

Sustainable Use of Freshwater Resources

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I. Introduction

The issue of freshwater resources is an increasing problem: in many areas of the world people do not have access to clean and sufficient drinking water. This not only causes many diseases among the population but it is also – in certain regions of the world – one of the major risk factors in maintaining peace. Thus, the perspectives of sustainable use of freshwater are of great importance not only from an environmental point of view¹. The sustainable use of freshwater resources often has an international dimension, since the use of such resources may concern several States. On the other hand, in a human rights law perspective, the aspect of internal access to freshwater also has a significant importance. Finally, it must be pointed out that the use of freshwater resources can have a great impact on future generations, and therefore also influences the “principle” of sustainable development.

The purpose of the following paper is not to deal in detail with the above mentioned issues. In this paper, I will try to evaluate the results of the Johannesburg Summit 2002 concerning the sustainable development of freshwater resources and to link it to the existing framework in international law² (II.) before considering the possible perspectives (III.). The paper ends with a short conclusion (IV.).

The exact meaning of the term “sustainable use” of freshwater resources cannot be fully explored in this paper; for our purpose, this notion refers to a use which guarantees that the existing freshwater can be maintained in quantity and quality for future generations. This especially means that the existing natural freshwater coming from water sources should be maintained and managed in such a way that in quantity and quality the water can continue to be used as freshwater resources for people³. This approach does not only imply protecting measures but also

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¹ Cf. on the importance of the “freshwater issue” Klaus M. Leisinger, *Die sechste Milliarde: Weltbevölkerung und nachhaltige Entwicklung*, 1999, 110 et seq.; Hans-Joachim Heintze, *Wasser und Völkerrecht*, in: Jörg Barandat (Hrsg.), *Wasser – Konfrontation oder Kooperation*, 1997, 279 (295 et seq.); Badr Kasme, *L'obligation de règlement des différends relatifs aux cours d'eau internationaux*, *Mélanges Mohammed Bedjaoui*, 1999, 179 et seq.; Stephen C. McCaffrey, *The Evolution of the Law of International Watercourses*, *AJIL* 1993, 87 et seq.

² Cf. to the present state of the law of international freshwater for example Betsy Baker Röben, *International Freshwaters*, in: Morrison/Wolfrum (eds.), *International, Regional and National Environmental Law*, 2000, 285 et seq.; Ulrich Beyerlin, *Umweltvölkerrecht*, 2000, 83 et seq.; Astrid Epiney/Martin Scheyli, *Umweltvölkerrecht*, 2000, 171 et seq.

³ Cf. in this context in the same direction Juliane Kokott, *Überlegungen zum völkerrechtlichen Schutz des Süßwassers*, *FS Günther Jaenicke*, 1998, 177 (201) who formulates this idea as follows: “Das Prinzip der nachhaltigen Nutzung bedeutet grundsätzlich eine Nutzung in den Grenzen der Regenerierbarkeit.”

managing measures in order to distribute the water resources in an appropriate way without damaging the availability of the resource itself.

II. Overview and Evaluation of the Results at Johannesburg

The use of freshwater resources is principally stated in points 23 to 28 of the “plan of implementation” adopted at the summit. This document is a “soft law” instrument, which means that it does not and will not be binding in the strict sense of the term but contains, above all, declarations of intention. This does not mean that they are irrelevant, but rather that they describe a target to be reached with the means available rather than strict obligations for the States to act or not. As concerns the content of the points mentioned, we can distinguish between different general aspects, concerning partly the use of freshwater resources and partly the use of other natural resources⁴ (1.), financial aspects and technology transfer (2.), prevention of water pollution (3.), introduction of an integrated water resource management (4.), and international co-operation (5.).

1. General Aspects

Two main points of the chapter related to sustainable use of freshwater resources (and partly to the use of other resources) may be stressed: the general target of the chapter (A.) and the issues dealing with different aspects of “good governance” (B.).

A. The General Target

The goal of a sustainable use of freshwater resources figures essentially in point 24 of the implementation plan. As a result, the current trend in natural resource degradation should be reversed as soon as possible: ecosystems have to be protected and an integrated management of water resources has to be achieved. Furthermore, point 25 mentions the goal of safe drinking water and to halve, before 2015, the proportion of people who have no access to or cannot afford safe drinking water as well as the proportion of people with no access to basic sanitation.

In this context, the implementation plan has – at least in chapter IV which will be discussed later in this paper – a very anthropocentric perspective, in the sense that the protection of natural resources is regarded as a means to promote social and economic development. This general direction is already expressed in the title of the chapter “Protecting and managing the natural resource base of economic and social development” and reflected in several affirmations in the document. The ac-

⁴ The title of the chapter is “Protecting and Managing the Natural Resource Base of Economic and Social Development”, so that in principle all natural resources are concerned.

cent is put on providing drinking water and water for the sanitary uses of people (point 24, in the beginning), an efficient use of water resources is affirmed, which should give priority to the satisfaction of basic human needs (point 25.c) and it is also mentioned that water pollution should be reduced in order to protect human health (point 24.d). It should not be denied that the management and the protection of natural resources, including freshwater resources, is a vital condition for human well being and development. Nevertheless, sustainable use and management of freshwater resources also require protection of water resources in the cases where their utility in promoting human well being does not exist or is less evident. Any other approach would not respect the interdependence of ecological systems.

The document – even if the accent seems to be put rather on aspects of utility – does not totally exclude such an approach. This is for example the case when the document refers to water pollution prevention in order to protect ecosystems (point 24.d) or when it is generally urged that prevention and protection measures should be adopted in order to promote sustainable water use and to address water shortages (point 24.e). But globally, the implementation plan stresses the needs of human beings, including aspects of industrial or agriculture needs for freshwater. Point 25.c) of the plan is especially clear on that point when it states that integrated water resources management plans should “improve the efficient use of water resources and promote their allocation among competing uses in a way that gives priority to the satisfaction of basic human needs and balances the requirement of preserving or restoring ecosystems and their functions (...) with human domestic, industrial and agriculture needs (...)”.

It is not the place here to question the understanding of “sustainable development”⁵ which seems to be the background of this approach. Nevertheless, it may be underlined that the needs of human being as a main perspective is not always useful since this point of view can lead us to neglect aspects of water policy which are not directly related to human needs. In this perspective, it may be – from a lawyer’s point of view – clearer if the concept of sustainable development is reduced to aspects of environmental protection whereas other interests could be taken into consideration as separate targets which should then be realised or balanced with environmental concerns. This approach does not give less importance to strictly social and economic issues but would allow a clearer definition of the goals of each policy and would thus clearly define the conflicts. On this basis, a balance of interests could assure a result which takes into account all relevant goals.

