Recent development in the field of international liability regimes to tackle environmental risks

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Abstract The polluter-pays principle requires States to take any actions that may be necessary to ensure that polluters bear the full environmental and social costs of their activities. One step to implement this principle is the development of regulations on environmental Civil Liability. The adoption of the UN-ECE Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (Kiev Protocol) in May 2003 was the result of a three-year negotiation process undertaken in the aftermath of the Baia Mare accident in Romania. The accident caused transboundary water pollution in the downstream countries Hungary and Yugoslavia. Owing to the absence of applicable liability rules, no compensation was ever paid for the damage caused by the pollution. The Cartagena Protocol on Biosafety mandates the Parties to establish rules and procedures in the field of liability and redress. Here there is likely to be a longer negotiation process before an agreed regime on liability and redress for damage arising from the use of living modified organisms (LMOs) becomes available, owing to the complexity and the particularities of gene technology.

Keywords Causa proxima; liability; polluter-pays principle; precaution; prevention; transboundary pollution

Outline
In the first section we shall describe the interdisciplinary nature of an environmental Civil Liability regime and assess the nature of such an instrument in the context of international environmental principles. In the second section we shall describe the industrial accident which occurred in Baia Mare (Romania) in 2000 in the absence of adequate environmental liability regulations. We shall then provide information on the establishment of the Kiev Liability Protocol by the international community in response to the aforementioned accident (UNECE, 2003a). In the third section we shall address questions surrounding causation and standards of liability.

In the fourth section we shall then refer to the prospects for the elaboration of a planned regulation on liability and redress under the Cartagena Protocol on Biosafety (2000) for damage resulting from transboundary movements of living modified organisms (LMOs).

In the final section, we shall state our conclusions regarding the establishment of such regimes.

Environmental Liability – an interdisciplinary system to protect the environment
Civil liability is an obligation on the part of a Person under the applicable law to provide compensation for damage resulting from an action for which that person is deemed to be responsible. It is the obligation of a Person who has caused damage to persons, to property or to the environment to provide compensation for this damage. Civil Liability needs to be distinguished from Liability under criminal or under administrative Law. It must also be distinct from State Responsibility, which is the obligation of a State to provide compensation for, or to rectify, damage which was caused by one of its citizens.

The establishment, implementation and application of a regime on environmental Civil Liability is not a purely legal instrument made to be applied by lawyers. It is a more
complex system requiring close cooperation among experts and lawyers. In addition, there is a need for a common understanding of, and agreement on, all relevant aspects of such regulations. Treaties on liability and compensation recently adopted by the international community show that such an understanding is possible and that the negotiations associated with these treaties can be concluded within a reasonable period of time.

It is state of the art that such liability regimes are to be established in combination with a compulsory insurance scheme. The risk posed to the environment by facilities falling under the scope of such regulations has to be carefully assessed. This task can only be undertaken by competent experts. Based on the assessment of that risk, the insurance companies will set the premium. The operators therefore have a strong incentive to minimise risks in order to keep the cost of insurance premiums affordable.

From the perspective of environmental law policy, the main purpose of establishing a regime on Civil Liability is the prevention objective. Some degree of prevention is achieved where activities dangerous to the environment are only permitted if the liability will be covered by insurance or other financial guarantees. Such guarantees will then at least be available when the relevant safety standards are met. No insurer would be prepared to cover the liability for activities where risks have not been carefully assessed and minimised. This demonstrates how the private insurance sector can support and enhance the efforts of the authorities to prevent accidents that could cause major damage.

The second goal is the compensation objective: when an incident occurs in spite of the fact that all of the requisite safety measures have been taken, the regulation on liability will provide for appropriate compensation for the damage caused.

Principle 16 of the (United Nations, 1992) Declaration on Environment and Development stipulates that national authorities should endeavour to promote the internalisation of environmental costs and the use of economic instruments, taking into account the approach that the polluter should bear the costs of pollution. According to this principle, activities dangerous to the environment should only be permitted by the authorities when appropriate regulations on liability are in place, in conjunction with a compulsory insurance scheme.

Principle 13 of the Rio Declaration therefore stipulates that States shall develop national law regarding liability and compensation for the victim of pollution and other environmental damage (United Nations, 1992). States shall also cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

Domestic law on liability mainly governs the consequences of incidents that occur and manifest their effects within the national territory, while international law on liability governs scenarios where an incident occurs in country A and causes damage in country B. There is a difference in scope only; the purpose – prevention and compensation – remains the same for both types of regulations.

“Causa proxima” and standards of liability
During negotiations concerning a regime on environmental Civil Liability, the issues surrounding the required level of proof of causation and the standards of liability have to be addressed.

