

---

## **The Hungary-Slovakia Danube River dispute: implications for sustainable development and equitable utilization of natural resources in international law**

---

Bukhosi Fuyane and Ferenc Madai

The Centre for Energy, Petroleum and Mineral Law and Policy,  
Dundee, Scotland

**Abstract:** The Gabcikovo-Nagymaros Project dispute is one of several controversies that have surrounded the use of Europe's second longest river – the Danube. It is a dispute that rocked Hungary and Czechoslovakia for many years before reaching the International Court of Justice. At the very heart of the matter are international environmental law issues, in particular, sustainable development and equitable utilization of international watercourses. The authors analyse the background of the dispute, the September 1997 International Court of Justice's decision, and the post-case developments that have since taken place. The paper seeks to determine the extent to which these international law concepts were given effect in the ICJ decision. The writers also question how effectively the ICJ addressed the issues that were presented to it by the parties before finally considering how the competing interests could have been balanced within the framework of these concepts. The paper concludes that the ICJ decision was largely non-committal to the real issues facing the parties and that this might carry some adverse implications for similar future cases.

**Keywords:** Danube River; equitable utilization; Gabcikovo-Nagymaros Project; International Court of Justice; international environmental law; sustainable development; treaty law; water law.

**Reference** to this paper should be made as follows: Fuyane, B. and Madai, F. (2001) 'The Hungary-Slovakia Danube River dispute: implications for sustainable development and equitable utilization of natural resources in international law', *Int. J. Global Environmental Issues*, Vol. 1, Nos. 3/4, pp.329–344.

**Biographical notes:** At the time of writing the authors were LLM degree candidates at the Centre for Energy, Petroleum and Mineral Law and Policy at the University of Dundee, Scotland specialising in Mineral Law and Policy. Bukhosi Fuyane is a lawyer and has worked for the Ministry of Justice in Zimbabwe. Ferenc Madai, an engineer, is a lecturer at the University of Miskolc in Hungary.

---

### **1 Introduction**

The Hungary-Slovak Danube river dispute has spanned several years and even witnessed a change of regimes. It is regarded as a landmark case in that it was the first brought before the International Court of Justice (ICJ) where international environmental issues

and in particular, the concept of sustainable development received international legal effect for the first time. The ICJ judgement (delivered on 25 September, 1997) therefore serves as a useful precedent for similar future cases of international environmental law [1]. The Gabčíkovo-Nagymaros barrage system (GNBS) was conceived during the Socialist era and was in fact the last major project of this era in these countries. The case is a reflection of the developments that have taken place in international environmental law issues. Aspects of environmental protection which were underestimated during the project planning period, and not well-elaborated in the 1977 Treaty, have come to receive the greatest prominence. With the emergence of democracy in these Eastern European States, particularly in Hungary, these environmental concerns gradually became matters to be reckoned with. The case was also caught up in political tensions in these countries and to an extent, it reflects the political processes that took place in Hungary and Czechoslovakia during the last decade of the Socialist Era and into the first years of democracy.

With the ICJ decision, the dispute is hopefully on its way to a sustainable settlement. This paper seeks to analyse what role the concepts of sustainable development and the principle of equitable utilization of international watercourses should play in the resolution of such disputes, and whether these principles played any meaningful role in the determination of this particular dispute by the ICJ. The writers also question whether the ICJ properly discharged its function in determining the three issues put to it by the parties.

## **2 The case background**

### *2.1 The GNBS project and the 1977 Treaty*

Plans for the regulation of the Danube river bed and utilization of hydroelectric power emerged as early as the beginning of this century. The Danube Commission (established by the 1948 Belgrade Danube Convention) was created to accelerate these plans and in particular to facilitate the opening of the waterway between the Black and North Seas, using the Danube-Main-Rhine canal, for use by ships with a capacity of up to 1500 tons [2].

One of the critical sections of this waterway is that which lies between Bratislava and Budapest, where the Danube flows onto a plain area from the upstream mountains. This sudden change in geomorphology causes intensive sedimentation, forming an inland delta area. Without any intervention to mitigate these effects, this section cannot be utilized for any large-scale navigation. In 1977, Hungary and Czechoslovakia concluded a treaty for the construction of the Gabčíkovo-Nagymaros Barrage System (GNBS). The objectives of this project were:

- energy production, for the joint benefit of both countries;
- electricity production, which would replace the air polluting, brown coal-operated power stations;
- protection of the Danube lowlands from floods;
- development of irrigation systems along the projected area; and
- improvement of navigation on this section of the Danube (while still adhering to the 2.5 metre navigation depth recommended by the Danube Commission) [3].

The Treaty provided for the construction of the Dunakiliti dam and reservoir on Hungarian territory, the Gabčíkovo tailrace canal and hydropower system on Slovak territory, and the Nagymaros dam and hydropower system on Hungarian territory [4]. In terms thereof, the GNBS would have been operated at peak-power regime [5], with a water charge 2.5 times higher than in the normal regime. Such a large-scale peak-power system would have been the first of its kind in Europe [6]. This would be possible only through the construction of the entire GNBS, requiring the full cooperation of both countries. During normal regime however, the system could be operated without the second lock (at Nagymaros). The construction of these works was set to be completed during the period 1986–90.