⁵ Cf. the concept developed in Astrid Epiney/Martin Scheyli, *Strukturprinzipien des Umweltvölkerrechts*, 1998, 42 et seq., with further references. Recently, some authors seem to admit that the concept of sustainable development should not – contrary to the current understanding in international law and practice – comprise the dimensions of social and economic welfare but be reduced to environmental aspects, taking into account the other (important) targets in the framework of autonomous targets. Cf. Wolfgang Kahl, *Der Nachhaltigkeitsgrundsatz im System der Prinzipien des Umweltrechts*, in: Hartmut Bauer/Detlef Czybulka/Wolfgang Kahl/Andreas Vosskuhle (Hrsg.), *Umwelt, Wirtschaft und Recht*, 2002, 111 (122 et seq.), with further references.

B. Aspects of Good Governance

The second general aspect concerns what is generally called “good governance”. The plan affirms that access to public information and participation in support and decision-making related to water resources management and project implementation should be guaranteed (point 24.b). Furthermore, several references are made to “capacity building” (point 24.a), 24.c), 25.e), 27.), and in point 25.g) it is stressed that public-private partnerships should be facilitated, a transparent national regulatory framework should be guaranteed and the performance and improving accountability of public institutions and private companies should be monitored. Point 25.b) calls upon a full employment of the range of policy instruments in order to achieve an integrated water resource management, and finally point 24.d) refers to the establishment of monitoring systems and on effective legal framework.

The target of good governance is often stressed, and the importance of the different aspects of good governance⁶ for the development of effective protection of natural resources cannot be denied. However, so far as the actual status of international law is concerned, obligations referring to concrete aspects of good governance are not really part of international law, except some very sectorial and limited aspects. Thus, the principle that an environmental impact assessment has to be made for projects, which cause considerable damage to the environment of other States, can be affirmed. But the requirements and procedural rules, which have to be applied in order to realise such an environmental assessment, have not yet been clearly defined in international law⁷. Furthermore, the Aarhus Convention has to be taken into account. This Convention states obligations in the field of access to environmental information, participation in deciding procedures and access to justice⁸. However, the Convention is for the moment limited to European States (it

⁶ Cf. to the meaning of good governance in the context of international environmental law with further references Patricia Birnie/Alan Boyle, *International Law & The Environment*, 2nd ed., 2002, 34 et seq.; Konrad Ginther/Erik Denters/Paul J.I.M. de Waart (eds.), *Sustainable Development and Good Governance*, 1995.

⁷ Cf. to the obligation of an environmental assessment Epiney/Scheyli (note 5), 126 et seq.; dissenting opinion from Judge Palmer, in the affair of nuclear tests, ICJ Rep. 1995, 288 (412); Alexandre Kiss/Dinah Shelton, *International Environmental Law*, 2nd ed., 2000, 202 et seq.; John H. Knox, *The Myth and Reality of Transboundary Environmental Impact Assessment*, AJIL 2002, 291 et seq.; see also ICJ in the *Gabcikovo/Nagymaros* Case, ILM 1998, 162 et seq., no. 130 et seq.; see also now Art. 7 of the ILC draft articles on International Liability for Injurious Consequences Arising out of Acts not Prohibited by International Law (Prevention of Transboundary Harm from Hazardous Activities), Report of the ILC, Fifty-third session, General Assembly, Official Records, Fifty-sixth session, suppl. No. 10 (A/56/10). Further, the Espoo Convention was certainly very important for the development of international law in this area. Cf. to this Convention for example Ute Stiegel, *Das Übereinkommen über die Umweltverträglichkeitsprüfung im grenzüberschreitenden Rahmen (Espoo-Übereinkommen)*, 2001.

⁸ Cf. to the Aarhus Convention Michael Zschesche, *Die Aarhus-Konvention – mehr Bürgerbeteiligung durch umweltrechtliche Standards?*, ZUR 2001, 177 et seq.; Astrid Epiney/Martin Scheyli, *Die Aarhus-Konvention*, 2000; Martin Scheyli, *Aarhus-Konvention über Informationszugang, Öffentlichkeitsbeteiligung und Rechtsschutz in Umweltbelangen*, ArchVR 2000, 217 et seq.; Katy Brady, *New Convention on Access to Information and Public Participation in Environmental*

was elaborated in the framework of the ECE/UNO Commission) and the rules figuring in the Convention are not part of (customary) general public international law.

Seen from this perspective, the results of the Johannesburg summit do not show any substantial progress, neither, so far as binding law is concerned, nor as new "soft law" postulates are concerned. The implementation plan is limited to relatively general affirmations without any precise definition of what is requested from the States.

2. Financial Aspects and Technology Transfer

There are several references to financial assistance and technology transfer in the implementation plan, aspects that are related to the different economic capacities of the States. The realisation of these aspects is also, to a certain extent, a concretisation of the principle of common but differentiated responsibilities.

Thus, international and domestic financial resources at all levels, as well as transfer technology should be mobilised (point 24.a) and new additional financial resources and innovative technologies should be provided (point 24.c). Point 25.e) refers to supporting measures to developing countries in order to face water scarcity and point 25.f) calls upon technological, technical and financial assistance for different efforts for energy-efficient, sustainable and cost-effective desalination of seawater and different forms of water recycling. In general terms point 26 stresses the necessity to support developing countries in their efforts to monitor and assess the quantity and quality of water resources and point 27 refers in a large manner to technology transfer.

Altogether, the plan is limited to general calls to financial assistance and technology transfer in different fields; but there is no precise commitment of any State. In so far, the document does not really develop existing international law.

3. Prevention of Water Pollution

The implementation plan refers in point 24.d) to prevention of water pollution in order to reduce health hazards and to protect ecosystems and also includes the protection of groundwater. Point 24.e) stresses the necessity of preventive and protection measures in order to promote sustainable water use and to address water shortages.

These targets are rather general, but it has to be noted that they do not refer to any transnational relationship. Until now, customary international law entails essentially obligations which are dependant on the implication of another State or its

Matters, *Environmental Policy and Law*, 1998, 69 et seq.; Jonas Ebbesson, *The Notion of Public Participation in International Environmental Law*, *Yearbook of International Environmental Law* 1997, 51 et seq.

territory, such as the obligation not to cause harm on the environment of other States⁹ and the principle of equitable use of common resources. Obligations with respect to the national territory only are limited to the prohibition to cause massive pollution, and even this obligation is contested¹⁰. Also, the UN Convention of 1997 on International Watercourses¹¹ is in principle limited to international watercourses. However, this Convention also points out, in the preamble, that sustainable use of international watercourses in order to satisfy the needs of present and future generations should be attained¹².

4. Towards an Integrated Water Resource Management

In several points, the implementation plan includes also an integrated perspective, in other words a perspective which is not limited to special measures in order to prevent a certain type of pollution but which should look at the water management from a holistic point of view¹³. The target of such an approach is to preserve and protect water resources as a whole and not just to fight against isolated pollution problems. Point 25 of the plan stresses the necessity of developing integrated water resource management, and in point 25.a), c) this target is reiterated and specified. Thus, national and regional strategies, plans and programmes should be developed and implemented with regard to integrated river basin and groundwater management and the efficient use of water resources and their allocation should be improved. It is worth noting that until now binding international instruments or

⁹ Cf. to this obligation Birnie/Boyle (note 6), 104 et seq.; Edith Brown Weiss/Stephen C. McCaffrey/Daniel Barstow Magraw/Paul C. Szasz/Robert E. Lutz, *International Environmental Law and Policy*, 1998, 254 et seq., 315 et seq.; Astrid Epiney, *Das "Verbot erheblicher grenzüberschreitender Umweltbeeinträchtigungen": Relikt oder konkretisierungsfähige Grundnorm?*, ArchVR 1995, 309 et seq.

