THE TRANSBOUNDARY MOVEMENT OF HARMFUL WASTES AND THE TRANSFORMATION OF TRADITIONAL STATE RESPONSIBILITY

XIAODONG TOU*

The protection of the environment and the prevention of the transboundary damage caused by pollution have become the common interest and responsibility of the international community. In order to effectively prevent the transboundary movement of harmful wastes and make up for the limitations of traditional theories, it is essential to redefine traditional State responsibilities to adapt to the trends of environmental protection and the development of international laws. By using the "Principle of Relative Sovereignty" as a base, this can be achieved by introducing strict liability, complementing State liability, establishing the undertakers of State responsibilities and undertaking collateral obligations.

In recent years, in order to escape the high costs involved in the disposal of harmful wastes[1] some developed countries adopted the method of transboundary movement of waste to ease their financial burden.[2] It is predicted that the smuggling of harmful wastes will become a continuous developing industry. Consequently, resolving the issue of the transboundary movement of harmful wastes has become a matter of international importance.

---

* Xiaodong Tou, Professor of Law, College of Law and Politics, Wenzhou University, Visiting Research Fellow, Centre for Environmental Law, Macquarie University, Australia. The paper is part of projects Reference No. 05JD820063, No. 07CGFX008YBQ, and No. 08CFX032.

1 *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*, opened for signature 22 March 1989, (entered into force 5 May 1992) (*'Basel Convention'*). The Basel Convention classifies wastes doing damage to human health and the environment to be hazardous wastes and other wastes, here we called them harmful wastes.

2 *Basel Convention, art 2(3)* defines "Transboundary movement" as any movement of hazardous wastes or other wastes from an area under the national jurisdiction of one State to or through an area under the national jurisdiction of another State or to or through an area not under the national jurisdiction of any State, provided at least two States are involved in the movement.

I Causes Underpinning the Transboundary Movement of Harmful Wastes

A *Increasing Production of Harmful Wastes and Motivation for the Transfer of Pollutants in Some countries*

An improvement in the standard of living in a country increases the concerns of citizens with environmental problems. However, concern and attention are not sufficient in providing appropriate solutions to these problems. To some extent, the production of harmful wastes is in direct proportion to the level of a country's industrial advancement. In developed countries where there is a strong consciousness towards high environmental standards, some wastes that were formerly considered general wastes are now listed as harmful wastes, contributing to a growth in the amounts of harmful wastes. In these jurisdictions, where strict environmental laws impose stringent environmental standards and make the costs of disposal of waste high, national governments may resort to the illegal transboundary transfer of harmful wastes to alleviate domestic pressures.

B *Weak Environmental Awareness and Poor Legal Protection in Developing Countries*

In contrast to developed countries, in developing countries there is weaker public environmental awareness, unsound environmental legislation, improper enforcement of the laws and a general lack of facilities for recycling and dealing with harmful wastes without doing harm to the environment. This is mainly due to the following factors:

1. The management system is not complete, the personnel quality is not high, and the management level is limited in power and scope.
2. The disposal technologies, equipments and facilities are backward.
3. The harmful wastes exchange system is flawed.
4. The phenomenon of operating harmful wastes without licenses is relatively common, which subsequently resulting in greater secondary latent pollution.

C *Differing Disposal costs*

Contrasting levels of environmental awareness can result in differing evaluations as to the economic value of trade in harmful wastes. To developed countries, transferring harmful wastes does not only eliminate the dangers posed by harmful wastes locally, but also saves a great deal of money and fosters international trade interests. On the other hand, in developing countries, the importation of harmful wastes not only brings in a large amount of money but also provides employment opportunities, both of which help to stimulate economic growth. At the same time,

differing environmental standards, legislation and public awareness influence costs between countries involved in the disposal of harmful wastes.[3]

D *The Shortcomings of the* Basel Convention

There are specific limitations to the *Basel Convention* and it's ability to effectively deal with the transfer of transboundary harmful waste. These include:

1 *Related important concepts and specific acts need to be further unified:*

(a) Several important concepts such as, "hazardous wastes and other wastes" etc. need to be further defined. The convention based its definition of "hazardous wastes" on the process of producing wastes and the harm it brings to the environment.[4] There are 45 kinds of wastes[5] listed as harmful according to their ingredients and danger grading.[6] Moreover, domestic legislation of Parties to the *Basel Convention* can also define other wastes to be hazardous wastes. However, a unified, clear and concrete definition is not given in the *Convention*. Another example is the concept of "environmentally sound management". The *Convention* simply stipulates that "environmentally sound management" means taking all practicable steps to ensure that hazardous wastes and other wastes are managed in a manner that will protect human health and the environment.[7] There is no clear definition given.