## *2.2 Ecological concerns and the suspension and abandonment of works by Hungary (1988–89)*

In April 1978, construction work began in earnest in both countries. Due to financial constraints, the Hungarian Government suspended construction in 1981. This was followed by the conclusion of a credit agreement with Austria in 1986 [7]. By this time, public criticism of the project had emerged in Hungary. The Danube Movement (DM), an organization that later grew into an influential Non-Governmental Environmental Organization (NGEO) was established during this period. The organization lobbied strongly against the GNBS, which was thought to entail severe ecological damages. A demonstration of 30,000 people organized by the DM and backed by the opposition was staged against the project in Budapest in September 1988 [8]. Gradually, the GNBS became labelled as a symbol of the non-pluralistic, command economy system.

In February 1989, the Hungarian government went against the public tide and signed a Protocol with Czechoslovakia for the acceleration of works on the project. At this time, the Dunakiliti dam was 90% complete, the Gabčíkovo tailrace canal and dam 85%, and the Nagymaros dam 60% towards completion. In a turn of events that had been predicted by some, Hungary unilaterally suspended construction works at Nagymaros from May 1989 until October 1989. She cited ecological concerns for this act [9], although the move had clearly been motivated by the wave of public discontent expressed towards the project. Among the ecological concerns cited were the potentially irreversible changes in biological diversity of the Szigetköz ecosystem [10], and the hazards likely to be caused by the peak-power operation of the project.

After Hungary's unilateral suspension, negotiations between the parties began, but failed to yield any positive results. On 30 October 1989, the Hungarian Parliament voted to abandon completely the works at Nagymaros and to suspend works at Dunakiliti [11]. Reacting to this move, Czechoslovak specialists devised seven variants for the continuation of the project. With the exception of 'Variant A' – which entailed the construction of the original project – the variants did not envisage the inclusion of the Nagymaros dam. 'Variant B' involved the completion of the Dunakiliti-Gabčíkovo system, in accordance with the original Treaty, but without the Nagymaros lock. 'Variant C' entailed the "completion of the Gabčíkovo hydroelectric station with a smaller reservoir, exclusively on Slovakian territory" [12]. This variant excluded the Dunakiliti dam from the system and proposed a significant diversion of the Danube on Slovak territory.

### *2.3 Termination of the Treaty by Hungary (1991–92) and the diversion of the Danube (October 1992)*

In April 1991 Hungary initiated negotiations for the complete termination of the 1977 Treaty [13]. Slovakia rejected this proposal and instead decided unilaterally to implement a ‘provisional solution’ (Variant C) in July 1991 [14]. Several unsuccessful negotiations ensued, but the opposing interests could not be reconciled [15]. Hungary unreservedly denounced the implementation of Variant C by Slovakia, which it regarded, (as did the DM) as technically impossible, and a disguised strategy to compel Hungary to adhere to the original plan embodied in the 1977 Treaty. The DM was influential in “press[ing] the Government not to negotiate about anything else other than termination of the Treaty” [16]. The Consultative Board of the Hungarian Academy of Sciences, among other institutions, also supported the termination, arguing that Hungary was well within its rights to terminate the Treaty [17].

Hungary eventually terminated the Treaty with effect from 25 May 1992. Slovakia completed the construction of the Cunovo dam (upstream Dunakiliti) shortly thereafter and planned the diversion of the main stream of the Danube for the end of October 1992 [18].

### *2.4 The special agreement and the lawsuit before the ICJ*

Following the unilateral diversion of the Danube by Slovakia, the European Council joined the negotiations. In the first round of negotiations (London, 28 October 1992) the parties signed a non-binding Protocol concerning the discharge of water into the riverbed and to the tailrace canal [19]. In the meantime, and in pursuance of Variant C, Slovakia charged 80% of the water into the tailrace canal. This resulted in the alteration of the Szigetköz ecosystem and the underground water system [20]. After lengthy negotiations, the parties concluded an Agreement, concerning the discharge of water [21], which preliminarily solved the ecological problems in the Szigetköz region.

It was at this point that the parties agreed that the dispute should be submitted to the ICJ for the final determination of issues set forth by both parties. The questions submitted to the ICJ were contained in a Special Agreement [22] signed at Brussels on 7 April 1993. The following three questions were put to the ICJ [23]:

- 1 whether the Republic of Hungary was entitled to suspend and subsequently abandon, in 1989, the works on the Nagymaros Project and on the part of the Gabčíkovo Project for which the Treaty attributed responsibility to the Republic of Hungary;
- 2 whether the Czech and Slovak Federal Republic was entitled to proceed, in November 1991, to the ‘provisional solution’ and to put into operation from October 1992 this system, ...;
- 3 The legal effects of the notification, on 19 May 1992, of the termination of the Treaty by the Republic of Hungary.

The parties decided, that “[t]he Parties shall accept the Judgement of the Court as final and binding upon them and shall execute it in its entirety and good faith” [24].

### **3 ICJ decision and its implications for sustainable development and equitable utilization**

#### *3.1 Technocentric vs. ecocentric approach*

The core of the conflict between the two countries [25] can be examined in terms of the concepts of sustainable development and use of international watercourses. Although there were some political conflicts that escalated the tension between the two sides, a fundamental basis for conflict was each party's differing conception of the application of these principles. For example, each side had a completely different cost-benefit analysis of the project. Decision makers on the Slovak camp based reliance on expert opinion, while in Hungary, the 'ecocentric' views of environmental NGOs influenced the decisions of the Government and Parliament to a large extent. Right from the outset therefore, there existed fundamental differences in viewpoints, which later proved formidable to reconcile.