¹⁰ Cf. with further references Epiney/Scheyli (note 2), 116 et seq.

¹¹ Cf. the text in ILM 1997, 700 et seq.; cf. to this Convention Stephen C. McCaffrey/Mpazi Sinjela, *The 1997 United Nations Convention on International Watercourses*, AJIL 1998, 97 et seq.; Kokott (note 3), 1998, 177 (184 et seq.); Luzius Caflisch, *La Convention du 21 mai 1997 sur l'utilisation des cours d'eau internationaux à des fins autres que la navigation*, AFDI 1997, 751 et seq.; André Nollkaemper, *The Contribution of the International Law Commission to International Water Law: Does it Reverse the Flight from Substance?*, NYIL 1996, 39 et seq.; Stephen C. McCaffrey, *The UN Convention on the Law of Non-Navigational Uses of International Watercourses: Prospects and Pitfalls*, in: Salman M.A. Salman/Laurence Boisson de Chazournes (eds.), *International Watercourses: Enhancing Cooperation and Managing Conflict*, World Bank Technical Paper, no. 414, 1998, 17 et seq.; Attila Tanzi, *The UN Convention on International Watercourses as a Framework for the Avoidance and Settlement of Waterlaw Disputes*, *Leiden Journal of International Law* 1998, 442 et seq.; cf. also the commentary of the ILC, YbILC 1994 II, 90 et seq.

¹² Moreover, one has to refer to Art. 2 V of the Helsinki Convention, *Convention on the Protection and Use of Transboundary Watercourses and International Lakes*, ILM 1992, 1312 et seq., which also refers to the principle of sustainable use.

¹³ Cf. to this holistic approach in relation with EC water law, especially the new framework directive, Astrid Epiney/Andreas Felder, *Überprüfung internationaler wasserwirtschaftlicher Übereinkommen im Hinblick auf die Implementierung der Wasserrahmenrichtlinie*, 2002, 23 et seq.

obligations generally do not repose on an integrated approach but seem to privilege a rather isolated approach, especially as concerns the obligation not to cause harm to other States.

5. International Co-Operation

Finally, point 28 of the implementation plan refers to the necessity of effective co-ordination among the international and intergovernmental bodies as well as the integration of the “civil society” in this co-ordination. This approach goes beyond the traditional obligation to cooperate which exists between States¹⁴. But it has to be noted that the extent and content of such co-operation remain rather unclear.

III. Perspectives in View of Sustainable Use of Fresh Water Resources

1. Evaluation of the Implementation Plan

If one tries to evaluate the results at Johannesburg in relation to the target of sustainable use of freshwater resources, one has to note that different aspects are taken into consideration, which touch essential aspects of sustainable use of water. Some of these aspects are: especially the necessity of financial and technology transfer, the necessity of the adoption of an integrated approach, different aspects of good governance and the insertion of merely “internal” environmental problems. The points included in the implementation plan are formulated in a very general way so that it is impossible to deduce any concrete commitment for States. However, in view of diminishing the number of individuals who have no access to sufficient freshwater, a concrete target (halving the number of these persons) is mentioned. Furthermore, the document does not solve the problem of the relationship between water protection and economic development. Some provisions point out the necessity to protect ecosystems, other formulations seem to allow rather fargoing infringements of natural resources in order to pursue economic and social targets without defining any criteria where the limits have to be drawn. Altogether, and without ignoring the importance of some aspects included in the document, such as for example the fact that purely internal aspects are considered or that the importance of technical and financial assistance is stressed, the Johannesburg result cannot, as such, constitute a sufficient starting point for a sustainable use of freshwater resources, and this for at least four reasons:

¹⁴ Cf. to these obligations Frederic L. Kirgis, *Prior Consultation in International Law. A Study of State Practice*, 1983; see also Astrid Epiney, *Nachbarrechtliche Pflichten im internationalen Wasserrecht und Implikationen von Drittstaaten*, ArchVR 2000, 1 (15 et seq.), with further references to international practice and doctrine.

- the goal is not formulated in a sufficiently precise manner;
- the commitments are too vague, as far as the traditional pollution and the concept of integrated protection are concerned; also the extent of financial and technical assistance is not really defined and the above mentioned international co-operation is formulated in very general terms;
- the role of individual rights is not stressed; in fact, the experience in the field of human rights shows that the guarantee of individual rights can often strengthen the respect of international commitments;
- and finally, the extent of obligations related to a state's own territory remains undefined.

2. Main Obstacles to a Sustainable Use of Freshwater Resources

Before asking how to improve the legal framework for a sustainable use of freshwater resources, one has to ask about the main obstacles on the way to a sustainable use of water resources. However, the following remarks are limited to the legal framework. Three aspects seem particularly important against the background of the considerations above:

First of all, the target needs to be defined more clearly. It is not possible in the present paper to explore the notion of "sustainability" or "sustainable development"¹⁵. But it can be stressed that a general "balancing" between the interest of protection of ecosystems on the one hand, and social and economic development on the other hand, is dangerous in the view of the effective consideration of the interests of future generations. Indeed, if you satisfy some human needs in the present, this can lead to the impossibility to maintain a functioning ecosystem in the future. So, sustainability should be specified in the sense that the environment should not be used or degraded in a way that the needs of future generations cannot be fulfilled any more. In this perspective, sustainability means also to maintain or guarantee a certain standard which can in principle not be relativised by other concerns. However, it is also evident that progress in other policy fields is a necessary condition for implementing sustainability. Thus, poverty and low social development are very serious enemies of sustainable development, and sustainability can only be realised if an adequate social and economic development is guaranteed. However, from a legal perspective, this incontestable link between the implementation of sustainability and progress in certain policy areas does not mean that the concept of sustainability itself should be altered but rather that the realisation of its objectives should also take place in the field of these policy areas. This also means – as the implementation plan puts forward – sufficient technical and financial assistance from the "developed" countries to the "developing" countries. In order to emphasise the meaning of sustainability in that context, it would be desirable if this connection could be pointed out in a clearer way than the way it is defined now.

¹⁵ Cf. the references in note 5. See also the short remarks above II.1.a).

Secondly, it is desirable that states and international organisations – in co-operation with non-governmental organisations – develop commitments for the States in a more accurate way. On the one hand, one can think of material commitments such as: reduction of certain polluting substances, obligation to clean water, interdiction to dispose clearly defined dangerous substances in the water and groundwater, etc., as well as procedural commitments such as: participation of the public, access to justice, environmental impact assessment for all dangerous projects, etc., on the other hand.