As far as proof of causation is concerned, when several different activities might have caused a damage event, it is particularly difficult to decide which of the activities is, in fact, to blame. In this case, the theory of “causa proxima” (or proximate cause) can help: according to this theory, the first cause from which the event flows in a natural, almost mechanical, and inevitable manner is the relevant cause. A further pertinent question in
this regard is the extent to which the causal link between the damage and the activities that caused the damage needs to be established. There are ambitions in some quarters to introduce specific conditions demanding a relaxation of the burden of proof or even its reversal.

As far as standards of liability are concerned, a standard of liability has to be chosen for every regime. The most common standards are the concepts of fault-based liability and strict liability. A fault-based liability regime requires the plaintiff to prove that the defendant had a duty to conform to a specific standard of conduct, that the defendant breached that duty, that the plaintiff suffered harm, and that the defendant’s breach of duty was the cause of the plaintiff’s injury. Strict liability normally applies in situations where the defendant causes injury in the course of an activity characterised as dangerous or hazardous. In the case of strict liability, the plaintiff does not need to prove that the defendant’s conduct was unreasonable; he merely has to establish the causal link.

Both the issue of causation and the standards of liability have recently been the subject of intensive discussions at the meeting of the technical group of experts on liability and redress in the context of the Cartagena Protocol on Biosafety, which took place on 18 October 2004 in Montreal, Canada (UNEP, 2004).

The Baia Mare accident and the Kiev Protocol as a reaction to it

On January 30 2000, there was a break in a dam encircling a tailings pond at a facility operated by the company Aurul SA in Baia Mare (north-western Romania). The result was a spill of approximately 100,000 cubic metres of liquid and suspended waste containing around 50 to 100 tonnes of cyanide, as well as copper and other heavy metals. The break was probably caused by a combination of design defects in the facilities set up by Aurul, unexpected operating conditions, and bad weather.

The contaminated spill leaked into the rivers Sasar, Lapus, Somes, Tisza and Danube before reaching the Black Sea about four weeks later. Some 2,000 kilometres of the Danube’s water catchment areas were affected by the spill.

Romanian sources said that, in Romania, the spill caused interruptions to the water supply of 24 municipalities, and financial losses for sanitation plants and industries because of interruptions in their production processes. Hungary estimated the amount of dead fish in Hungary at 1,240 tonnes. Yugoslavian authorities reported large amounts of dead fish in the Yugoslavian branch of the Tisza River. In March 2000, the foreign company that owned Aurul voluntarily entered receivership and was delisted from the stock exchange. No compensation has ever been provided for the damage to the environment and to individuals in the downstream countries Hungary and Romania (UNEP, 2000).

This is due to the fact that no adequate regime on international Civil Liability was in place. Moreover, the operating company was not solvent and therefore not in a position to provide compensation for the damage caused by the incident (Schwabbach, 2000).

The First Joint Special Session of the Parties to the United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes and the Convention on the Transboundary Effects of Industrial Accidents took place in Geneva from 2 to 3 July 2001 (European Parliament, 2001). It decided that an intergovernmental negotiating process should be entered into, with the aim of adopting a legally binding instrument on Civil Liability for transboundary damage caused by hazardous activities within the scope of both Conventions. To this end an open-ended intergovernmental Working Group was established with a mandate to draw up the above-mentioned legally binding instrument to be adopted at a future Joint Special Session.
On 21 May 2003 in Kiev, the Second Joint Special Session of the Parties (UNECE, 2003b) unanimously adopted the Protocol on Civil Liability and Compensation for Damage caused by the Transboundary Effects of Industrial Accidents on Transboundary Waters (Kiev-Protocol). The Protocol was signed by 23 Parties. The whole negotiation process took 18 months.

The Protocol has two main strengths:

- It stipulates that, throughout the UN/ECE region, compensation is to be provided for any damage caused by the transboundary effects of industrial accidents on transboundary waters.
- Operators of industrial facilities which, in the event of an accident, could cause transboundary effects on transboundary waters have to obtain insurance to cover their liability.

Civil Liability under the Cartagena Protocol on Biosafety for damages resulting from transboundary movements of LMOs

Article 27 of the Cartagena Protocol on Biosafety foresees that the Conference of the Parties shall, at its first meeting, adopt a process with respect to appropriate elaboration of international rules and procedures in the field of liability and redress for damage resulting from transboundary movements of LMOs. The reason behind this provision was the fact that many States were not ready to accept the establishment of international regulations on biosafety unless the question of liability and compensation was properly addressed. The first Conference of the Parties to the Cartagena Protocol in February 2004 decided how to start this process (UNEP, 2004). The first expert group meeting on this issue has taken place in October 2004, as mentioned above.

