research is the examination of how nations collaborate internationally to achieve climate change mitigation and adaptation goals through global agreements. These agreements serve as frameworks for collective action, guiding states in their efforts to combat climate change and minimize its harmful effects. By emphasizing the no harm principle, this study seeks to deepen our understanding of state responsibility for climate change and associated environmental damage. It underscores the imperative for robust collaborative endeavors aimed at safeguarding the global environment and ensuring a sustainable future for all. Through enhanced awareness and collective action, states can fulfill their duty to protect the planet and mitigate the adverse impacts of climate change on present and future generations.



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# Introduction

The problem of environmental degradation due to climate change is becoming increasingly apparent to society. As the human population increases, the need for

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survival increases and the exploitation of natural resources increases. In addition, increased infrastructure development, such as greenhouses in big cities and the discharge of gas emissions from vehicles also contribute to increased environmental damage in urban areas (Shivanna, 2022). Climate change is affecting almost all regions around the world. According to the European Commission's website, climate change has resulted in higher temperatures, droughts and forest fires, limited availability of clean water, flooding, rising seas and changes to biodiversity, soil and marine environments (European Commission, 2023).

According to Indonesian Forum for the Environment (WALHI) East Java, explained that climate change causes many changes in various sectors of human life. Data from the World Meteorological Organization (WMO), explained that the impact of climate change has killed 1,600 people due to heat waves and forest fires, 35 million lost their lives and homes due to flooding, 821 million people are malnourished due to drought, acidification of sea water and a decrease in oxygen in the ocean globally Furthermore, WALHI stated that greenhouse gases, aerosol emissions and land use change are factors in climate change (Styawan, 2021). Currently, the amount of gas emissions in the atmosphere is increasing due to the impact of clearing forest land into agricultural areas or plantations without paying attention to natural conditions. In Indonesia, the decline in the number of trees reached 36%, causing a buildup of emissions in the air. From an economic perspective, entrepreneurs are only profitoriented while ignoring environmental conditions (Qodriyatun, 2021).

It is undeniable that one of the global issues that is still a big task with the international community is related to climate change. Climate change is even recognized as one of the most complex, diverse and serious threats to human life, especially in this modern era. The impacts of climate change are increasingly felt in front of us, ranging from extreme temperatures to rising sea levels. The threats that are approaching the existence of living beings in the world need to be addressed together by the international community. Countries are obliged under international law to mitigate the impacts of climate change and protect the rights of current and future generations from the impacts of climate change (Fitzmaurice & Rydberg, 2023). Indeed, the reality is that climate change is a very complex and multi-faceted issue that poses a challenge to the international community.

Various agreements at the international level have been formed in order to anticipate climate change. The echo to provide awareness of the need for global environmental management was first carried out through the 1972 Stockholm Conference which later resulted in the Stockholm Declaration, a form of multilateral international agreement in the environmental field and in this case escorted by the United Nations Environment Assembly (UNEA). 50 years after its establishment, the world is still facing complex challenges in the environmental field including accelerated climate change, so Achim Steiner, a staff of the United Nations Development Programme called for countries to reunite and refer to Stockholm. This is because the Stockholm Declaration was the first recognition by the international community of the new behaviors and responsibilities that must govern their relationship in the environmental era which means that each country needs to take actions and responsibilities that also prioritize the environment (Tsang, 2021).

The Paris Agreement of 2015 is a significant international treaty specifically addressing climate change, binding each participating country to its provisions. Under this agreement, world leaders commit to immediate action to mitigate climate change effects, overseen by the United Nations Framework Convention on Climate Change (UNFCCC). Implementation is facilitated through Nationally Determined Contributions (NDCs), action plans submitted by each country to reduce greenhouse gas emissions in line with the agreement's goals, with updates required every five years. All countries, regardless of development status, are tasked with participating in climate change mitigation efforts. The UNFCCC emphasizes the principle of Common but Differentiated Responsibility (CBDR), asserting that developed nations must take the lead in supporting developing countries to achieve the Paris Agreement's objectives. This principle recognizes the shared responsibility for addressing climate change while acknowledging the differing capacities and historical contributions to emissions between developed and developing nations. The principle of CBDR is specifically described in Principle No. 7 of the Rio Declaration as follows:

"States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."

According to this provision, all countries are responsible for climate change but some countries are "more" responsible than others (Harris, 1999). There are two

elements in the form of responsibility according to the CBDR principle, namely Common Responsibility (joint responsibility in the form of state cooperation through joint integration to achieve common goals) as an example is the preservation of resources that are not specifically owned by a country and can be used by any party so that cooperation is needed to ensure its sustainability. Second, namely Differentiated Responsibility is based on different circumstances when it comes to the issue of climate change so that there are differences in the contribution of each country according to its ability to overcome climate change (Afriansyah & Bilqis, 2020). According to the Paris Agreement, there are 3 (three) aspects that include the implementation of the principle of CBDR, among others, which are financial, technology and development capacity.

