

Research on the Transboundary Environmental Damage Caused by the Discharge of Nuclear Wastewater in Japan

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Abstract: Neighboring nations voiced severe protests when Japan unilaterally declared on August 23, 2023, that it intended to release radioactive effluent stockpiled since the Fukushima nuclear accident in 2011 into the ocean. Japan clearly breaches international law by acting in a way that is contrary to its duties for reasonable risk prevention, notification, and transboundary environmental impact assessment. In the international community, the question of transboundary injury accountability and compensation has long been of concern. International conventions addressing transboundary pollution are mostly framework agreements with soft law provisions, which means that their substantive impact on contracting parties' behavior is minimal. This article examines the national and personal obligations that the party in control of this nuclear wastewater discharge should have by combining concepts of international law, including the principle of attribution, state sovereignty, and international environmental protection. It examines the characteristics of international transboundary damage liability and compensation schemes from the standpoint of governments taking on international environmental responsibility.

Keywords: Transboundary damage, strict liability, fault liability, national responsibility, civil liability

1. Introduction

The duty of nations has not been properly applied in compensation principles for transboundary damage cases, and there are currently no uniform national regulations governing transboundary contamination. Some academics support expanding the application of the fault liability concept to national accountability, disputing the absolute illegality of outlawing any transboundary harm and highlighting the need of states to carry out risk prevention and due diligence investigations. In the context of transboundary pollution, strict responsibility and fault liability have not been fully applied in court due to competing interests. The purpose of this article is to examine the processes involved in assigning blame and responsibility for transboundary environmental harm, to evaluate the benefits of various liability schemes, and to look for practical legislative measures that might be used to restrain countries' transboundary pollution practices.

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In more than 20 nations downstream, the 1986 Chernobyl nuclear reactor disaster caused a notable rise in the quantity of radioactive materials. The impacted nations cannot directly rely on these international treaties to pursue legal responsibility and compensation from the former Soviet Union through litigation because the former Soviet Union was not a party to either the Paris or Vienna Conventions. As a result, these two conventions do not apply to the former Soviet Union. In addition, the majority of nuclear-using nations—including China and Japan—have not ratified any international agreements that provide compensation for harm resulting from nuclear power. As a result, nations may only make claims for compensation under unofficial regulations developed through national cooperation. Therefore, in the absence of express responsibilities under international treaties, state accountability only emerges in cases when broad principles of international law are broken.

There is little question that sending national cases to the International Court of Justice poses a challenge to the defendant states' judicial sovereignty. States that depend on resource exploitation for their primary industries have been known to oppose the establishment of internationally binding laws and fail to fulfill their obligations to protect the environment due to their reluctance to be bound by the international community and their desire for economic development. Because of this, rather than establishing meaningful systems of national accountability, some current transboundary pollution accords mainly concentrate on developing information exchange and consultation processes [1]. For instance, it is clearly stated in a footnote to the 1979 Convention on Long-Range Transboundary Air Pollution that "This Convention does not contain rules concerning the responsibility of States for damage" [2]. As an alternative, nations pursuing damages have succeeded in safeguarding their interests and averting harm by means of "cooperative agreements." For example, the Songhua River's waters were significantly contaminated in 2005 due to an explosion at Jilin Petrochemical Corporation, which had a substantial negative impact on water supplies and numerous communities in the Russian Far East. Following discussions over compensation claims, China and Russia signed a transboundary water cooperation agreement in 2008 [3]. Plantations in Indonesia have been a major source of transboundary hazardous haze pollution since the 1980s, negatively affecting Southeast Asia and Indonesia [4]. Millions of people suffer greatly as a result of these farms' emphasis on social and environmental sacrifices [5]. In 2002, the ASEAN approved the ASEAN Agreement on Transboundary Haze Pollution in an effort to further regulate haze pollution. The international community has come to recognize and employ "cooperative agreements" as a means of clearly defining culpability for transboundary harm and environmental commitments.