Thirdly, the exact relationship between territorial sovereignty and obligations related to the management of natural resources is not yet clearly established, neither in theory nor in concrete commitments. Therefore, States have generally the tendency to insist on their territorial sovereignty without acknowledging any obligation related to the use or management of natural resources.

3. Perspectives

Some of the above mentioned obstacles require certain developments in international law. It is now idle to speculate if such developments can be expected in the next years. But the results of Johannesburg and the rather slow development of international environmental law during the last decade do not seem to indicate important developments so that one should not be too optimistic on this point.

However, irrespective of possible developments in the future, one can ask if some legal developments or legal principles already exist. These developments or principles could be of a certain importance in relation to a sustainable use of freshwater resources, especially those which could be developed in the sense of a recognition of legal principles contributing to a sustainable use of freshwater resources. In fact, two aspects seem to be important: first, the question if and to what extent human rights can contribute to a sustainable use of freshwater resources (a) and second, the question how – from a legal perspective – the concept of territorial sovereignty can be reconciled with the idea of sustainable use of freshwater resources (b). Even if – as will be shown below – there are some indications in that sense, it has to be mentioned that the following remarks concern mainly perspectives which would have to be developed further in international law and practice.

It has also to be noted that for the development of the following considerations the principle of sustainable development is important. It has been mentioned above¹⁶ that the content of this principle should – contrary to the dominating view in international law and practice – be limited to environmental considerations excluding economic and social belongs. These should be taken into consideration in the framework of “independent” principles and so in balancing different interests respectively principles. From a legal point of view, the “obligation” to tend towards sustainable development can be regarded as a “principle” of international law with

¹⁶ Cf. III.2.

a certain legal value. This paper is not the place to discuss the necessity of principles in international law and their possible meaning¹⁷; however, it can be pointed out that in international law and especially in international environmental law different “principles” have been developed in practice. They distinguish themselves from rules in the way that they do not yet contain precise obligations of behaviour for States. They are formulated in a too general way or their content tends to seek merely general targets. As a result, it is not possible to argue that a certain State behaviour is in contrast with such a principle. The point of view defended in this paper is that you can distinguish in international environmental law between such principles – which are as such not really operational – and rules – which contain more precise obligations for State to do or not to do something¹⁸. However, the exact legal meaning and value of such principles, binding as customary or international law, is often not clear. Under this condition, they must be taken into consideration when interpreting and applying international rules, and thus, to this extent, will be considered as indirect guiding principles for States behaviour. Furthermore, they influence the development of international customary and treaty law¹⁹. Nevertheless, a principle can only have such a legal value if its content can be defined to a certain extent which is often difficult²⁰. As concerns the principle of sustainable development, it can be – if interpreted in the mentioned restrictive way – regarded as such a principle for two reasons. First, its meaning can – to a certain extent – be specified; and second, international law and practice refers to this prin-

¹⁷ Cf. very critically the overview by Ulrich Beyerlin, “Prinzipien” im Umweltvölkerrecht – ein pathologisches Phänomen?, FS Helmut Steinberger, 2002, 31 et seq.

¹⁸ Cf. more in detail Epiney/Scheyli (note 5), 43 et seq., 76 et seq.; Epiney/Scheyli (note 2), 75 see also in this direction Philippe Sands, *Principles of International Environmental Law*, 1995, 183 et seq.; Bettina Kellersmann, *Die gemeinsame, aber differenzierte Verantwortlichkeit von Industriestaaten und Entwicklungsländern für den Schutz der globalen Umwelt*, 2000, 54 et seq.; Rüdiger Wolfrum, *International Environmental Law: Purposes, Principles and Means of Ensuring Compliance*, in: Fred Morrison/Rüdiger Wolfrum (eds.), *International, Regional and National Environmental Law*, 2000, 3 (6 et seq.); Maurice Kamto, *Les nouveaux principes du droit international de l’environnement*, RJE 1993, 11 (12 et seq.); Bin Cheng, *General Principles of Law as Applied by International Courts and Tribunals*, 1953, 376; see also Wolfgang Durner, *Common Goods. Statusprinzipien von Umweltgütern im Völkerrecht*, 2001, 22, 74 et seq.

¹⁹ Recently, this approach was criticized in mainly two points: first, the distinction between “principles” and “rules” should refer only to the distinction between “really” and “ideally” demanded behaviour, second, it is argued that the international practice does not allow to conclude that a lot of pretended principles can be regarded as customary law. Cf. Beyerlin (note 17), 31 et seq. It has to be pointed out that also this author does not deny that a certain distinction between different sorts of international norms can be drawn, even if the criteria of differentiation seem to be a little bit different. It is not the place here to make theoretical reflections on differentiation between different sorts of international law; however, it seems to be recognized that some norms have a sort of “principle character” in the sense that they should guide interpretation and application of other international norms.

²⁰ So for example for the principle of common but differential responsibilities, cf. to this “principle” Natalie Michels, *Umweltschutz und Entwicklungspolitik*, 1999, 146 et seq.; Ana Maria Pomar Borda, *Das umwelt(völker)rechtliche Prinzip der gemeinsamen, jedoch unterschiedlichen Verantwortlichkeit und das internationale Schuldenmanagement*, 2002, 71 et seq.; Kellersmann (note 18).

ciple in such a way that it seems obvious that it should have a legal value in the sense that it has to be taken into consideration when interpreting and applying international law²¹.

A. A Propos the Human Rights Dimension of Water Use

Even if the dimension of sustainable use of water resources has to be separated from other political or legal goals (like social and economic development), there are numerous links between the realisation of sustainability and the implementation of citizen's rights in other fields. Thus, the existence and reliance of rights in other fields can help to promote, as a sort of secondary effect, sustainable development. It means that the possible human right to fresh drinking water can or could contribute to the realisation of a sustainable water use and indirectly oblige the State to take measures in favour of a sustainable development, at least in that field. In this context, two problems can be distinguished: the existence and meaning of an individual right to "water use" (a) and the relationship of this right with a sustainable use of freshwater resources (b).

As already mentioned above²², the following considerations do not pretend to reflect existing and recognised international law. So, it should be pointed out that until now a "right to sufficient drinking water" is not recognised in international practice²³, and this is the case even if, in recent years, some commentaries are going in this direction. The aim of the following considerations is therefore to demonstrate that the recognition of such a right would fit very well in the international system of human rights and sometimes is even a necessary condition for the effectiveness of some of them.

²¹ State practice today parts from the principle that sustainable development has a legal value as a sort of guiding line. It has to be noted that the International Court of Justice and the WTO appellate body refer to this principle as a principle of a certain, but limited, legal value. Cf. very instructive to this point Philippe Sands, *International Courts and the Application of the Concept of "Sustainable Development"*, Max Planck UNYB 3 (1999), 389 et seq.; cf. also to the State practice Epiney/Scheyli (note 5), 36 et seq.; the notion of sustainable development is also used in several international treaties so that it must necessarily, at least in this context, have some legal value. Cf. the Framework Convention on Climate Change, ILM 1992, 851 et seq., or the Convention on Biological Diversity, ILM 1992, 822 et seq.; in reference to the State practice see also Franz Xaver Perrez, *Cooperative Sovereignty. From Independence to Interdependence in the Structure of International Environmental Law*, 2000, 284 et seq., who concludes as follows (287): "This repeated and constant reference to the principle of sustainable development in all kinds of instruments of international environmental law manifests the universality of the acceptance of this principle."