The interesting thing to discuss in this climate change issue is who should be responsible for the environmental damage that occurs, whether climate change is purely human action or comes from policies taken by the state government. In international law, the issue of the state's relationship with environmental problems is quite complex. The state has the need to prosper its people by fulfilling the needs of clothing, food and shelter (Rahman, et.al., 2022). On the other hand, these needs will inevitably sacrifice the environment such as the conversion of forest land into agriculture, plantations and public housing. The state also explores and exploits natural resources for state revenue which often ignores environmental sustainability. The state has the freedom to take any action in its territory as long as it does not harm the interests of other countries. However, the state still has international obligations and is responsible for actions taken in its territory (Mayer, 2014).

The concept of state responsibility, as outlined in Responsibility of States for Internationally Wrongful Acts 2001, focuses on state actions that result in harm to other states (United Nations, 2021). These actions typically involve acts or omissions attributable to the state that breach international obligations. Initially, environmental issues were considered territorial concerns within individual countries, regulated by domestic environmental laws. However, as environmental problems became global in nature, international environmental law emerged as part of international law.

Two significant pillars of international treaties concerning environmental issues are the 1972 Stockholm Declaration and the 1992 Rio de Janeiro Declaration. These declarations embody crucial principles in international environmental law: territorial sovereignty, good neighborliness, and state responsibility. Territorial sovereignty asserts a state's full authority over its territory, while good neighborliness permits

countries to utilize their territories without infringing upon the interests of others. State responsibility holds nations accountable if actions within their territories harm the interests of other countries. The 1972 Stockholm Declaration highlighted the global human impact on the environment and aimed to preserve and enhance the human environment. Subsequently, the 1992 Rio de Janeiro Declaration, during the International Conference on the Environment, reaffirmed the international community's obligations toward the environment and laid the legal and political groundwork for sustainable development (Kumar, 2023).

The no-harm principle in international environmental law, recognized as customary international law, obligates states to prevent, reduce, and control the risk of harm to other countries. Instances of international violations occurred when smoke from land burning activities in Indonesia, linked to companies in Malaysia and Singapore, crossed into the territories of Singapore and Malaysia. This led to haze, worsening air quality, school closures, and advisories for children to avoid outdoor activities (Greenpeace Southeast Asia, 2019).

Addressing climate change requires continued attention from the international community, with efforts focused on mitigation, repression, and establishing a fund for loss and damage. Mitigation strategies, integrated into Nationally Determined Contributions (NDCs), demand genuine commitment from participating countries to combat climate change effectively. Repressive measures involve taking direct action against individuals who obstruct climate change initiatives, imposing appropriate sanctions. The concept of loss and damage acknowledges situations where the impacts of climate change exceed a country's capacity to cope. Examples include flash floods in Pakistan or the migration of tuna fish impacting the livelihoods of Pacific island nations. To address these challenges, funding mechanisms have been proposed to compensate vulnerable countries. However, there is ongoing debate with developed nations regarding the implementation of these measures (Bhandari, et.al., 2024).

Thus, climate change is a real issue that still needs serious attention. Moreover, the impacts resulting from climate change every year are increasingly felt by humans. This issue is a global issue that requires cooperation in its resolution, while in order to do so it also requires trust between countries that work together. International trust is also an important component in efforts to resolve global issues, namely cooperation can be achieved if stakeholders trust each other and maintain that trust through monitoring and sanctioning violators. In this case, it means that each party in the effort

to address climate change needs to have trust that can be given and obtained between countries, especially in this case between developed and developing countries, so that a concrete and implementable joint synergy can be created in supporting efforts to tackle climate change. This paper aims to analyze the extent to which states respect the no-harm principle in their efforts to tackle the problem of climate change in relation to the principles of territorial sovereignty and state responsibility.

#### Method

This paper is a conceptual paper with a normative juridical research method. The paper explains the principles, theories and concepts in international environmental law, especially the no-harm principle by using a regulatory, doctrinal and legal practice approach of countries in enforcing the law in their jurisdiction. The main legal sources in this research are international treaties and national legal rules of countries. Subsidiary legal sources are books and journals.