(b) Detailed measures to prevent harmful wastes from the transboundary movement are not clearly specified, which might cause confusion and conflicts. For example, in regards to "environmentally sound management of hazardous wastes or other wastes", the *Convention* stipulates that the "obligation under this Convention of States in which hazardous wastes and other wastes are generated require that those wastes are managed in an environmentally sound manner may not under any circumstances be transferred to the States of import or transit."[8] The obligation, however, seems lucid at best and does not provide clear steps and procedures that can be adhered to.

(c) Some of the key technical terminology needs to be further defined. For example, the *Convention* stipulates that:

> Parties shall take the appropriate measures to ensure that the transboundary movement of hazardous wastes and other wastes only be allowed if: The State of

---

3 E Xiaomei, 'Transboundary movements of hazardous wastes and the "Basel Convention"[J]' (1999) 3 *Inner Mongolia University Journal (Humanities and Social Sciences Edition),*110.

4 *Basel Convention,* annex 1.

5 Ibid, annex 3.

6 Ibid, arts 4(2), 4(10).

7 Ibid, art 4(9).

8 Ibid, art 4(11).

> export does not have the technical capacity and the necessary facilities, capacity or suitable disposal sites in order to dispose of the wastes in question in an environmentally sound and efficient manner.[9]

The *Convention*, however, does not provide specific provisions or standards as to the concrete meanings of "suitable" or "technical capacity." This gives developed countries a reason for transferring their pollution, due to their high environmental standards, a lack of proper disposal sites, technical capacity or the necessary facilities and equipment.

2 *The inconsistency of relative provisions*

Articles 4 and 11 of the *Basel Convention* refer to a mutually beneficial compromise between developed and developing countries in regards to the transboundary movement of harmful wastes. However, the content of the articles prove to be contradictory. Article 4 states: "A Party shall not permit hazardous wastes or other wastes to be exported to a non-Party or to be imported from a non-Party."[10] While Article 11 provides: "Parties may enter into agreements or arrangements regarding transboundary movement of hazardous wastes or other wastes with Parties or non-Parties provided that such agreements or arrangements do not derogate from the environmentally sound management of hazardous wastes and other wastes as required by this Convention."[11] Article 11 therefore, permits Parties to export harmful wastes to any country yet at the same time provides no clear criteria as to what "environmentally sound management" means resulting in Parties' arbitrary interpretations of this article. This is detrimental to the effective control of transboundary movements of harmful wastes and makes it very difficult to judge whether the actions of Parties comply with the agreement or not. So, rather than prohibiting the illegal transboundary movement of harmful wastes, the Basel Convention seemingly paves the way for the legalization of such transboundary movements.

3 *Difficulties in regards to the implementation of the* Convention

Whether the Parties, especially developing countries, have the ability to comply with the complex rules of the *Convention* is an important factor in its effective implementation.[12] For example, in regards to the Prior Informed Consent (PIC) system and the consent procedure, the problems that the States of export, the States of import and the States of transit face are:

(a) It is unknown whether the harmful wastes will be passed on or imported into their countries;

---

9 Above n 3, 112.

10 *Basel Convention,* art 4.

11 *Basel Convention,* art 11.

12 Lin Canling, *The State Responsibility of International Law for Transboundary Damages,* (2000, Hawen Press) 23.

(b) There is insufficient time, professional knowledge or technology available to evaluate whether each individual transboundary movement of harmful wastes is acceptable;
(c) States do not have the management capabilities to inform or assent; and
(d) There is not sufficient information to help States carry out professional evaluation of the transferred harmful wastes that are in progress.

Therefore, the successful adoption of PIC system relies on advanced national management facilities and provisions.