As reflected in the parties' submissions to the Court, Slovakia considered the GNBS and the related section of the Danube primarily in a development-oriented context:

- Electric power generation of the Gabčíkovo plant would yield a \$100-120 million annual income [26]. The abandonment of construction by Hungary had resulted in a \$10 billion economic damage to Slovakia [27].
- A proper flood control mechanism would be established.
- Conditions of navigation upstream of Gabčíkovo would be improved and measure up to the recommendations of the Danube Commission [28].
- Improved irrigation conditions, conducive to agriculture.
- Environmental damages (in the form of limited drainage effect of the tailrace canal) were manageable. Environmental conditions would be improved (the 3-4 m rise of groundwater level would halt riverbed degradation) [29].

On the other hand, Hungary viewed the project strictly from an environmental perspective, and asserted that the project would result in serious environmental damage (the lowering of groundwater level alongside the tailrace canal as a result of intensive silt sedimentation in the riverbed). In actual fact, the low water-charge of the old riverbed (resulting from the diversion) had seriously damaged or at least endangered the diverse features of the Szigetköz ecosystem. Conversely, the deepening of the riverbed below the Nagymaros dam could lower the average groundwater level in the surrounding area, which is the main water-source for Budapest. An added concern was the damage of the historic and natural landscape on the Danube bend, one of the most attractive tourist sites in Hungary. It must be mentioned here that the environmental consequences likely to result in either country differed in nature and extent. As an upstream country, Slovakia would suffer negligible damage as compared to Hungary located downstream. The possible environmental effects downstream the Nagymaros dam were irrelevant to Slovakia. Hungary also ventured to question the economic feasibility of the entire project. Experts from the Hungarian side pointed out that 'all calculations made prior to 1989 indicated that costs exceeded benefits ... [and in order] to reach favourable conclusions ... indirect economic benefits were given undue weight, while various costs

(particularly environmental ones) were ignored' [30]. It is suffice to state that for Hungary, the original project became particularly unprofitable following the conclusion of the debt agreement with Austria, whose re-payment was planned to be settled by electric energy for the following 20 years [31].

The process of reconciling these opposing views, particularly on an international scale, is complex and intricate. Environmental and economic assessments of the project that were carried out before 1989 were subsequently said to be inadequate and below even the minimum of standards [32]. The possible ecological damage in the Szigetköz region for example, had been excluded from that assessment [33]. As has been noted, the economic valuation of environmental costs and benefits, such as the biological diversity, historical landscape or long-term environmental changes had not received attention [34]. This is a typical case where the Court was required to act only on the information at hand to balance two seemingly legitimate interests.

### *3.2 The ICJ decision*

For purposes of this work, only the decision of the Court relating to the first two points of the above-mentioned Special Agreement will be analysed. It is intended to determine whether and what part, (if any), the concepts of sustainable development and equitable utilization of international watercourses played to balance on one hand, the environmental interests relied upon by Hungary to repudiate the 1977 Treaty, and on the other, the competing developmental concerns raised by Czechoslovakia coupled with its subsequent implementation of Variant C. Sustainable development requires any development-oriented project to be carried out in a manner that recognises the need to protect the environment. More precisely, it is 'development that meets the needs of the present, without compromising the ability of future generations to meet their own needs' [35]. At first sight, this concept would provide the ideal tool by which the Court could have reconciled the differences before it. Although it was called upon to decide on the actual 'legality' of Hungary's defection from the Treaty provisions, the issue of the sustainability of the environment even within this context assumed some relevance (given that Hungary justified its repudiation on account of the preservation of the environment). The questions presented to the Court therefore intrinsically entailed environmental questions. This is endorsed by the parties' own affirmation of the relevance of the 'concept of sustainable development' to the dispute in their pleadings [36].

#### *3.2.1 Decision on the first question*

Hungary's environmental concerns, occurring as they did within the context of a breach of Treaty, were treated within the rigid confines of the 'state of necessity test', as defined by the International Law Commission. Hungary had to demonstrate that its actions:

- were occasioned by an essential interest;
- that the interest must have been a 'grave and imminent peril';
- that the act was the only means of safeguarding that interest, and
- that the act must have seriously impaired an essential interest [37].

The Court accepted that there existed a potential for adverse impacts on the environment emanating from the Project. Although ecological preservation constituted an essential interest, on the whole, the environmental risks Hungary complained of were found to be neither certain, short-term nor imminent [38]. Furthermore, these risks could be mitigated, for example, by the lowering of the riverbed, the siltation problems by the regular discharge of gravel into the river downstream of the dam, and the water quality improved by the processing of the river water [39]. It is beyond the scope of this work to address whether such measures could bring about the desired results.

On the other hand the Court affirmed the relevance of the 'preventive approach' in the field of environmental protection [40]. Sustainable development, (whether in the form of a concept or a principle) is an ingredient of the preventive approach. In seeking to promote a sustainable utilization, sustainable development also seeks to prevent negative environmental effects. Hence, it forms one of the 'new norms or standards that have emerged' to which the Court gave its approval. It is a concept that deserved to be given 'proper weight, not only when States contemplate new activities but also when continuing with activities begun in the past' [41]. In this context therefore, sustainable development, constituted such a standard and a continuing obligation to which both parties (and the Court) were entitled to give weight. Instead, the concept did not receive anything more than *orbiter* recognition and no weight was attached to it in the Court's decision relating to the first point. Short of granting Hungary the right to terminate the Treaty, the environmental interests at least justified the discontinuation (or suspension) of the project by Hungary.