### Discussion

# 1. Principles of Territorial Sovereignty

In the concept of territorial sovereignty, the state is free to take any action within its territory (Sefriani, 2015). Judge Max Huber explained in the Palmas Island Arbitration Award case that Sovereignty in the relations between States signifies independence. Independence with respect to a portion of the globe is the right to exercise therein, to the exclusivity of any other States, the functions of a State. Furthermore, the International Court of Justice reiterated that between independent States, respect for territorial sovereignty is an essential foundation of international relations. Territorial sovereignty is implicitly subject to customary international law as well as conventional rules of international law, whereby a state is entitled to exercise its jurisdiction over anyone within its territory to make rules and enforce them. Furthermore, territorial sovereignty protects the state from interference from other states. Territorial sovereignty provides boundaries to other states in relation to the territory controlled. However, territorial sovereignty characteristically not only protects the state but also imposes obligations on the state, particularly the obligation to protect the rights of other states from within its territory. In other words, actions taken by the state from within its territory are not intended to interfere with the rights of neighboring states (Heinegg, 2013). Malaysia has protested to Indonesia since 1991

because of the fires that occurred in Sumatra. Furthermore, in 1994 there was a very dense haze in Malaysia due to forest fires in Kalimantan and South Sumatra. From 1997 to 2015 haze occurred again and repeatedly in Malaysia due to forest fires in Kalimantan which were exacerbated by the El Nino phenomenon (Hanafi, et.al., 2018).

The Indonesian government as the owner of territorial sovereignty punishes companies proven to have intentionally burned forests with Environmental Law Number 32 of 2009 with three law enforcement approaches, namely state administrative law, criminal law and civil law (Sihombing, 2022).

Nationally, climate change will threaten state sovereignty, in the sense of national resilience of countries in the face of natural anomalies that occur today. Globally, climate change does not recognize national borders, thus requiring cooperation between countries to address the impacts of climate change. Climate fluctuations affect food production and supply stability, which can lead to food security uncertainties. Climate change has had an impact on food production, especially in developing and agrarian countries, including Indonesia.

El Niño events have a detrimental impact on rice production, primarily due to decreased rainfall and hydrological changes. Studies have shown that El Niño leads to reduced rainfall, particularly in regions like West Java and the Java Sea, resulting in suboptimal conditions for rice growth. The decrease in rainfall affects rice production as water is crucial for rice cultivation. Further research shows that water shortages, especially during the flowering phase, negatively impact rice physiology and yields. Stress caused by water deficiency can lead to spikelet degeneration, sterility, and empty grains, ultimately contributing to a decline in rice production. Overall, El Niño-induced water stress exacerbates the challenges faced by rice farmers, leading to suboptimal growth conditions and reduced yields (Dhamira & Irham, 2020).

La Niña events typically result in higher rainfall in Indonesia, but paradoxically, they have a negative impact on rice production. Studies have shown that La Niña years are associated with decreased rice yields. This negative effect may stem from chill injury or frost damage, hindering plant germination during crop establishment. The decline in rice production during La Niña years can also be attributed to various factors such as flooding and increased pest activity due to higher rainfall. Additionally, alternative hazards including extreme air temperatures, poor rainfall during the growing season, or excessive rainfall leading to flooding during planting periods can further reduce agricultural production (Dhamira & Irham, 2020). Climate change also

contributes to natural disasters around the world, including Indonesia. However, there are also intangible threats associated with climate change, including terrorism, separatism, cybercrime, border violations and piracy of natural resources (Legionosuko, 2019).

# 2. The State Responsibility Principle

Although other countries cannot intervene in a country's sovereignty, it does not mean that the country can take arbitrary actions from within its territory. States can be held accountable for actions that harm other states. Article 1 of Responsibility of States for Internationally Wrongful Acts 2001 states that "Every internationally wrongful act of a State entails the international responsibility of that State." The meaning of "internationally wrongful act of a State" is explained in Article 2 of the Draft Articles, namely "attributable to a State under international law" and "constitutes a breach of an international obligation of a State." In cases of environmental law violations, all actions can be charged or delegated to the state because the state has obligations and responsibilities for all problems that occur in its territory. The state must ensure that all legal rules are obeyed by everyone in its territory. Law enforcement must be done properly and continuously.

Following the Trail Smelter Arbitration case, Principle 21 of the 1972 Stockholm Declaration restates that States have the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction. Furthermore, in the 1949 Corfu Channel case, the ICJ pointed out to states that Every State's obligation not to allow its territory to be used contrary to the rights of the other States. Later, the UN Survey of International Law concluded that There is general recognition of the rule that a State must not permit the use of its territory for purposes injurious to the interests of other States in a manner contrary to international law (Kiss, & Shelton 2007).