II THE CONNOTATIVE ANALYSIS OF STATE RESPONSIBILITIES IN REGARDS TO THE TRANSBOUNDARY MOVEMENT OF HARMFUL WASTES

A *Extending the Reach of StrictLliability*

As the traditional theory of State responsibility, Grotius's theory of fault liability has been in a dominant position for long time. The key aspect of the theory is that actions and inaction violating international obligations must contain subjective factors such as intention and negligence. Thus the illegality of the action will be precluded and State responsibility cannot be established if there is neither intention nor negligence. However, the idea that there are absolute rights that can be exercised without any restriction can be challenged. When a country seeks to profit from moving its harmful wastes across its boundary, the interests of other countries should be taken into consideration. At a time when advanced technologies are being continuously used, serious damages have been caused to other countries by engaging in such activities. However, international law neither openly permits nor prohibits these activities, which are considered useful or even indispensable to the development of human society. If actors engaged in such activities do not bare any legal responsibilities, it would be unjust for the victims.[13]

Exporting states should take responsibility for the illegal transboundary movement of harmful wastes. In The *Draft Articles on State responsibility*,[14] two conditions are required before a wrongful act committed by a State can be established. First, under international law the conduct in question must be attributable to the State. Second, the conduct must constitute a breach of an international legal obligation. "Oppenheim's International Law" explicitly pointed out:

> When concerning private behavior, State responsibility is fault-based. … The state has not give enough attention to the prevention of damages or to the punishment of offenders. However, responsibility may occur without fault in some areas. For some particularly dangerous activities, the treaties have absolute or strict liabilities.[15]

---

13 XU Huanru, 'The Legislation and Development Trends of Environmental Pollution Damages', 2000 5 *Law Review* 135.

14 United Nations International Law Commission, *Draft Articles on State Responsibility,* (1979) art 3(a), (b) accessed at <http://untreaty.un.org/ilc/documentation/english/a_cn4_1291.pdf> at 3 June 2008.

15 Lassa Francis Lawrence Oppenheim, *Oppenheim's International Law,* (Vol. 1, 1995, China

In regards to the illegal transboundary movements of harmful waste that result in a country's breach of an international legal obligation, States of export must bare international responsibilities. Under circumstances in which the States of import allow the legal transboundary movements of harmful wastes, if the movement does not cause damages, the States of export are not liable, however if damages do eventuate the exporting countries subsequently become liable. The consent of importing countries is not a determinant factor in the State liability of transboundary movements of harmful wastes. Exporting countries are responsible for damages they cause whether they have obtained the consent from importing countries or not. It is difficult to judge whether the actors' subjective actions are deliberate or negligent and whether the victims have assented or not. However, in order to prevent the unpredictably high risks of transboundary damages from harmful wastes and the emergence of irresponsible transfers of waste, stricter measures must be taken.

B *The Inversion and Transfer of the Burden of Proof*

The high risk of damages occurring from environmental pollution requires a reconsideration of the Civil Code's principle of culpability (i.e. the fault-responsibility principle). It should be replaced with the principle of no-fault or strict liability where States are responsible for their actions regardless of whether they are at fault. Defendants, who are more familiar than the plaintiffs with their production process, equipment conditions, production mechanism and the quantity and concentration of their emissions should bare the burden of disproving the plaintiff's claims regarding environmental pollution**.** In regards to the problem of compensation for damages from environmental pollutants, on the baring of the burden of proof, most countries embody the tendency of alleviating the plaintiffs' burden of proof. Many have transferred the burden of proof in important cases.[16] In the United States for example, the Michigan *Natural Resources and Environmental Protection Act* (1970) stipulates that when the plaintiff in the action has established a prima facie case showing that the conduct of the defendant has or is likely to pollute, the defendant may rebut the claim by submitting evidence to the contrary.[17] Thus the plaintiff needs only to establish a prima facie case and the burden of proof shifts from the plaintiff to the defendant.

In China, Article 74 of *Supreme People's Court Proposals on Several Issues Regarding Implementation* of the "*PRC Civil Procedure Law*" stipulates that in the litigation for compensation for damages from environmental pollution, "in regard to the tort facts raised by the plaintiffs, if the defendants rebut, the defendants are

---

Encyclopedia Publishing House) 406-7.

16 Zhao Jianwen 'The State Responsibility for Transboundary Movement of Hazardous Wastes' (1997) 6 *China Legal Science* 98.