Articles 15, 19 and 20 of the 1977 Treaty addressed the environmental issue by calling on the parties to comply with obligations to protect nature and fishing interests and ensure that the water quality was not impaired. The imperative wording of Articles 15, and 20 attaches a clearly defined obligation. Rightly so in our view, the Court held that obligations of an evolving nature were imposed on the parties. This finding raises an interesting issue. If the protection of nature, was an 'evolving' obligation, and accrued to both parties, then either party's actions designed to protect nature, even if unilateral, arose as part of that obligation. Therefore one could argue that Hungary was obliged in terms of the Treaty not to proceed with a project whose sustainability to the environment had become an issue. Further, even Czechoslovakia, could be similarly deemed obliged not to proceed with a project whose sustainability to the environment of its joint partner had, whether rightly or wrongly, become questionable, until the environmental concerns had been adequately addressed.

However, such a course of action, could have resulted in the complete abdication of the objectives of the Treaty, which was to construct dams. The parties would then need to negotiate a new system of construction, (incorporating the necessary measures to mitigate environmental damage), which would then be appended to the Joint Contractual Plan. Instead, the strategies adopted by both parties prove that if an interest, either environmental or developmental, is pursued without consideration of the other it will in the long run fail to sustain itself.

Therefore, the Court's finding on the first point is on the whole quite unresponsive to such emerging trends in environmental management. The preventive and precautionary approaches (of which sustainable development is part) are notions that have emerged to address potentially harmful activities on the environment, even in the absence of conclusive scientific proof [42]. These place emphasis on the need to

pre-empt environmental damage. The decision is insensitive to the importance of actions taken in the name of environmental protection, hence sustainable development. Instead, it unduly focused Hungary's actions on the 'certainty' and 'imminence' of harm. Where environmental concerns exist, they must be addressed in the first instance and ways to prevent or mitigate them devised. It is insufficient to speculate that at some point during the life of the project, it might have been possible to mitigate environmental damage as this runs counter to the preventive approach. Presumably however, the Court could envisage the drastic implications that a decision entitling Hungary to repudiate a Treaty on account of environmental concerns would have had on treaty law in general. In the final analysis, the point successfully conveyed by the Court is that environmental threats (occurring in the context of a development-oriented project), should not be construed only in terms of their existence, but also in terms of how they can be averted or mitigated.

### *3.2.2 Decision on the second question – equitable utilization*

The guiding principle in the allocation of waters of an international watercourse is rooted in equity, i.e. there must be "perfect equality of all riparian States in the user of the whole course of the river and the exclusion of any preferential privilege of any one riparian State in relation to others" [43]. Equitable utilization is a narrower sub-concept of the umbrella concept of sustainable development. Several authors also suggest that equitable utilization is a vehicle by which to achieve sustainable development [44]. In defining the principle, the Convention on the Law of the Non-Navigational Uses of International Watercourses creates this link clearly:

"... In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimal and *sustainable* utilization thereof and benefits therefrom, taking into account the interests of the watercourse States concerned ..." [45] (Emphasis added)

Equitable utilization is therefore defined in terms of sustainability, particularly in relation to the interests of other riparian States (in accordance with their rights to a common watercourse).

Here, the majority court decision was that Slovakia's implementation of the provisional solution deprived Hungary of its rights to an equitable allocation in international law. (Hungary and Slovak share a common border that lies in the mainstream of the Danube). Slovakia would divert some 80% of the Danube waters 'before returning them to the main bed of the river' [46]. Judge Koroma, dissenting, expressed the view that this approach applies only in circumstances where the conduct of the parties is not regulated by Treaty and that this was not the case in this instance. The parties to a Treaty remain free to establish a different regime. However, in the event of a dispute, a clearly unsustainable allocation, not compensated for in any manner is unlikely to be upheld, by virtue of the principle of equitable utilization. But to suggest that in the present case, Hungary had (in terms of Article 14 of the Treaty) agreed to the allocation that was subsequently implemented by Czechoslovakia is not precise [47].

Article 14 was formulated to apply within the context of a joint investment by the two parties. The excess withdrawal contemplated would entitle one to compensation in the form of a reduced share of electric power for the other party. As for the allocation of water to Variant C, the resultant distribution between the two countries was properly adjusted in terms of the principle of equitable utilization. Under the implementation of Variant C, Slovakia would appropriate to its own use a quantity representing 80% of the



waters. This unilateral measure would have resulted in adverse effects on the ecology of the Szigetköz region. In fact, when the provisional solution was put into operation, there is evidence that there was a substantial decrease in water levels in this riparian region [48]. Yet, Slovakia's case was overall primarily weakened by two factors:

- That the operation of Variant C would have (negative) transboundary effects. This emphasizes the importance of consultation, and co-operation in the utilization of an international watercourse, regardless of the fact that such actions originated within the sovereign territory of Slovakia. On this point, Slovakia was put in a difficult position given the hostility of Hungary.
- The sheer quantity of water diverted to Variant C, which ran counter to the theory of equity. There are suggestions that technically, it would have been feasible for Variant C to maintain a lower water charge. However, this situation would compromise its economic feasibility for the generation of electricity.

### *3.3 Balancing utilization, sustainability and development*

Sustainable development and equitable utilization can be achieved only by the appropriate balancing of all the interests involved. Presently there does not exist any well-defined mechanism by which to balance these concerns. International law has over time identified certain 'sub-concepts' of sustainable development [49]. These, however, tend to be somewhat utilization-oriented and only define sustainable *methods* of utilizing natural resources without providing any formula. Equitable utilization does however, provide a useful measure by which to balance utilization (and development). It calls for the assessment of each interest involved within a framework of equity [50].