The establishment of agreements on liability and compensation for damages from transboundary movements of LMOs is a highly challenging task. On the one hand, it is common sense – particularly with respect to possible long-term effects of this new technology – that little knowledge is available on the frequency and the size of possible damage events. On the other hand, it is fairly widely acknowledged that scenarios such as the contamination of organically farmed fields by cross-pollination from LMO-crops are likely to occur when widespread application of gene technology begins (Rosso Grossmann, 2003).

The establishment of a regulation on liability, whereby possible future damages can be assessed and predicted, is therefore an act of prevention. In cases where it is uncertain, with respect to long-term effects, whether damage could occur (and if so, what kind of damage), the establishment of regulations on liability is also an act of precaution. Here, regulations will allow and promote behaviours that ensure that activities involving LMOs will be conducted with due care and that every effort will be made to minimise possible risks. Furthermore, these agreements require exporters of LMOs to ensure that funds are available to compensate for any damage caused by the LMOs. When looking at scenarios in which activities involving LMOs could lead to damage, separate provision is to be made for the following types of activities: the contained use of LMOs, the release of LMOs for experimental purposes (field trials), and the use of marketed LMOs (Figure 1).

Contained use of LMOs and field trials are types of activities which can, to a certain extent, be compared with other activities dangerous to the environment. They are undertaken in a fixed and specified installation and are under the control of an identified responsible operator. Here it is logical and uncontested to channel the liability for damages resulting from such activities to the operator.

When damage occurs as a result of the use of marketed LMOs, decisions on the channelling of liability are far more complex. Where there is a possibility that such damage may occur, the most likely scenario is as follows. An organically farmed field
is contaminated by LMOs as a result of cross-pollination from a neighbouring LMO field. At least three parties will be directly involved: the seed producer, the user of the seeds (the LMO farmer), and the farmer who suffered the damage (an organic or conventional farmer) (Figure 2).

For conventional or organic farmers who suffer damage from cross-pollination it would be extremely difficult to prove where the pollen-flight which caused the contamination had its origin. It would be almost impossible to prove who caused the damage. The question of how to deal with such damage resulting from the coexistence of LMO and non-LMO crops is being hotly debated in many European countries.

The Swiss Parliament has chosen the following solution in the new Swiss Gene Technology Law, which entered into force in January 2004 (Gene Technology Law, 2003). Primary liability will be imposed upon the person subject to the authorisation requirement, which is normally the producer or importer of LMO seeds. After having paid compensation for the damage, this person will have a right of recourse against persons who have handled such organisms inappropriately or have otherwise contributed to the occurrence or exacerbation of the damage (Figure 3).

The Swiss solution allows the farmer who has suffered damage from cross-pollination to analyse, in a simple procedure, the LMO which caused the damage. He will then be able to claim against the seed producer. The seed producer can check how his customers dealt with the LMO seed. If some farmers have handled such organisms inappropriately, the seed producer will have a right of recourse against the offending LMO farmer(s).
At the international level, many questions have yet to be raised. Which transboundary movements of LMOs should be covered by the liability regulation? Is unintended transboundary movement also to fall within the scope of such a regulation, or only intended movement? In the former case, will the focus only be on the transfer of LMOs that caused damage across the border as a consequence of an incident or an accident? If not, will LMOs that have been transported across a border in conformity with the relevant legal provisions and have then caused damage fall under the scope of an international regulation on liability and compensation? Moreover, any financial limits to such a liability regime will have to be decided on. A crucial point will be the extent to which the liability thus determined has to be covered by insurance or other financial guarantees.

Then time limits will have to be fixed for the liability. Decisions will have to be taken on the standards of liability. Is strict or fault-based liability to be applied? Negotiations on these and many other, partly controversial, questions will show whether a productive outcome is to be possible in due course.

Conclusions

Domestic and international regulations on Civil Liability are necessary instruments to internalise the environmental costs of activities dangerous to the environment. They provide that the person in charge of a hazardous activity will be held liable for all consequences of such activities, particularly in the event of incidents or accidents. It will then not be incumbent upon the victim or the State to compensate for the damage that has been suffered or for the reinstatement of the impaired environment. The establishment of a regime on environmental Civil Liability is therefore a further important step towards implementation of the polluter-pays principle.

Where activities are undertaken and their consequences, particularly with respect to the frequency and possible size of damage events, are uncertain or even unknown (as is the case in the biotech sector, for example), the establishment of a regulation on Civil Liability reflects the precautionary principle. According to this principle, the lack of certainty is not an excuse for delaying measures to prevent environmental harm.

The establishment of a regime on Civil Liability is such a measure. It is, in addition, a reasonable measure, because it does not prohibit such activities – it merely accompanies the activity with a legal instrument to prevent damage and to provide compensation where necessary.
References


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