²² See III.3., in the beginning.

²³ Cf. for example Birgit Demeter, *Schutz und Nutzung internationaler Binnengewässer. Zwei Rahmenkonventionen im Vergleich*, 2001, 80 et seq.; Markus Reimann, *Die nicht-navigatorische Nutzung internationaler Süßwasserressourcen im Umweltvölkerrecht*, 1999, 126 et seq.; see also Ellen Hey, *Sustainable Use of Shared Water Resources: The Need for a Paradigmatic Shift in International Watercourse Law*, in: Gerald Blake/William Hildesley/Martin Pratt/Rebecca Ridley/Clive Schofield (eds.), *The Peaceful Management of Transboundary Resources*, 1995, 127 (130 et seq. states that such a right is *in statu nascendi*).

a) Existence and Extent of a Right to "Water Use"

The question which arises in this context concerns the existence of human rights which confer to the concerned persons the right to claim a sufficient provision of drinking water²⁴. In the relevant international treaties on human rights, there are above all two provisions in the Covenants of 1966²⁵ which could confer such a right:

Art. 6 of the Covenant on Civil and Political Rights states that every human being has the inherent right to life. Since the access to water resources is a necessary condition to life, one could deduce from this provision that all people have a right of access to fresh water and/or that the State has to take the necessary measures in order to preserve sufficient freshwater resources in general. As a result this presupposes a sustainable water resource management.

Art. 11 of the Covenant on Economic, Social and Cultural Rights recognises the right of everyone "to an adequate standard of living for himself and his family, including adequate food". Access to water resources is part of an "adequate standard of living" and water is also considered as an element of the necessary nutrition. In this context the question of the existence of a right to access to water resources and of an obligation of States to procure sufficient water resources can also be raised.

On the one hand, the application of both provisions to our topic raises the controversial and classical question as to whether and to which extent human rights can oblige States to take affirmative actions, so that the traditional aspect of human rights as rights to ask the State to refrain from certain actions ("Abwehrrechte") would be completed by certain rights to positive measures ("Leistungspflichten"). On the other hand, one can ask if the effective protection of human rights do require from the State certain measures to guarantee that the respect or realisation of human rights is not endangered by other persons and/or general life conditions ("Schutzpflichten"). It has to be pointed out that the "Schutzpflichten" are in reality part of the "Leistungspflichten" since they presuppose also a certain action of the State, in the sense that the State has to prevent that human rights are violated by other private persons.

It is not the subject of this paper to deal with these fundamental issues of human rights doctrine. Thus, I will rather take as a starting point the principle that the ob-

²⁴ Cf. especially to this issue also Stephen C. McCaffrey, *A Human Right to Water: Domestic and International Implications*, *Geo. Int'l Envtl L. Rev.* 1992, 1 et seq.; Eyal Benvenisti, *Collective Action in the Utilization of Shared Freshwater: The Challenge of International Water Resources Law*, *AJIL* 1996, 384 et seq.; Brown Weiss/McCaffrey/Barstow Magraw/Szasz/Lutz (note 9), 446 et seq.; Demeter (note 23), 82 et seq.

²⁵ The two Covenants distinguish from each other in respect of the degree of obligation in that sense, that the C.P. Covenant imposes an immediate obligation to respect and to ensure the rights it proclaims (Art. 2 para. 1), while the State Parties to the E.S.C. Covenant need only implement the obligations under that agreement progressively (Art. 2 para. 1). Since the basic problems related to the recognition of a right to sufficient drinking water are nevertheless parallel in the two conventions, the two provisions are nevertheless treated together.

ligation to take affirmative actions can be a meaning of human rights, then explore the possible meaning of these guarantees and finally try to concretise their meaning in relation to our topic:

First of all, it seems now to be widely recognised that human rights guarantees can, in principle, oblige States also to take positive measures in favour of individuals²⁶. The labelling of many human rights provisions already supports this point of view. Over and above this, the effective guarantee and realisation of a couple of human rights require different types of behaviour from States. Generally, an abstention of the State to do something is necessary to protect the human right. Second, the State may be called to prevent private persons to violate a human right, and third, in numerous cases, a real “doing” from the State to individuals is necessary.

So, the real question is not if – in principle – States can be obliged to take affirmative actions, but which human rights confer such obligations and what is their concrete meaning. Three aspects are important in this context²⁷ and they can be pointed out independently of concrete rights. Nevertheless, it is evident that only the analysis of concrete dispositions allows to formulate an exact meaning of these obligations. First, such obligations can generally be fulfilled in various manners so that it is often not possible to specify in a concrete way the required State action, as the States dispose of a certain discretion. As a result, obligations to take positive measures are often not very accurate so that only an evident refusal to act as requested can be regarded as a violation. Second, obligations to take positive measures are generally formulated in such a way that States are only under an obligation to take the necessary measures as expeditiously and effectively as possible in order to achieve the goal²⁸. In practice, it is often the case that States cannot realise – from an economic or a factual point of view – the objectives formulated by the human rights obligation. As a result, obligations to take positive measures often state only duties to use all the possible means to reach the target. However, this

²⁶ Cf. for example Manfred Nowak, *Inhalt, Bedeutung und Durchsetzungsmechanismen der beiden UNO-Menschenrechtspakte*, in: Walter Kälin/Giorgio Malinverni/Manfred Nowak (Hrsg.), *Die Schweiz und die UNO-Menschenrechtspakte*, 2nd ed. 1997, 3 (8 et seq.); Philip Alston, *Out of Abyss, The Challenge Confronting the New UN Committee on Economic, Social and Cultural Rights*, HRQ 1987, 351 et seq.; Scott Leckie, *Another Step Towards Indivisibility: Identifying the Key Features of Violations of Economic, Social and Cultural Rights*, HRQ 1998, 81 et seq.; Jörg Künzli, *Menschenrechte: Bloße Gesetzgebungsaufträge oder individuelle Rechtsansprüche?, Überlegungen zur direkten Anwendbarkeit des UNO-Sozialpakts in der Schweiz*, AJP 1996, 527 et seq.; Audrey R. Chapman, *A “Violations Approach” for Monitoring the International Covenant on Economic, Social and Cultural Rights*, HRQ 1996, 23 et seq.; Matthew C.R. Craven, *The Domestic Application of the International Covenant on Economic, Social and Cultural Rights – A Perspective on Its Development*, 1995, 141 et seq.; Jörg Künzli, *Zwischen Rigidität und Flexibilität: Der Verpflichtungsgrad internationaler Menschenrechte*, 2001, 210 et seq.; cf. explicitly the UN Committee on Economic, Social and Cultural Rights, *General Observations 12*, para. 15. See in detail Walter Kälin/Jörg Künzli, *Das Recht auf Nahrung*, Teil 1, in: Jusletter, 6 January 2003, para. 49 et seq. (<<http://weblaw.ch/jusletter>>).