17 Michigan Natural Resources and Environmental Protection Act (1970) s 1703, available at http://www.legislature.mi.gov/(S(kylcfsrbjhg1vzacwq2f0k45))/mileg.aspx?page=getObject&objectName=mcl-324-1703.

responsible for the burden of proof".[18] In regards to the transboundary movement of harmful waste, where importing States have little or no information about the waste and the damage it may cause, the adoption of a strict responsibility system overcomes these issues by making exporting States responsible. It is clear however, that gaining a country's consent to import harmful wastes for recycling must be under the condition that it causes no harm to the environment. If there is no harm done to the environment, the illegality of such a transfer on the importers' consent can be excluded. On the other hand, if damages do occur that exceed the scope of agreement, international responsibilities and the ultimate illegality of the transfer cannot be excluded. The importers or producers have the clearest knowledge about the substantial damages that harmful wastes cause, but because of the impact on their economic interests and the environmental requirements, it is common for them to conceal these details when acquiring the importers' consent. In addition, maintaining industrial secrets is usually given as a reason by the importers or producers for not providing necessary evidence, which becomes an obstacle to the victims' proving liability.

Therefore, since the victims have less access to information and thus are disadvantaged in providing evidence, it is necessary to burden the defendants with the substantial proofs. The consents of the importer cannot prevent the exporter from the burden of proof. For example, there are related laws and regularities in China with similar expressions, such as Article 18 of "*Ocean Dumping Regulations*".[19] In terms of the burden of proof, the victims only need to prove losses that they suffer by providing documents such as the natural environment and general overview, relevant departments and agencies' technological appraisals and certificates at the time when damages from imported harmful wastes are occurring. The exporters, on the other hand, are required to defend themselves by proving there is no cause and effect relationship between their acts and the importers' losses. If the exporters ask to be exempt from responsibilities, they must provide evidence that the injurious consequences could not be avoided even though reasonable measures have already been taken during the transboundary movements.

In view of the specificity and complexity of the damages caused by the transboundary movement of harmful wastes, to achieve fairness and make relevant legislative provisions more effective and practical there must be a transfer of the burden of proof. Only in this way can the legitimate rights and interests of the victims be well protected.

C *The Duality of the Subjects of Responsibility*

Generally speaking, it is natural or legal persons and not governments that are engaged in the transboundary movements of harmful wastes in the name of international trade. Therefore, based on the national interest, some countries

---

18 Supreme People's Court Proposals on Several Issues Regarding the Implementation of the "PRC Civil Procedures Law, 74.

19 *Regulations of the People's Republic of China on Ocean Dumping*, s 11.

advocate that individuals and non-government entities should be responsible for the damages they cause rather than the State. However, the *Draft Articles on State Responsibility* states: 'a person or a group of persons' conduct which is not attributable to a State shall nevertheless be considered an act of that State under international law'.[20] Although the acts of a natural or legal person under the jurisdiction or control of a country that is engaged in the illegal transboundary transfer of harmful wastes are not on behalf of the State, these acts are considered as an act of the State.[21] In addition, according to Draft Article 3, international misconduct that can be attributed to the country not only includes the State's "action", but also includes the State's "inaction".[22]

Therefore, in regards to the transboundary movement of harmful wastes, the governments of the importing countries are primarily responsible. So if this results in a transfer of pollution, to some extent it also shows the impropriety in discharging responsibility and the State's "inaction". In other cases, if the country gives tacit approval to or supports the transfer of harmful wastes of its enterprises to other countries, it should take responsibility for the damages caused by the transfer.

In addition, States must take responsibility for the international damages caused by the transboundary movements of harmful wastes and other transboundary environmentally damaging acts perpetrated by natural or legal persons who are under its jurisdiction or control. This is a weakness of traditional international law as individuals or private corporations are not responsible for damages they cause.