#### *3.3.1 What is equitable?*

Within the context of international watercourses, equitable utilization must go beyond the concept of percentages, although percentages will, if precise, provide a useful yardstick. Percentages alone do not reflect the peculiar 'interests and needs' of other riparians. One must avoid the simplistic approach of determining quantities of water diverted, but also consider the precise needs of other interested parties for the use of the water resource, as well as any resultant damage that may arise as a result of that use.

In the present case the Court placed undue emphasis on percentages. As Judge Koroma speculated, had Slovakia withdrawn say only 50%, might that have been considered equitable? This is where the wide-ranging interests for the use of the waters must be considered. The unilateral diversion prompted by Variant C was inequitable to the ecology of the riparian Szigetköz region, even though the precise extent was not immediately determinable. This reaffirms the notion that the interests of a country in the use of a watercourse do not necessarily have to relate only to 'consumptive' interests, but that 'non-consumptive' uses (such as the protection of ecology) are equally important. Equity is prone to subjectivity and one must always be on guard in applying the process. What is equitable (to each riparian) may differ "according to levels of economic development, and economic and cultural traditions" [51]. Due to such considerations, equitable utilization cannot be left to do the sifting process on its own. To be practicable, one must keep in mind the broad objective of equity, which is to achieve sustainability.

### 3.3.2 *What is sustainable?*

Slovakia also had legitimate interests to implement Variant C. This is a country that had expended considerable finances on the project and was in dire need to dam the Danube waters for purposes of generating electricity. The country had also incurred losses as a direct result of the repudiation of the Treaty by Hungary. The project itself had considerable economic benefits, which included improved navigation further downstream, and the mitigation of floods.

Issues to be considered in determining what is sustainable include the economic benefits that stand to be derived from the proposed project vis-a-vis the possible harm that may be engendered. Economic benefits must be construed broadly as relating not only to fiscal rewards, but also to the benefits that accrue to the populations affected. In this context, the improvement of navigation, hence commerce in the area and the controlling of floods amounted to economic benefits. Would the economic benefits be vast or insignificant? Issues to be determined include those of an environmental nature, the nature of damage (if any) likely to be caused by the utilization, i.e. whether it is vast or insignificant, reversible or irreversible. Secondly, the extent of damage likely to be caused, i.e. whether it is localized, bilateral or transnational. The greater the extent the more probable it is to result in, in addition to some transboundary harm in breach of another well established international law principle. Conclusive environmental impact assessments play a significant role in the determination of these points. A third factor is the availability or otherwise of measures to preclude or reverse the harm. In a transboundary context however, who should determine the relevance of each interest is a keen point. There is then a need for an independent and authoritative body that will adjudicate such differences between countries even before they reach the echelons of an International Court. In the present instance Hungary for example undermined the benefits of the project, whilst Slovakia also downplayed the environmental risk. States must understand that both development and environment are to be considered in unison and that one is not to be regarded in the absence of the other, or as Judge Weeramanty expressed it, “each Principle cannot be given free rein, regardless of the other” [52]. Initially, the parties themselves needed to acknowledge the significance of the project, and take positive steps to mitigate the environmental risks. The fact that the risks were of a long-term nature, as the Court so repeatedly stressed, does not imply that they should be overlooked at the ‘initial’ stage when Hungary raised its objections. As stated, there is a growing plethora of law in support of preventive and precautionary approaches in environmental protection [53].

The Court balanced these interests through a process that did not take into account all the interests involved. In summary, the critical message conveyed by the Court is that environmental protection strategies deserve an equal footing with developmental strategies. It is the writers’ contention that where there exists a reasonable risk to the environment any development must lean in favour of environmental protection in order to be sustainable. In addition any criteria for balancing environmental and developmental concerns must also take into account other international law principles (even though they are still evolving). This scenario is one that could have been averted were it not for the intransigence of both parties. Cooperation and negotiation are paramount factors in striking the correct balance.

We conclude in the next section, by highlighting the post-decision developments and to what extent the parties have implemented the decision of the Court.

#### **4 Post-case developments**

The ICJ gave the parties up to six months to negotiate a workable solution. Since then, more than eleven rounds of negotiations have been conducted. It was evident from early deliberations that the two sides interpreted the Court's decision differently. Even though the Court found, that 'the 1977 Treaty is still in force' [54], when Slovakia proposed to construct the entire system as had been originally agreed in the Treaty, (amending only the objects of the provisional solution i.e. the Cunovo reservoir and the connecting channel to the tailrace canal), Hungary categorically rejected the building of a second dam on the Danube [55].

Due to these incompatible views, the parties have moved to work out a new compromised solution. Hungary put forward three alternative proposals, designed overall to improve the conditions of navigation on the Danube between Gabčíkovo and Budapest. These are:

- to modify the shape of the river-bed and increase the water depth
- to elevate the water level by spurs, and
- to build two small dams with hydropower plants instead of a larger one.

The first two received the support of Hungary's influential environmental groups. The first proposal needs to be renewed regularly to be efficient and would be quite costly for the country. On the contrary, the same environmental groups have protested against the building of any new dams on the river.

In December 1997, Slovakia rejected the first two proposals. Pavel Baco, head of the Slovak delegation stated that, "unless Nagymaros or a similar plant is completed, Slovakia will insist that Hungary pay compensation for the shortage of electric power" [56]. In January 1998, János Nemcsók, the head of the Hungarian delegation announced that Hungary would not agree to the building of a new dam unless it is preceded by a thorough environmental and economic impact assessment [57]. This would address the anomaly that existed in 1977 and also in 1989, when no impact assessments were conducted [58].