²⁷ Cf. the references in note 26.

²⁸ Cf. Leckie (note 26), 81 (92 et seq.); Craven (note 26), 136 et seq.

does not necessarily mean a general exception for economic difficulties. Such a point of view would not be in conformity with general international law. But as long as the human rights obligations refer to such a meaning, economic difficulties can be taken into consideration²⁹. Third, there are exceptions to the limits of the meaning of obligations to adopt positive measures. Sometimes, the result to be reached is clearly enough formulated so that it is possible to specify the content of the obligation. Furthermore, there are human rights obligations that stipulate a minimal standard, which must be adhered to. Under these conditions, human rights can be regarded as obligations to attain a certain result³⁰. So, in relation to the most social and economic rights, a sort of "minimal core content" can be formulated. In other words, if the minimal rights are not fulfilled, this can be considered as a violation of the human rights, and States are under the direct obligation to take the necessary measures to fulfil these rights. However, international obligations are not violated if one of the circumstances precluding wrongfulness are fulfilled, such as, for example, *force majeure* or distress³¹. Nowadays, this concept seems to be recognised in principle³², and also the Committee on Economic, Social and Cultural Rights adopts this approach³³. It is also a necessary consequence in order to give some effectiveness to certain social and economic rights. In other words, their character as legal obligations implies that it is possible to deduce a sort of minimal obligations for the State, otherwise these guarantees would be reduced to pure objectives and as such they could not deploy any real effect. However, it is to be noted

²⁹ This general limit to the meaning of obligations to take positive measures has found its expression for instance in the general clause of Art. 2 I of the International Covenant on Economic, Social and Cultural Rights: "Each State Party to the present Covenant undertakes to take steps, individually and through international assistance and co-operation, especially economic and technical, to the maximum of its available resources, with a view to achieving progressively the full realization of the rights recognized in the present Covenant by all appropriate means, including particularly the adoption of legislative measures."

³⁰ Cf. to the distinction between different categories of obligations Astrid Epiney, *Die völkerrechtliche Verantwortlichkeit von Staaten für rechtswidriges Verhalten im Zusammenhang mit Aktiven Privater*, 1992, 124 et seq.

³¹ Cf. Arts. 23, 24 of the Draft articles on Responsibility of States for internationally wrongful acts adopted by the International Law Commission at its Fifty-third session (2001), Report of the ILC on the work of its Fifty-third session, Official Records of the General Assembly, Fifty-sixth session, supplement No. 10 (A/56/10). Cf. especially to the concept of *force majeure* in this context the very instructing considerations by Künzli, *Rigidität und Flexibilität* (note 26), 410 et seq.

³² Cf. Alston (note 26), 351 et seq.; Craven (note 26), 141 et seq.; Chapman (note 26), 23 (45 et seq.); Leckie (note 26), 81 (100 et seq.); see also Arjun Sengupta, *On the Theory and Practice of the Right to Development*, *Human Rights Quarterly* 2002, 847 (867).

³³ Cf. General Comment 3, para. 10 of the Committee on economic, social and cultural rights: "The Committee is of the view that a minimum core obligation to ensure the satisfaction of, at the very least, minimum essential levels of each of the rights is incumbent upon every States party. Thus, for example, a State party in which any significant number of individuals is deprived of essential foodstuffs, of essential primary health care, of basic shelter and housing, or of the most basic forms of education is, *prima facie*, failing to discharge its obligations under the Covenant. If the Covenant were to be read in such a way as not to establish such a minimum core obligation, it would be largely deprived of its *raison d'être*." Cf. also General Comment 12, para 17. Cited by Künzli, *Rigidität und Flexibilität* (note 26), 284.

that such obligations on the State do not mean that States have to confer to individuals real individual, "subjective" rights in the sense that they can be claimed in court. The manner how States fulfil their international obligations is in their competence and even the minimum core content is very often not precise enough for the formulation of an individual right³⁴.

If one tries now to apply this approach to our issue, the question is whether and to what extent such a minimal core content can be deduced from Art. 6 of the Covenant on Civil and Political Rights and Art. 11 of the Covenant on Economic, Social and Cultural Rights. If one takes seriously the presented approach of a minimal core content of some economic and social rights, in other words, if the concept of minimal core content does make any sense, these two articles – and especially, in our context, the second one – must contain such a minimal standard, at least as access to a living minimum of freshwater is concerned: These obligations are sufficiently precise as the necessary means for human beings to survive is concerned. They would be deprived from every effectiveness if they did not confer a right to the minimal needs necessary in order to survive (right to life and right to food)³⁵. Since a minimum quantity of freshwater is necessary to survive³⁶, one can deduce from these articles an obligation for the States to take the necessary steps to guarantee a sufficient access to freshwater resources. So, if a very significant number of individuals is deprived of such an access, the territorial State normally fails to discharge its obligations under these articles. Nevertheless, in every single case, there must be examined if some circumstances precluding wrongfulness are fulfilled, which can probably be admitted in cases of factual impossibility. Furthermore, it has to be stressed that States dispose over a certain discretion as to the manner they use to fulfil this obligation. In other words, it would generally be very difficult to deduce from the cited obligation an obligation of the States to take one precise measure.

³⁴ Edith Brown Weiss, *Our Rights and our Obligations to Future Generations for the Environment*, AJIL 1990, 1198 (203 et seq.) points out that an obligation of a State does not necessarily correspond with an individual right.

³⁵ Nevertheless, some tendencies seem to deny that these articles can confer any right. See the references in Brown Weiss/McCaffrey/Barstow Magraw/Szasz/Lutz (note 9), 449, who point also out that the recent practice does not confirm this approach. So, the General Comments adopted by the Human Rights Committee under Article 40 para. 4 of the C.P. Covenant states: "(The Committee) has noted that the right to life has been too often narrowly interpreted. The expression 'inherent right to life' cannot properly be understood in a restrictive manner, and the protection of this right requires that States adopt positive measures. In this connection, the Committee considers that it would be desirable for States parties (to the C.P. Covenant) to take all possible measures to reduce infant mortality and to increase life expectancy especially in adopting measures to eliminate malnutrition and epidemics." Human Rights Committee, General Comments adopted under Art. 40 para. 4 of the C.P. Covenant, UN Doc. CCPR/C/21/Rev. (May 19, 1989), 5.

³⁶ Cf. in this context with further references Brown Weiss/McCaffrey/Barstow Magraw/Szasz/Lutz (note 9), 446 et seq.; Demeter (note 23), 22 et seq.

b) Relevance for the Sustainable Use of Freshwater Resources

If, actually, one tries to link the human rights obligation of States to take the necessary steps in order to provide access to a minimum quantity of freshwater to individuals on the one side, with the guarantee of a sustainable use of freshwater resources on the other side, one has to start with the assumption that States are, in principle, free to decide how they want to fulfil this obligation. As a result, it could be difficult to deduce, from the above mentioned concept of minimal core content, an obligation to look for a sustainable use of freshwater resources. It may be possible that people have access to sufficient freshwater resources even if principles of sustainable use of freshwater resources are not respected.