The 1972 treaty on International Liability for Damage Caused by Space Objects is the only treaty in current international law that expressly recognizes nations' liability for transboundary harm and defines the nature of that liability [6]. On the one hand, the idea of sovereignty prohibits nations from meddling in the internal affairs of other sovereign states [7]. On the other hand, nations use the doctrine of sovereign immunity to defend their exemption from treaty and customary law-based international responsibilities. Historically, states have not often taken the lead in prosecuting companies and operators for environmental contamination inside their borders; in certain situations, states have even evaded legal accountability. Therefore, the question of state responsibility and compensation mechanisms for transboundary pollution is being reexamined against the backdrop of Japan's unilateral decision to discharge nuclear wastewater into the sea, which poses a serious threat

to the interests of countries worldwide, and there is a general call for the inclusion of a mutually beneficial protection clause.

2. Exploring the Concept of Strict Liability for transboundary Pollution by States

When the International Law Commission defined transboundary environmental damage in 1978, it meant "liability for harm caused by acts not prohibited by international law." Draft articles offering a system of strict responsibility for nations were published in 2001 and 2006 under the titles "Draft Articles on Prevention of Transboundary Harm Arising from Hazardous Activities" and "Draft Articles on International Liability for Harm Arising from Hazardous Activities," respectively. If a worldwide system of strict obligation for states can be established, it would need to take into account both the existing status of the environment and the demands of particular nations in terms of development.

2.1. Proposal for International Responsibility Assumption in Response to the Issue

It is important to recognize that the majority of industrial operations that have the potential to create transboundary harm are not expressly prohibited by international law. States must thus create relevant legal frameworks in order to mitigate the dangers and repercussions connected to these kinds of actions [8]. In my opinion, creating a shared binding mechanism among states that focuses on efficient damage control and reasonable risk prevention is one way to lessen the burden of proof on the harmed state and avoid outright prohibiting a state's potentially polluting behavior in the international arena. This idea holds that a state should be held internationally responsible if it does not take action to stop predictable, direct, and substantial harm from coming from its territory [9].

Thus, the International Law Commission highlights the importance of focusing on an activity's results rather than its legality, further elucidating the extent of state accountability for actions that do not violate international law but actually inflict harm on other nations. The notion of "international responsibility" for nations' permissible actions is introduced, denoting the worldwide need to refrain from actions that are not forbidden by domestic legislation [1]. The main duty in situations when actions might result in "significant" transboundary harm is to avoid or reduce risks. Even if the conduct is not illegal in and of itself, the secondary regulations of state responsibility take effect if this basic duty is broken. The international community's legislative goal of upholding impacted governments' rights and guaranteeing fair compensation is reflected in this draft.

2.2. Exploring the Notion of Strict International Liability

The International Law Commission's idea of "international responsibility" has changed the foundation of liability from blame to risk mitigation. The topic of whether nations should be strictly liable for any transboundary pollution harm has gained significance in this setting. A state cannot claim unforeseeability as an exemption under the strict responsibility principle.

The purpose of the ILC draft is to make clear the broad guidelines and legislative goals that apply to each state's obligation for transboundary contamination. The idea of severe state accountability has been investigated more in light of the pressing need to defend rights in very risky occupations. Regarding generic transboundary pollution harm, different academics have differing opinions. Some contend that this is the most likely way to fulfill the goals of international responsibility. A system that strictly enforces countries' obligations to provide compensation could be a major advance in traditional international legal theory, as there is no public interest in international law to forbid high-risk activities that could cause serious transboundary harm [1]. Merely forcing the polluting source country to carry out its obligation of due diligence not only creates significant challenges for international organizations doing review work, but it also frequently leads to situations where the

afflicted nations bear the practical brunt of the harm. Strict responsibility helps nations have a shared interest in environmental concerns, which makes it easier to resolve transboundary conflicts. On the other hand, detractors of the strict liability standard contend that the absence of clear general guidelines governing state responsibility in the body of existing substantive law renders it impossible to establish direct state responsibility or to limit sovereignty resulting from private actions that cause harm under a strict liability regime. In addition, regulated states must voluntarily accept broadly prescribed state responsibility on an international scale. The International Law Commission (ILC) works to handle different transboundary environmental challenges by creating a universal, unified system of rigorous state accountability. But the environment right now isn't developed enough for this kind of strategy. Therefore, a workable and efficient approach is to establish a more flexible system of strict liability as one of the grounds of responsibility, controlled under certain restrictions. Through agreements between the afflicted nations and the relevant states involved in harmful actions, a fair division can be achieved through this strategy.