For example, under the *United Nations Convention on the Law of the Sea (UNCLOS)*[23], States have a supervisory obligation to monitor any conduct by its natural or legal person that violates the Convention's provisions and are responsible for consequences caused by this conduct.[24] States thus have an obligation to implement effective control over the environment within their jurisdiction and not to cause cross-border harm, regardless of whether it is by State institutions or private persons. Therefore the responsibility for environmental damage caused by private behavior can be considered the responsibility of the State. In this regard, the distinction between the responsibilities a State bares for government and private acts within its jurisdiction is gradually disappearing.[25]

States have the obligation and the ability to effectively control the transboundary movement of harmful wastes, and to protect the global environment as a whole. So when damages from harmful wastes' transboundary movement occur (legal or illegal) in the importing country or other areas of the environment, it is not only the

---

20 Above n 14, *Draft Articles on State Responsibility,* art 11.
21 Ibid, art 5.
22 Ibid, art 3.
23 *United Nations Convention on the Law of the Sea (UNCLOS),* opened for signature 10 December, 1982, (entered into force 16 November, 1994).
24 Ibid, art 297 (1c).
25 Above n 16, 98.

natural or legal person' responsibility but also the State's. This duality of responsibility is advantageous in confirming clear State responsibility, and to promote the effective implementation of obligations on States to control the transboundary movement of harmful wastes. Thereby it can more effectively protect the interests of victims and contribute to international environmental security.

D *Improvements to International Compensation Liability*

Scholars from different countries have had contrasting views on the definition and emergence of State responsibility. The definition given by Professor Liu Binghua in his "International Law" states that:

> When a subject of international law violates the act or omission of international law and causes damages to other subjects, the subject of international law bares the responsibility for damage compensation. This kind of damage liability regime is called international responsibility in international law.[26]

At the same time he stressed compensation for damages in a broad sense, meaning that all acts require compensation for damages, including restitution, monetary compensation or restoration of the damaged reputation, and all other acts that can satisfy the victims.[27] Tong Jin points out that international legal responsibility refers to "the legal consequences caused by the subjects of international law owning to a violation of international legal obligations."[28] Jecov Nicov placed more emphasis on the legal consequences of State responsibility. He stressed in his book "International Law" that the destruction of the legal order causes corresponding responsibility for the subjects of international law.[29] This responsibility not only exists after material damages are inflicted on other subjects, but also in the instance where a State has not caused direct material damages yet still violates one or more of the subjects' powers. In regards to the emergence of international legal responsibility, typically it is not so much the act causing material damage that determines the illegality of an act, but rather the illegal violation of the subject's international legal political or material rights. Wang Tieya believes that the traditional sense of national responsibility is 'the responsibility that a subject of international law should bare when the subject is engaged in a violation of rules of international law', or in other words, when a country violates it's international obligations.[30]

Furthermore, industrialization, the increasing complexity of the sources of responsibility and the growing prominence of transboundary damages have gradually become prominent issues in international relationships demonstrating that we cannot continue to rely solely on traditional State responsibility to resolve environmental issues. Since the traditional theory of fault liability fails to provide

---

26 Liu Binghua, *International Law* (Vol. 2, 1997, China University of Political Science and Law Press), 205.
27 Ibid.
28 Tong Jin, *International Law,* (1988, China Law Press), 204.
29 Jecov Nicov, *International Law,* (1985, China Commerce and Trade Press), 105.
30 Wang Tieya, *International Law,* (1995, China Law Press), 136.

adequate remedy for transboundary damages, it is preferable to apply the principle of non-fault liability to supplement the rules of State responsibility,

Intrinsic links exist between liability for damages arising from transboundary movement of harmful wastes and traditional State responsibility. Liability for damages resulting from transboundary movement of harmful wastes is also encapsulated by the concept of State responsibility as both aim at determining the international responsibility that States should undertake as a consequence of their actions. There are also obvious differences:

1. The nature of traditional State responsibility involves the internationally wrongful acts of a State, the performance of which is in violation of international obligations. But the emergence of liability for damages caused by the transboundary movement of harmful wastes depends on transboundary damages that occur after the transfer, rather than the illegality of the conduct.

2. According to the traditional definition of State responsibility, if a State can prove that is has made efforts by taking reasonable measures to prevent the damages, it can be exempted from liability. However, it is not the case in the liability of transboundary movements of harmful wastes. The State is subject to the strict liability, meaning that it must bare the compensation liability for damages regardless of the reasonable measures it has undertaken.

3. In accordance with traditional State responsibility, where an act is considered to be an internationally wrongful act even if remedial measures have been undertaken and compensation given, the offending State does not have the freedom to continue this act. While in regards to the liability for damages occurring from the transboundary movement of harmful wastes, as long as suitable compensation is given, the freedom of other acts is not restricted.