The Court found that Slovakia was entitled to proceed to construct the 'provisional solution' [59] but was not entitled to put it into operation [60]. This has generated some debate concerning the upstream portion of the GNBS. During one round of negotiations, it was suggested that the parties agree to adopt these variants as part of the GNBS, or alternatively put into operation the completed Dunakiliti reservoir and dam, which was part of the original Treaty. On the 27th February, the parties finally signed a Memorandum of Understanding, in which they agree on 4 major points [61]:

- the water level of the Dunakiliti dam will be elevated up to 128m above the sea level (making it possible to regulate the water charge into the Danube, as well as to stimulate the necessary flood mechanisms on the floodplain)
- the Cunovo reservoir will be adapted to the inventory of the GNBS
- a dam will be built at Nagymaros or at Pilismarót, and
- the parties mutually renounced all financial claims and counter-claims.

This Memorandum sought to strike a balance between the utilization of the watercourse for ecological purposes vis-à-vis for energy use [62]. Although it was only provisional, (due to expire on 30 June 2000 unless the parties mutually agree to extend it) [63], it was a milestone achievement indicating a commitment to reconcile interests.

In May 1998, a new coalition replaced the socialist-liberal Hungarian Government. During the campaign, the coalition had already declared that the Memorandum ought to be revised. After assuming power, a few negotiation rounds were held but the parties became even more polarized. Slovakia launched a new appeal to the ICJ on 2 September 1998. In 1999 elections were also held in Slovakia. The new government enjoys a better relationship with the present Hungarian government. The situation remains more or less frozen, which some regard as favourable for the countries' relations, but not by far a permanent solution.

## 5 Conclusion

The Hungary-Slovak Danube River case is a landmark in that it was the first time the ICJ was called to decide on issues of international environmental law within the context of the utilization of an international watercourse. From the onset, the Court was restricted to determining only the three questions put to it by the parties in the Compromise. The questions all embodied issues of an environmental nature and it is this environmental aspect that formed the essence of the protracted dispute. However, the Court responded to them only in *orbiter dicta* and in that regard the decision was non-committal to the real issues at hand. It can therefore be argued that the questions put to the Court were not satisfactorily canvassed. As a result, both parties were left dissatisfied. Shortly after the decision, it was said that this had been a 'gentleman's decision' – a framework to resolve the dispute through amicable means. What the parties (and the international community) expected from the Court was a more definitive and urgent framework. Having been locked in futile negotiations for over a decade, the parties find themselves having to return yet again to the drawing board. The question to be asked is 'Is the ICJ the right forum to resolve international water disputes in a conclusive manner?' Any other institution could have fulfilled a similar arbitrary function as long as the parties submitted to its judgement. The decision might have some implications for similar cases in the future. Against this background the Court might be obliged to give parties the same 'freedom' to resolve complex disputes out of Court (especially where a Treaty exists). The effectiveness of this approach is questionable, particularly in a situation (such as the present one) where the parties have different interpretations of the Court's decision, making the objective self-defeating.

It is noteworthy however that subsequent negotiations between the parties have been in keeping with sustainable development. The parties are demonstrating the importance of a concept, which was treated only as *orbiter* by the Court. Their negotiations reveal that the issues relevant to their dispute are of an environmental nature. The arrogance that both parties has exhibited before has been replaced with reasonable cooperation. It remains to be seen whether the framework set by the Court is the most appropriate approach in disputes of such a nature.