Many countries violate international obligations, both those stipulated in customary law and the general rules of international law and international treaties. The most common violation of international obligations is the violation of obligations to international treaties that have been agreed upon. There is currently an international treaty regarding the prohibition of nuclear proliferation, namely the 1968 Nuclear Non-Proliferation Treaty, hereinafter referred to as the 1968 NPT. The United States, the United Kingdom and Australia are parties to the international treaty. Australia is a

non-nuclear state, while the United States and the United Kingdom are nuclear states. Article II of the 1968 NPT states that non-nuclear states parties are required not to accept transfers of nuclear weapons or nuclear-powered explosives. Even Article III Paragraph 2 of this Treaty states that states parties with nuclear are asked not to provide materials or equipment that can be used to produce nuclear weapons to states without nuclear. It is interesting that these three countries are parties to the 1968 NPT where the obligations in the treaty should have been complied with in good faith but instead it is the opposite.

Regionally Australia is a party to the Treaty of Rarotonga. This treaty is an international agreement in the South Pacific region which has been ratified by Australia, Cook Islands, New Zealand, Fiji, Kiribati, Nauru, Niue, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu and Vanuatu. This agreement contains a nuclear-free area in the South Pacific. This treaty prohibits states parties to use, experiment, and possess nuclear weapons within the boundaries of the region. The Rarotonga Treaty has three Protocols that have been signed by five nuclear states, namely the United States, Britain, France, Russia and China. The three Protocols prohibit assembling, placing and conducting experiments in the region (Papadimitropoulos, 1988).

Beyond the South Pacific region, there is the ASEAN regional area. Although Australia is not part of the ASEAN organization, the crossings used by nuclear submarines are the sea territory of ASEAN countries, especially Indonesian sea territory. In the ASEAN region itself, ASEAN member states have declared the status in the region as a nuclear-free area. This was agreed through the Bangkok Agreement in 1995. The Southeast Asian nuclear-free zone took effect on March 28, 1997. In the Bangkok Treaty, states parties are obliged to: (1) not to develop, produce or purchase, possess or control nuclear weapons, nuclear weapons bases or conduct nuclear tests or use nuclear weapons anywhere, either inside or outside the Southeast Asian region; (2) not to request or receive nuclear-related assistance; (3) not to undertake any activity of providing assistance or supporting the manufacture or acquisition of any nuclear equipment by any state; (4) not to provide resources or specialized materials or equipment to any non-nuclear state; (5) to prevent the operation or deployment of nuclear weapons in the region of states parties and to prevent nuclear tests; and (5) to prevent the maritime areas of the Southeast Asian region from the dumping of radioactive waste or radioactive materials by any state.

Related to the state responsibility for the effects of climate change, Indonesia takes it very seriously by adhere to ratified treaty obligations. The initial action of the Indonesian government was to ratify international treaties related to climate change starting from the UNFCCC, Kyoto Protocol, and Paris Agreement. Indonesia has also submitted its NDCs to the UNFCCC which details Indonesia's action plan and contribution in reducing greenhouse gas emissions, with a reduction target of 29% (twenty-nine per cent) by 2030 or 41% (forty-one per cent) if it receives international support. This commitment was then translated into several technical regulations, including through the Ministry of Forestry and Environment (MOEF) and the Presidential Regulation, such as Presidential Regulation Nr. 98 of 2021 on Carbon Economic Value (CEV Regulation) then followed by MOEF Regulation Nr. 21 of 2022 (MOEF Regulation 21/2022) (Prihatiningtyas, et.al., 2023).

Now, MOEF has issued Regulation Nr 7 of 2023 regarding Procedures for Carbon Trading in Forestry Sector (MOEF Regulation 7/2023). Each state party to the UNFCCC has a burden to address the problem of climate change although based on the principle of CBDR the burden is different from one country to another. However, a burden is certainly a separate responsibility that must still be carried by the country. The burden of responsibility to tackle climate change is also not a light burden, because in it there are so many complex aspects that need to be considered and accommodated. between developed countries and developing countries, of course, a mutually supportive relationship is needed with one common interest, namely the common interests of the international community that cannot be inserted in the slightest by hidden personal interests in providing such support. It is unfortunate that the realisation of support from developed countries to developing countries is still far from being in line with these common goals.