4. In terms of traditional State responsibility, compensation is restitutionary in nature whilst damages from the transboundary movement of harmful wastes are not equated with the actual damages.

In light of this, the institutional arrangements for the liability system for damages from transboundary movement of harmful wastes not only have reflected the changing international relations under the context of globalization, but have also contributed to the improvement of the traditional theory of State responsibility. The liability for damages resulting from the transboundary movement of harmful wastes should consist of three major elements:

1. Only subjects of international law can be liable for damages from transboundary movements of harmful wastes. These include States, international organizations and domestic enterprises that are involved in the transboundary movement of harmful wastes.

2. The liability arises from the transboundary movements of harmful wastes.

3. The liability is a type of responsibility at the international level.

III THE LEGAL BASIS OF RELATIVE SOVEREIGNTY

National sovereignty is considered to be the fundamental right of a State according to international legal norms and the exercise of this right is exclusive and specific. In international law, Sovereignty refers to the States' inherent and independent power in dealing with internal and external affairs. Based on supreme internal authority and independent external characteristics, States have the right to determine their social, political and economic system and the exclusive power to determine foreign policy. In other words, States have supreme jurisdiction and domination over both people and resources under their territory.[31]

The *Charter of the United Nations* outlines the principle of the sovereign equality of all its members, requires States to respect each other's sovereignty in international exchanges and to respect the independence of other countries.[32] But this does not mean that national sovereignty has absolute and unlimited power. Although the State is not accountable in another jurisdiction, it must abide by international law and shoulder international obligations. States therefore are not allowed to violate international obligations when exercising national sovereignty.[33] The 1970 *Declaration on the Principles of International Law* specifically stipulates a States' obligation to respect the principle of sovereignty.[34]

In addition the 1974 *Charter of Economic Rights and Duties of States* on one hand affirms a States' right of sovereignty in terms of political and economic relations, yet also places restrictions on the exercise of national sovereignty. It emphasised that 'Every State has and shall freely exercise full permanent sovereignty, including possession, use and disposal, over all its wealth, natural resources and economic activities'.[35] At the same time it restated:

> The protection, preservation and enhancement of the environment for the present and future generations is the responsibility of all States…All States have the responsibility to ensure that activities within their jurisdiction or control do not cause

---

31 Above n 13, p 72.

32 *Charter of the United Nations,* art 2 (2), accessed <http://www.un.org/aboutun/charter> at 2 June 2008.

33 Liang Shuying, *Public International Law,* (1995, China University of Political Science and Law Press), 27.

34 Wang Tieya and Tian Ruxuan, *Selected Information on International Law,* (1995, China Law Press) 1-9;*The United Nations Declaration on Principles of International Law Concerning Friendly Relations and Co-operation among States in Accordance with the Charter.*

35 *Charter of Economic Rights and Duties of States, art 2(1), GA Res 328 (xxix), 29th sess, UN Doc A/Res/S-6/3201, (1 May 1974).*

> damage to the environment of other States or of areas beyond the limits of national jurisdiction.[36]

It further stipulates that:

> The protection, preservation and enhancement of the environment for the present and future generations is the responsibility of all States. All States shall endeavor to establish their own environment and development policies in conformity with such responsibility. The environmental policies of all States should enhance and not adversely affect the present and future development potential of developing countries. All 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.[37]

"To use their own property and should not hurt other people's property" is an ancient law principle of Justinian origins and its application in international environmental law not only embodies the principle of mutual respect for national sovereignty, but also reflects the globalization of the environmental interests, particularly in the current interdependent international community.

IV COLLATERAL OBLIGATIONS UNDER STATE RESPONSIBILITY FOR DAMAGES CAUSED BY THE TRANSBOUNDARY MOVEMENT OF HARMFUL WASTES

A *Obligations in Preventing the Emergence of Damages from Transboundary Movements*

The amount of pollution caused by transboundary damages is increasing, and no country can guarantee that activities within their own territory can be conducted without resulting in transboundary damages. Therefore, on the basis of the theory of traditional State responsibility, new international rules should be adopted to manage damages or potential dangers which are irreversible in nature, can or cannot be foreseen or avoided beforehand so as to emphasize the responsibility of the countries causing the damages. Therefore, it is necessary to require States to positively undertake "prevention obligations" for damages from the transboundary movement of harmful wastes. It is especially true in the international environmental protection due to the complexity of environmental problems and non-recoverability of environmental damages. The special nature of environmental damages makes prevention an extremely important and indispensable step in obtaining an effective solution to prevent damages caused by the transboundary movement of harmful wastes.