3. Constructing a Mechanism for Damage Compensation: Allocating State and Civil Liability Responsibilities

Following its 2002 clarification of the definitions and parameters of "state responsibility" and "international responsibility," the ILC working group changed its emphasis to examine the transboundary harm compensating distribution models. Rather than depending on a certain definition of culpability, they tried to present a fresh strategy.

3.1. The Development of a Robust Civil Liability Regime for Transboundary Environmental Harm

In the framework of international responsibility, the ILC recommended in 2004 a distribution of anticipated loss for various private parties involved in hazardous operations. It said that the operator has the principal responsibility for the damaging action and that proof of wrongdoing is not necessary for such accountability [10]. International accountability seems to be less comprehensively developed than civil liability regimes. The main "polluter pays" method of compensation in civil cases has already been implemented by international treaties, national laws, and customs. It excludes certain grounds for exemption, such as force majeure, but permits exceptions based on irresistible force and shifts the burden of proof to the defendant.

The fundamental function of the civil compensation mechanism is to operate as a kind of insurance by allowing operators to reimburse the outside world for their costs. Therefore, because of the cost shift of goods or services, an overuse of civil compensation may cause polluters to become less competitive. In addition to making it easier for victims to get compensation swiftly, strict responsibility makes it more difficult to resolve conflicts involving transboundary contamination between possible polluters and potential victims. Regarding many issues pertaining to transboundary environmental harm, different nations have differing opinions. Energy-developing countries, including major nuclear power countries, will undoubtedly oppose the imposition of stringent accountability and significant costs on the polluting nation. When assessing this system's actual application, it's also important to take into account whether or not it diminishes the responsibility to reduce risks by placing an emphasis on compensating for losses.

3.2. Establishment of transboundary Pollution Prevention and Control System and Compensation Mechanisms for Damage

The two components of transboundary pollution—compensation and prevention—should be handled separately. State responsibility for fault necessitates that the state take reasonable steps to stop

transboundary pollution harm brought on by operations under its control or authority. Foreseeability is often necessary for such damage to be acknowledged, and failure to meet this requirement results in a fault for which the state is held accountable on a national level. The state's strict responsibility essentially acts as a compensation mechanism to encourage risk management.

Thus, this essay feels that the theory of fault-based liability is beneficial in becoming a formula for national responsibility in situations of transboundary environmental harm, taking into account the current era and the benefits and drawbacks of both systems. To avoid and limit the incidence of transboundary pollution harm, states must adopt matching preventative measures and laws based on this idea and supervise their implementation in pertinent regions.

To address concerns of accountability and compensation, it is helpful to clarify the link between governmental duty and civil liability. The goals of international environmental law have changed from maintaining resource order to prioritizing environmental risk management and preventative actions. This means that in the case of transboundary environmental harm, states are solely liable for the fallout from operators' failure to exercise due diligence, whereas operators will be held strictly liable [11]. The international community has chosen a different route to offer impacted parties financial support based on operator culpability, in addition to enabling nations to create their own compensation regulations.

4. Conclusion

Unquestionably, the Improvement of the Domestic Civil Liability Legal System, which mandates strict adherence to environmental protection measures, provides a quicker solution to the problems associated with transboundary contamination. Completely relieving states of their international obligations, however, would cause the international legal system to become less fair and predictable. State accountability for misconduct continues to be an essential tool as a well-developed system of state accountability will support global environmental protection. States are the most important actors in maintaining international law. Rather than being overstated or understated, governmental duties in the context of transboundary environmental damage responsibility should be progressively explored in order to support the enhancement of private law liability systems. However, depending just on strict civil culpability or state fault liability will not result in complete answers or solutions that will successfully prevent conflicts. In order to accomplish preventative and remedial effects, this paper advocates for the integration and complementarity of both methods, combining international law and state responsibility as connected remedies under civil liability.

Any liability system reform should take into account all relevant considerations, including the parties' interests, due diligence, and justice, while not obstructing scientific and economic advancement. Experience has demonstrated that while the theory of fault-based liability has some shortcomings in terms of national accountability for transboundary environmental damage, it offers a strong basis for reaching agreements and balancing the interests of all stakeholders in the regulation of transboundary pollution. The relationship between "prevention" and "liability" should thus be given consideration in order to fulfill our shared objective of environmental preservation.

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