However, this point of view does not address adequately the principle of sustainable development which has a certain legal effect³⁷. Therefore, this principle should be especially taken into account when interpreting international obligations – even if it remains an unprecise one. If this concept also means that the perspective of future generations should be taken into consideration, in the way that their interests will have in principle the same value as the interests of the present generations, the right to access to sufficient freshwater resources, as deduced from Art. 6 of the Covenant on Civil and Political Rights and Art. 11 of the Covenant on Economic, Social and Cultural Rights and further the obligation of States to take all necessary measures in order to guarantee such an access, should not be interpreted in a manner which could undermine the needs of future generations. If the needs of the present generation to have access to sufficient freshwater resources are now satisfied in a way which clearly does not respect principles of sustainable use of freshwater resources, then the needs of future generations are or could be compromised. In that sense, States are under the obligation, entailed in the above mentioned provisions, to respect a minimum standard of sustainable use of freshwater resources when fulfilling the needs of access to such freshwater resources.

In these limits, States are thus obliged to realise the minimum core content of the cited articles in respecting principles of sustainable use of freshwater resources. But, as the States discretion in realising this target is very large, a State's act can be considered as a violation of this obligation only in case of patent non respect of the principles of sustainability, such as for example: the use of the water of a lake in a way which results in the draining of the lake or at least in a considerable and stable reduction of water quantity and/or quality. Besides, this obligation is not an "independent" obligation to apply principles of sustainable use of freshwater but it is one of the elements of the right to have access to sufficient freshwater or of the obligation to take all necessary measures to attain this target.

³⁷ Cf. above III.3., in the beginning, and the references in notes 5 and 18; also the ICJ refers to this principle even if it does not precise its contents, ICJ, Rep. 1997, 7, para. 140 (*Gabcikovo/Nagy-maros*).

b) On the Way to a Limited Concept of Territorial Sovereignty(?)

One of the main problems in realising a sustainable use of freshwater resources is, in fact, the principle of territorial sovereignty as this concept has developed historically. It now means that all resources situated in the territory of a State are at the free disposition of that State unless rules of public international law limit the way to dispose of specific natural resources. These limits occur over and above all under the condition that the territory of another State is seriously affected. As concerns the use of freshwater resources the principle of equitable and reasonable utilisation of common water resources – which is also included in international conventions – is particularly important³⁸. One can also mention the obligation not to cause considerable harm to the territory of another State³⁹. When natural resources are used in a way that does not hinder possible utilisations by other States, there are generally – at least so far as water resources are concerned – no international obligations involved, even if the utilisation does not respect principles of sustainable use⁴⁰. The concept of sustainable development does not change this conclusion since it cannot be applied as such and one cannot deduce just from this principle rights and obligations from States. However, it is evident that this “traditional” concept of territorial sovereignty does not contribute to oblige States to apply principles of sustainable use. On the contrary; it is inherent to this system that even the development of concrete international rules is rather hindered by this concept.

This statement leads to the question as to whether it would be possible to develop the mentioned principle of “total” territorial sovereignty in a sense allowing, under certain conditions, to deduce from principles of international law some limits for the exercise of territorial sovereignty. A starting point could be the well known judgement of Max Huber in the *Palmas* case⁴¹ where he pointed out – in

³⁸ Cf. to this principle Birnie/Boyle (note 6), 139 et seq.; Durner (note 18), 74 et seq.; Kerstin Odendahl, *Die Umweltpflichtigkeit der Souveränität*, 1998, 158 et seq.; Andreas Reinicke, *Die angemessene Nutzung gemeinsamer Naturgüter*, 1991, *passim*.

³⁹ Cf. to this principle the references in note 9.

⁴⁰ Over and above this aspect, in legal doctrine it is discussed if international law prohibits serious environmental damage in general, also in the own territories of the States. Cf. to this aspect Durner (note 18), 57 et seq.; Eva Kornicker, *Ius cogens und Umweltvölkerrecht. Kriterien, Quellen und Rechtsfolgen zwingender Völkerrechtsnormen und deren Anwendung auf das Umweltvölkerrecht*, 1997, 185 et seq.; Jörg Lücke, *Universales Verfassungsrecht, Völkerrecht und Schutz der Umwelt*, ArchVR 1997, 1 et seq.; as the protection of biological diversity is concerned also Rüdiger Wolfrum, *The Convention on Biological Diversity*, in: Rüdiger Wolfrum (ed.), *Enforcing International Standards*, 1996, 373 (379); very far going Alexandre Kiss, *Towards the Codification of International Environmental Law*, in: Hubert Bocken/Donatienne Ryckbost (eds.), *Codification of Environmental Law*, 1996, 167 (171 et seq.); Colleen P. Graffy, *Water, Water Everywhere, Nor any Drop to Drink: The Urgency of Transnational Solutions to International Riparian Disputes*, Georgetown International Environmental LR 1988, 399 et seq.; in the same direction probably Jutta Brunnée, “Common Interest” – Echoes from an Empty Shell?, *ZaöRV* 1988, 791 et seq.; see also Art. 11 of the IUCN draft on International Covenant on Environment and Development, in: Bocken/Ryckbost (note 40), 183 et seq. However, it has to be conceded that State practice does not allow the conclusion that such an obligation is generally recognized, except of actions which concern the State Community as such. Cf. Epiney/Scheyli (note 2), 116 et seq.; Odendahl (note 38), 292 et seq.

relation to the “traditional” meaning of territorial sovereignty – the following principles: “Territorial sovereignty (...) involves the exclusive right to display the activities of a State. This right has as corollary a duty: the obligation to protect within the territory the rights of other States, in particular their right to integrity and inviolability in peace and in war, together with the rights which each State may claim for its nationals in foreign territory”⁴².

The background of Max Huber’s analysis is the fact that territorial sovereignty certainly gives the right to States to use their territory as they understand it; but this concept reaches its limits when certain types of use of the territory endanger rights of other States or common goods. In these cases, the exclusive exercise of power in a territory does not make any sense anymore since the consequences of the action go beyond the pure utilisation of the territory. It is clear that at the time when the *Palmas* judgement was pronounced, the rights of other States were the center of the preoccupations of such “corollary duties”, so that the aspect of use of the territory in a manner that does not respect the territorial integrity of another State was the only or at least the main possible application of this idea; no one thought of environmental problems or issues related to sustainable use of resources. However, with the development of the concept of common concern of mankind⁴³ and of the principle of sustainable development, one can ask if this idea of “corollary duties” can also apply to other issues, more concretely if the rights entailed in the principle of territorial sovereignty have to be limited in the sense that territorial sovereignty can never be the ground for applying non sustainable use of resources, especially water resources. This question can definitively be answered by the affirmative. The idea of Max Huber that territorial sovereignty should not confer rights which affect other internationally recognized interests, principles or “Rechtsgüter” can well be applied to the sustainable use of (water) resources: since a non-sustainable use would compromise the interests of future generations and, because of the interdependence of ecosystems, could as well deploy negative effects on the ecological equilibrium. The right to do what seems to be good for the State on its territory then finds its limits when the sustainable management of resources is touched⁴⁴. In that sense, the respect of sustainable use of

⁴¹ RIAA II, 829.