The nature of state responsibility is accountability under the law for the proper performance of a duty. State responsibility means the obligation to provide an answer that is an account of something that happened and the obligation to provide recovery for losses that may be caused. The principle of CBDR is a manifestation of state responsibility mandated by The International Law Commission Articles on State Responsibility which states that every internationally wrongful act of a state entails the international responsibility of that state (Voigt, 2021). That climate change is a wrongful act committed simultaneously by many countries, so the principle of CBDR is appropriate to be applied in responsibility for climate change. This principle has also

been commonly applied in the scope of other branches of international law, one of which is in the field of international trade law overseen by the World Trade Organization (WTO). In the WTO, the principle of Special and Differential Treatment (SDT) is known. Through SDT, developing countries get support from developed countries to be able to implement equal trade practices, and get special treatment from trade obligations according to their capabilities compared to developed countries (Ine, 2023).

Indonesia's position on state responsibility regarding climate change typically aligns with international agreements and principles. As a member of the UNFCCC and the Paris Agreement, Indonesia acknowledges the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC). This principle recognizes that while all countries have a shared responsibility to address climate change, developed nations should take the lead due to their historical contributions to greenhouse gas emissions and their greater capacity to mitigate and adapt to climate change impacts.

Indonesia often emphasizes the importance of developed countries fulfilling their commitments to provide financial support, technology transfer, and capacity-building assistance to developing countries. Additionally, Indonesia advocates for the inclusion of adaptation measures and support for vulnerable communities in international climate initiatives.

At the same time, Indonesia recognizes its own responsibilities as a rapidly developing country with significant emissions from deforestation, agriculture, and other sectors. The nation has committed to reducing its emissions through NDCs and implementing policies to promote sustainable development and resilience to climate change. Overall, Indonesia's position underscores the need for collective action and cooperation among nations to address climate change effectively while considering the differing responsibilities and capacities of each country.

# 3. The "No-Harm" Principle in relation to Climate Change

The "no-harm" principle in relation to climate change refers to the responsibility to avoid or minimize the negative impacts that climate change can have on individuals, communities and the environment. This principle is particularly important in the context of climate change because climate change can lead to devastating consequences such as rising global temperatures, floods, droughts, extreme weather, and serious

threats to human life and ecosystems. The "no-harm" principle is the basis for climate change mitigation and adaptation efforts. The goal is to protect human well-being and the environment, and to ensure that actions taken in the face of climate change do not harm more people than necessary. State action on climate change is critical, as climate change is a global issue that requires cooperation and coordination at the national and international levels. Country actions on climate change vary widely depending on government policies, available resources and the level of public awareness. These efforts play an important role in global efforts to mitigate the impacts of climate change and safeguard our planet. This "no-harm" principle is a principle that applies to countries conducting activities within their territories so as not to cause environmental damage in other countries (Mayer, 2016).

The principle of "no harm" in the context of climate change includes several important aspects, including reducing greenhouse gas emissions, which are the main cause of climate change. Adapting to the impacts of climate change if they have already occurred or cannot be avoided through water management, infrastructure planning and agricultural practices that are suitable for extreme weather. This "noharm" principle should also consider marginalized groups such as minorities, the poor and developing countries. International collaboration is of utmost importance as it relates to state sovereignty, where countries must work together to address the impacts of climate change. To reduce the impact of climate change, some actions that countries can take are national policies related to climate change where countries reduce gas emissions by using low-polluting vehicles and subsidizing electric vehicles. Countries can also invest in renewable energy such as solar, wind and ocean power (Qurbani & Rafiqi, 2022). Most important is the preservation of forests and reforestation to reduce carbon emissions. The most important thing is to raise public awareness through education by teaching people how to reduce the impact of climate change (Mayer, 2016).

Finally, some states may object to the application of the "no-harm" principle as Benoit Mayer suggests, namely *lex specialist* states, where state responsibility for violations of the "no-harm" principle is precluded by special norms relating to the same issue in the climate regime. Second, the collective responsibility objection because it has no relevance whatsoever to the context of climate change impacts, and may instead result in something unfair to certain individuals. Third, the political opportunity objection where the 'no-harm' principle cannot solve the climate change problem due

to large political barriers. Still according to Mayer, there are two ways to adapt to the problem of climate change, including the primary obligation, which is to define the nature of "harm" and the substance of state obligations. The second obligation is to eliminate wrongful acts and provide remedies or compensation.

#### Conclusion

The principle of "no-harm" is a principle in customary international law that must be respected by states regardless of state sovereignty. Although a state can conduct any activity within its territory, it also has an obligation to ensure that activities from within its territory do not interfere with the rights of other states. Reducing the impacts of climate change is the responsibility of all states and requires the cooperation of states including when they make international agreements to avoid overlapping international obligations. One of the global issues that has become a burden and shared responsibility is related to climate change, which Indonesia also has the burden to overcome. Real and immediate efforts are needed, but to realize them also requires support and cooperation between countries. The UNFCCC accommodates countries to support each other based on the principle of CBDR.

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