## References and Notes

- 1 Case concerning the Gabčíkovo-Nagymaros Project, Hungary/Slovakia, <<http://www.icj-cij.org/idocket/ihs/ihsjudgement.1> (visited Dec. 10, 1997) ('Danube River case'). See generally Hungarian Declaration Terminating the Treaty, reprinted in, (1993) *Int. Legal Materials*, Vol. 32, pp.1269–1290; Seidl-Hohenveldern, I. (1992), 'Danube commission', in Bernhard, R. (Ed.), *Encyclopaedia of Public International Law*, Vol. I; Linnerooth, J. (1990) 'The Danube River Basin; negotiating settlements to transboundary environmental issues', *Nat. Resources J.*, Vol. 30, pp.629–660; Margesson, R. (1997) 'Reducing conflict over the Danube waters; equitable utilization and sustainable development', *Nat. Resources F.*, Vol. 21, pp.23; Wouters, P.K. (1996) 'An assessment of recent developments in international watercourse law through the prism of the substantive rules governing use allocation', *Nat. Resource J.*, Vol. 36, pp.417–439. Mucha, I., 'Plenipotentiary of the Slovak Republic for construction and operation of Gabčíkovo-Nagymaros hydropower project'.
- 2 Linnerooth-Bayer, J. and Murcott, S. (1996) 'The Danube river basin: international cooperation or sustainable development', *Nat. Resources J.*, Vol. 36, pp.521–548, at pp.525-526.
- 3 Galambos, J. (1993) 'An international environmental conflict on the Danube: The Gabčíkovo-Nagymaros Dams', in A. Vári. and P. Tamás (Eds.) *Environment and Democratic Transition: Policy and Politics in Central and Eastern Europe*, pp.176–226, at p.199.
- 4 Treaty concerning the construction and operation of the Gabčíkovo-Nagymaros system of locks, 16 Sept., 1977, Czechoslovakia-Hungary, reprinted in (1993) *Int. Legal Materials*, Vol. 32, pp.1247–1258 ('Gabčíkovo-Nagymaros Treaty').
- 5 An artificial tidal effect is created by this regime, opening the locks at Dunakiliti. The energy production by this regime is much higher than in normal regime.
- 6 Kern, K. (1997) 'The original project – scientific concerns', *Oral Presentation in the Danube Case before the ICJ* on March 4, 1997, <<http://www/meh.hu/kum/Haga/Day2/7.htm>> (visited 6 November 1997).
- 7 Galambos, ref. 3, pp.181. According to this contact, Austrian banks were to supply loans for the construction of the project. Austrian companies were to be given 70% of all building contracts and Hungary was to repay the loans by delivering electric energy to Austria, from 1996 over a period of 20 years. The Austrian firms began work at Nagymaros in August 1988.
- 8 Anonymous (1997), Hágai Bós-per: féléves kemény tárgyalás következik, (Lawsuit in Gauge: 6 months difficult negotiations ahead, in Hungarian), *Magyar Hirlap*, 25 September, 1997.
- 9 Danube River case, ref. 1, para. 21, 22.
- 10 The Szigetköz region has a unique ecosystem with exceptionally diverse habitats.
- 11 Danube River case, ref. 1, para. 21, 22.
- 12 Galambos, ref. 3, pp.186.
- 13 Liska, M. (1995) 'Development of the Slovak-Hungarian section of the Danube', in Blake, H., Blake, G., Hildesley, H., Pratt, M., Ridley, R. and Schofield (Eds.) *The Peaceful Management of Transboundary Resources*, pp.175–185, at pp.180.
- 14 Danube River Case, ref. 2, para. 23.
- 15 See e.g. an unsuccessful meeting of the Hungarian and Czechoslovakian Parties on 15 July 1991, in which the Slovak Prime Minister, Jan Carnogursky participated; Exchange of letters between the governments in August; Hearing by the Federal Minister of Environment of Czechoslovakia, Josef vavrousek at the Environmental Committee of the Hungarian Parliament on 11 September 1991; Meeting of expert committees in Budapest in December. See Galambos, ref. 3, pp.189–190.
- 16 Galambos, ref. 3, pp.205.
- 17 Kopátsy, S. (1997), Fülemüle per Hágában, (Nightingale Lawsuit in Hague, in Hungarian), *Magyar Hirlap*, 3 October 1997.
- 18 Danube River Case, ref. 1, para. 23.

- 19 Danube River Case, ref. 1, para. 24. According to this protocol, 95% of the water charge would have been loaded into the old river bed. By such a condition, the exploitation of the Gabčíkovo plant would have been impossible.
- 20 Vida, G. (1997) 'Evolution, human intervention and natural values', *Oral submission about the Danube Case before the ICJ* at 3 March 1997, <<http://www.meh.hu/kum/Haga/Day1/4.htm>> (visited 6 November 1997).
- 21 Agreement concerning certain temporary technical measures and discharges in the Danube and Mosoni branch of the Danube, mentioned in Danube River Case, ref. 1, para. 25. According to this agreement, the old river bed would have been received 400 m<sup>3</sup>/s in annual average and the Mosoni Danube 43 m<sup>3</sup>/s. They also agreed that Hungary would build an underwater weir for improvement of the interaction of the river stream and the underground water system as well as the Szigetköz ecosystem.
- 22 Special agreement for submission to the International Court of Justice of the differences between the Republic of Hungary and the Slovak Republic concerning the Gabčíkovo-Nagymaros project 7 April 1993, reprinted in (1993), *Int. Legal Materials*, Vol. 32, pp.1291-1297 (Special agreement).
- 23 Special agreement, ref. 22, Art. 2, para. 1.
- 24 Special agreement, ref. 22, Art. 5, para. 1.
- 25 Slovakia became an independent country on 1 January 1993, but as of 1990 the federal Czechoslovak Government had agreed that the future of the GNBS must be managed by the Slovak Government.
- 26 Galambos, ref. 3, pp.200.
- 27 Liska, ref. 13, pp.179.
- 28 That means a minimum depth of 2.5 m. Such water level conditions downstream Gabčíkovo are non-existent from mid summer till September. See e.g. Réti, P. and Szabó, G., *Megállapodástervezet Bős-Nagymarosról* (Agreement-proposal about Box-Nagymaros, in Hungarian), *Heti Világgazdaság* (HVG), March 7, 1998.
- 29 Liska, ref. 13, pp.184. See also Liebe, P., 'Recent results of investigations regarding the relationship between surface and ground waters', <[http://origo.hnm.hu/danube\\_dg/e5liebe.htm](http://origo.hnm.hu/danube_dg/e5liebe.htm)> (Visited November 6, 1997).
- 30 Gorove, K. (1997) 'The viability of the original project', *Oral Presentation about the Danube Case before the ICJ* at 4 March 1997, <<http://www.meh.hu/kum/Haga/Day2/8.htm>> (visited November 6, 1997).
- 31 Galambos, ref. 3, pp.202.
- 32 Gorove, ref. 30, (i.e. international minimum standards).
- 33 Zsoldos, A. (1997) *Milliók és milliárdok – a bős -nagymarosi számla már így is nagyon magas*, (Millions and billions – the Bős-Nagymaros bill is even too high, in Hungarian), *Népszabadság*, November 28.
- 34 Sands, P. (1995) *Principles of International Environmental Law: Fireworks, Standards and Implementation*, Vol. 1, pp.640.
- 35 WCED Report, quoted in Handl, G. (1990) 'Environmental security and global change: the challenge of international law', *Y.B. of Int. Env't'l L*, Vol. 1, pp.3–33, p.20.
- 36 Danube River Case, ref. 1, Separate opinion of Judge Weeramantry, <<http://www.icj-cji.org/idoocket/ihs/ihsjudgement/ihsjudweeranman.htm>> (visited December 9, 1997).
- 37 Danube River Case, ref. 1, para. 52.
- 38 Danube River Case, ref. 1, para. 54.
- 39 Danube River Case, ref. 1, para. 55.
- 40 This approach has been favoured by Hungary.
- 41 Danube River Case, ref. 1, para. 140 (emphasis added).