⁴² RIAA II, 829 (839).

⁴³ This concept expresses the idea that at least certain aspects of environmental protection are of a general concern of all States. However, in the present state of international environmental law, it is not possible to deduce precise obligations from this concept. It can deploy a certain importance as the structure of international obligations is concerned (who can prevail on obligations?). Cf. Art. 3 IUCN Draft Covenant on Environment and development or the preamble of the Climate Convention. Cf. to this concept Frank Biermann, “Common Concern of Humankind”: The Emergence of a New Concept of International Environmental Law, ArchVR 1996, 426 et seq.; the idea of common heritage of mankind applies in the present state of international law only to areas which are not within a State territory, cf. to this concept and its legal consequences respectively meanings Odenahl (note 38), 252 et seq.; Ronald St. J. MacDonald, The Common Heritage of Mankind, FS Rudolf Bernhardt, 1995, 153 et seq.; see also Wilhelm A. Kewenig, Common Heritage of Mankind – politischer Slogan oder Schlüsselbegriff?, FS Hans-Jürgen Schlochauer, 1981, 385 et seq.

(water) resources is – as expressed in principle by Max H u b e r – a corollary of the territorial sovereignty which is, to that extent, limited.

However, the principle of sustainability, also in this context, is not clearly defined, therefore giving States a large power of discretion. Nevertheless, it seems that at least in the field of freshwater resources, its meaning can be concretised to a certain extent, over and above all in applying principles developed in relation with the principle of equitable and reasonable use of water resources and the obligation not to cause harm to the environment of other States⁴⁵. Even if these obligations refer in reality to transboundary relationships, two main ideas developed in the context of their application can be underlined for our purposes. The starting point will be that the target of sustainable use of freshwater resources should not be damaged more than the environment of other States: First, no serious harm (resulting from one or several sources) should be caused to freshwater resources, strong pollution “automatically” affecting the principle of sustainable use⁴⁶; second, the aspect of the realisation of sustainable use of freshwater resources has to be taken into “equitable consideration”⁴⁷ which also means, in accordance with the principles formulated in the 1997 Convention⁴⁸, that the freshwater resources have to be managed by taking into consideration aspects of sustainable development which presupposes an integrated management⁴⁹, an approach which is also mentioned in the Johannesburg documents. Thus, it is imaginable that a State conduct does clearly not respect the limit of sustainability of managing water resources in using its territory. Such a limitation of territorial sovereignty means that the State itself has to avoid activities which are contrary to the principles of sustainable use of freshwater; and the State has to take all necessary measures in order to realise such a sustainable management, which implies positive measures, including measures addressed to private persons. Even if – as pointed out – in some clear situation, a violation of these principles can be envisaged, the main importance of such a limitation of territorial sovereignty would be – as the principle of sustainable development

⁴⁴ So in that sense, sustainable development can modify the concept of exclusive territorial sovereignty by making clear “that nations have primary but not exclusive control over resource decisions with extraterritorial impacts and that nations owe duties to the international community”. Cf. A. Dan Tarlock, *Exclusive Sovereignty versus Sustainable Development of a Shared Resource: The Dilemma of Latin American Rainforest Management*, *Tex. Int’l J.* 1997, 44 (65).

⁴⁵ Cf. to these obligations references in notes 9 and 38.

⁴⁶ Cf. also in this direction Kokott (note 3), 177 (201).

⁴⁷ The criteria developed in the context of the principle of equitable and reasonable use can also be stressed in this context. Cf. the list in Art. 6 of the UN Convention of 1997 on International Watercourses. Cf. to these criteria Ximena Fuentes, *The Criteria for the Equitable Utilization of International Rivers*, *BYIL* 1996, 337 et seq.; see also Odendahl (note 38), 177 et seq.; Gerhard Hafner, *The Optimum Utilization Principle and the Non-Navigational Uses of Draining Basins*, *AJPIL* 1993, 113 (119 et seq.); Charles B. Bourne, *The Primacy of the Principle of Equitable Utilization in the 1997 Watercourses Convention*, *CYIL* 1997, 215 et seq.; Art. 7 of the “Helsinki Rules”, *ILA Helsinki Rules on the Uses of the Waters of International Rivers of 1966*, in: Harald Hohmann, *Basic Documents of International Environmental Law* (3 Volumes), 1992, vol. 1, 227 et seq.

⁴⁸ Cf. art. 24 II *lit. a*) of the Convention.

⁴⁹ Cf. in reference to the 1997 Convention Kokott (note 3), 177 (202 et seq.).

itself – the existence of a guiding line in the interpretation of existing international rules and in the development of new rules.

In any case, it has to be conceded that these thoughts do not (yet?) figure among the recognised principles of international law, even if they – as shown above – could very well fit in the concept of territorial sovereignty, as it has to be developed⁵⁰.

IV. Conclusion

If one tries to evaluate the actual results of “Johannesburg” in the light of the above mentioned perspectives, at least three remarks can be made:

First of all, it has to be noted that the human rights dimension refers to the dimension expressed in a relatively concrete way in the document: until 2015, the number of people not having access to sufficient drinking water should be halved, even if the question concerning the other half remains.

The general targets, as far as the sustainable water use is concerned, do not rely on territorial aspects that could be interpreted in the sense of a certain limited territorial sovereignty. Indeed, the need to implement a sustainable use of fresh-water also within the territories of the States seems to be recognised.

Finally, the “Johannesburg results” refer to an integrated management of fresh-water resources which is certainly a necessary condition of sustainable use of fresh-water resources.

However, the decisive steps in order to implement concretely these targets formulated in a very general way, have yet to be taken. In this context, “Johannesburg” can only be the beginning of a large *prise de conscience* which should be concretised in precise concepts and obligations, not only including material obligations for each State to realise the necessary means on the way towards a sustainable use of fresh water, but also obligations for developed countries to transfer technology and undertake capacity building measures. Besides, the target of sustainable use of freshwater should be formulated in a more precise way if one does not want to risk a relativisation of the aim to safeguard freshwater resources for future generations. Considered from this point of view, the results of “Johannesburg” may show the principal direction in which international law needs to be developed if one really wants to implement a sustainable use of fresh water resources. However, further steps in positive international law have to be made, and two points could be especially promising, as shown above: the human rights dimension and a certain change in the concept of territorial sovereignty.

⁵⁰ See also the ideas going in a similar direction expressed by Odendahl (note 38), 360 et seq., who postulates an “Umweltpflichtigkeit” of sovereignty; Perrez (note 21), 243 et seq. who understands sovereignty (also) as a responsibility.