There is a growing trend in international environmental law, to adopt strategies that aim to not only recover the actual damages to the environment but also to minimise environmental risks. In other words, more attention is paid to source-side

---

36 Ibid, art 30.
37 Ibid.

prevention rather than end-side prevention, meaning that measures should be taken as early as possible to minimize or mitigate damages from occurring. Therefore, in the course of estimating damage compensation, the factor of "due protection and attention" should be taken into consideration.

B *The Obligation of Equitable Distribution of Damages from Transboundary Movement of Harmful Wastes*

One of the major functions of international law is to achieve equitable interest distribution among different states. Consequently, States must take into consideration the impacts of hazardous activities on other States. Different from the traditional attention obligations, it is a kind of readjustment of interests derived from the principle of management responsibility of the State. The countries concerned should reach the following two agreements[38]:

> First, the extent of existing transboundary damages or the possibility of potential transboundary damages;
>
> Second, the appropriate preventive or remedial measures that should be taken in a dangerous situation.

After the transboundary damages from harmful wastes become apparent, it would be improper for the State responsible to rely on the fact that it is not an international illegal act to avoid liability, or to attribute all responsibility to the victims. To do so would result in an inequitable distribution of environmental damages.[39] Although it is difficult to predict the nature and scope of environmental damages, it is reasonable to require breaching States to take compensation liabilities based on the equity principle of international law.[40]

C *International Co-operation Based on the Common but Differentiated Responsibilities*

To improve international co-operation in environmental protection, it is necessary to first accurately define the subjects of the damage liabilities from transboundary movements of harmful wastes. Transboundary pollution can be more effectively addressed when there is a clear delineation of the rights and responsibilities of victim and breaching States. This clear definition of liabilities plays an important role in facilitating the international cooperation necessary to deal with transboundary environmental issues.

It is true that the global environmental protection is the common interest of mankind. Each State is responsible for preventing environmental degradation. However, responsibilities should not be evenly distributed in an absolute sense

---

38 Baxter "first report", UN Doc A/36/10, (1981), 183, [60].
39 Ibid, 116.
40 Ibid, [46].

between developed and developing countries without considering historic factors. Rather, this should be done on the basis of the principle of common but differentiated responsibilities relating to global environmental protection. In particular, developed countries should avoid transferring pollution originating from harmful wastes to other countries. At the same time they should help developing nations to improve their environmental awareness so as to eliminate short sighted and sometimes blind imports of "foreign rubbish". Developed countries should also make more efforts to support developing countries to participate in the formulation and negotiation of international environmental conventions and get more involved in global environmental partnerships.

Moreover, they should provide financial assistance and help to promote technology transfers to improve the actual environmental protection capacity of developing countries. International environmental law could be used to establish a practical and feasible mechanism to ensure that developing countries are able to receive sufficient financial assistance.

V CONCLUSION

When determining the distribution of responsibilities for transboundary damages caused by harmful wastes, attention should be given to maintaining a balance between the freedom of activities within the sovereign jurisdiction of States and not causing significant damage to other countries. So as not to damage national sovereignty and territorial integrity, the complexity involved in the transboundary movement of harmful wastes should be taken into special consideration and more care should be given to the special circumstances and needs of developing countries. A proper definition of responsibilities would help to raise environmental awareness and protect the global environment as a whole.

This paper has given a number of recommendations to improve the traditional theory of State responsibility for the transboundary transfer of harmful waste. It has advocated a movement away from the theory of fault liability and suggested extending the reach of strict liability so that States can be held accountable for the environmental damage they cause regardless of whether they had consent from the importing State. In addition it has considered the need to subvert the burden of proof so that exporting States bare the burden of disproving that their actions caused environmental damage. Related to this point, individuals and legal personalities should be held responsible for the damage they cause. There should also be improvements in the way international compensation liability is awarded to include non-economic aspects in addition to the economic damages. Collaborative measures should also be taken between States to prevent transboundary pollution, promote equity between nations and to foster co-operation based on the principle of common but differentiated responsibility.