- 42 See *Rio Declaration on Environment and Development*, 14 June, 1992, Principle 15, reprinted in (1992), *Int. legal Materials*, Vol. 31, pp.874–880; UN framework convention on climate change, 9 May, 1992, Art. 3, reprinted in (1992), *Int. Legal Materials*, Vol. 31, pp.849–873; UN migratory fishstocks agreement, 4 Aug., 1995, Art. 6, reprinted in (1993), *Int. Legal Materials*, Vol. 34, pp.1542–1580; UN convention for the protection of the marine environment of the north east Atlantic, 22 Sept., 1992, Art. 2(1)a, reprinted in (1993), *Int. Legal Materials*, Vol. 32, pp.1069–1100.
- 43 Danube River Case, ref. para. 85.
- 44 Sands, ref. 34, pp.204.
- 45 UN Convention on the law of the non-navigational uses of international watercourses, Art. 5, reprinted in (1997), *Int. Legal Materials*, Vol. 36, pp.700–720.
- 46 Vida, ref. 20.
- 47 The Gabčíkovo-Nagymaros Treaty, ref. 4, Article 14, para. 2 provides: ‘... without giving prior notice Parties could both withdraw from the Hungarian-Czechoslovakian section of the Danube and subsequently make use of the quantities of water specified in the water balance of the approved Joint Contractual Plan’.
- 48 Vida, ref. 20.
- 49 The ‘sub-concepts’ all derive from the umbrella concept of sustainable development; they are Intergenerational Equity; Sustainable Use; Equitable Utilization and Integration of Environment and development. See Sands, ref. 34, pp.199–208. See also UN Convention on biological diversity, June 5, 1992, *Int. Legal Materials*, Vol. 31, pp.818–841; UN Convention to combat desertification in those countries experiencing drought and/or desertification particularly in Africa, June 14, 1994, reprinted in (1994) *Int. Legal Materials*, Vol. 33, pp.1328–1382; UN Stockholm Declaration on the human environment, June 16, 1972, reprinted in (1972) *Int. Legal Materials*, Vol. 11, pp.1416–1469; UNCED Rio Declaration on environment and development, June 14, 1992, reprinted in (1992) *Int. Legal Materials*, Vol. 31, pp.874–880; Non-legally binding authoritative statement of principles for a global consensus on the management, conservation and sustainable development of all types of forests, June 13 1992, reprinted in (1992) *Int. Legal Materials*, Vol. 31, pp.881–887.
- 50 Birnie, P.W. and Boyle, A.E. (1992), *International Law and the Environment*, pp.127.
- 51 Beyerlin, U. (1996) ‘The concept of sustainable development’, in Max Plank *Institute of International Law*, pp.95, 104.
- 52 Separate opinion of Judge Weeramantry, ref. 36.
- 53 See the authorities collected at ref. 42.
- 54 Danube River case, re. 1, Art. 148.
- 55 Radio Free Europe/RL *NEWSLINE* Vol. 1, No. 157 (11 November, 1997).
- 56 Mucha, I. (1997), Plenipotentiary of the Slovak Republic for construction and operation of Gabčíkovo-Nagymaros hydropower project, <<http://www.uvtip.sk/slovak/ministerstvo/gabcikovo/book/book.htm>> (visited December 2, 1997). See also Radio Free Europe/RL *NEWSLINE* Vol. 1, No. 180 (December 12, 1997). Article 155. 2. D of the Judgements states: ‘unless the Parties otherwise agree, Hungary shall compensate Slovakia for the damage sustained by Czechoslovakia and by Slovakia on account of the suspension and abandonment by Hungary of works for which it was responsible; and Slovakia shall compensate Hungary for the damage it has sustained on account of the putting into operation of the ‘provisional solution’ by Czechoslovakia and its maintenance and service by Slovakia’. However, the ecological damages on the Hungarian side have not been assessed properly and such assessments have not been conducted in international disputes, whereas the shortage of electric power or the delay of ships can be assessed relatively easily.
- 57 Anonymous (1997) ‘Nemcsók János Szobnál és Nyergesújfalunál építené az új Duna-duzzasztókat’ (‘János Nemcsók would have built the new Danube-dams at Szob and Nyergesújfalu’, in Hungarian) *Népszabadság*, November 26, 1997; Anonymous, *Száz nap*

344 *B. Fuyane and F. Madai*

hordaléka', ('Alluvium of one hundred days, in Hungarian) *Heti Világgazdaság* (HVG), March 7, 1998.

**58** Gorove, ref. 30.

**59** Danube River case, ref. 1, Art. 155, 1. B.

**60** Danube River case, ref. 1, Art. 155. 1. C.

**61** Réti and Szabó, ref. 28, p.9.

**62** Réti & Szabó, ref. 28, p.10.

**63** Réti & Szabó, ref. 28, p.9.