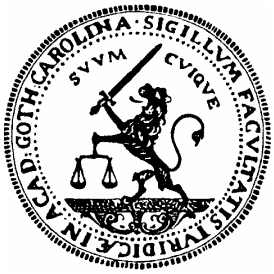

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The Mekong Agreement

In light of International Principles Relating to Sustainable Use of Transboundary Watercourses

Master thesis
20 points

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Environmental Law
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Contents

Summary

This Master's thesis discusses the Mekong Agreement and its potential from a viewpoint of sustainable use of the Mekong River. The Mekong River, in Southeast Asia is shared by six States: the upper riparians; China and Myanmar, and the lower riparians; Thailand, Lao PDR, Cambodia and Vietnam. The Mekong Agreement governs the four Lower Mekong countries' cooperation on their part of the river. China and Myanmar have chosen to remain outside of the Agreement. The Agreement needs further specification through rules to become fully effective as an instrument to promote sustainable use. Some of these rules, supplementing the Agreement, have already been developed, while others are under way.

Using a combination of a descriptive and analytical study of available legal sources, the Mekong Agreement is compared to relevant international principles concerning sustainable use of transboundary watercourses, such as 'equitable utilisation', the 'no harm' rule and the duty to cooperate. As vital components of the concept of sustainable use, the notions of public participation and Environmental Impact Assessment are also included. In relation to the discussion and analysis of the Agreement and its rules, and their strengths and weaknesses, in some cases extensions into the actual situation in member states are made.

It is found that important principles and components concerning sustainable use of international watercourses have been included in the Mekong Agreement to a varying degree, but that subsequent rules will be needed to make the principles fully effective in view of sustainable use. Parts of the river, such as tributaries, have been insufficiently covered by the Mekong Agreement and its rules. The exclusion of the concepts of Environmental Impact Assessment and public participation in the Mekong Agreement, coupled with a legal text which has gaps and in parts is somewhat ambiguous and vague, most notably concerning the important notion of 'the Mekong Basin', as well as the exclusion of the two upper riparian states China and Myanmar are seen as the most important impediment to sustainable use of the Mekong River. Ambiguity over how water quality issues should be handled in the Mekong Agreement and its rules also diminishes the potential of the Agreement in relation to sustainable use.

However, taking into account the history of political unrest in the region, the Agreement is an important step in the right direction with the Mekong River Commission being strongly focused on environmental issues and sustainability, and progress in turning the framework instrument into practical use. The Commission also provides an important forum for building trust and cooperation between the parties.

Preface

I would like to thank my Supervisor, Annika Nilsson for her patience and essential criticism. I would also like to thank Claudia Wahlgren for language control and encouragement. Furthermore I would like to extend my gratitude to my colleagues at UNEP in Bangkok for their support during the first phases of the thesis, especially to Mr Iqbal for widening my knowledge of international law and the region. I would also like to thank all those at the MRC who so willingly have provided me with additional information. Last, but not least I would like to thank family and friends, especially Pernille, Sebastian and Johan, for their support, patience and encouragement.

Josefin Gooch

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Abbreviations

ADB	Asian Development Bank
ASEAN	the Association of South East Asian Nations
BDP	Basin Development Plan
EIA	Environmental Impact Assessment
EP	Environmental Program
FAO	Food and Agricultural Organisation of the UN
GEF	Global Environment Facility
GDP	Gross Domestic Product
GMS	Greater Mekong Sub region
ICJ	International Court of Justice
ILC	International Law Commission
JC	Joint Commission
LMR	Lower Mekong Region
MRC	Mekong River Commission
MRCS	Mekong River Commission Secretariat
NCA	Preliminary Procedures for Notification, Prior Consultation and Agreement, approved by the Council on the 12 of November 2002 in Ho Chi Minh City, Viet Nam.
NGO	Non Governmental Organisation
NMC	National Mekong Commission
STEA	The Science, Technology and Environmental Agency
UN	United Nations
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environmental Programme
WUP	Water Utilisation Program

1 Introduction

The rain is plenteous but, by God's decree,
Only a third is meant for you and me;
Two-thirds are taken by the growing things
Or vanish Heavenward on vapour's wings:
Nor does it mathematically fall
With social equity on one and all.
The population's habit is to grow
In every region where the water's low:
Nature is blamed for failings that are Man's,
And well-run rivers have to change their plans.

Sir Alan Patrick Herbert (1890-1971)

1.1 The global water situation

Access to fresh water is of vital importance to the world's population. However, with a growing human population and an economic development dependent on high water consumption the world's water situation has become critical. Thus many writers maintain that water, not oil, will be the most crucial resource in the twenty-first century.[1] Numerous regions in the world face water scarcity, and over half of the world's major rivers are now seriously polluted.[2] The situation, which many would call a crisis, has become geographically more widespread and it threatens the environment and efforts to reduce poverty as well as further development and measures to assure peace. A call for action from the global community has resulted in a pledge by all UN Members to "halve, by 2015, the proportion of the world's population without access to safe water supply and adequate sanitation".[3] At the Earth Summit in Rio, in 1992, protection of freshwater resources was recognised as crucial and Chapter 18 of Agenda 21 points out that the "holistic management of freshwater as a finite and vulnerable resource /…/ [is] of paramount importance for action in the 1990s and beyond".[4] At the Johannesburg meeting in 2002 water was again perceived as a subject of utmost importance and the Commission on Sustainable Development devoted the first two-year post Johannesburg period to water issues.[5]

Given that most of the economically exploitable waters have already been developed, attention has now largely turned towards transboundary waters which, due to political considerations, remain a fairly undeveloped source.[6] In view of the great amount of internationally shared waters in the

[1] E.g. Biswas, 1996, p. 3.
[2] Industry and Environment, 2004, p. 4.
[3] Millennium Development Goal Nr 7, target 10 (http://www.developmentgoals.org/Environment.htm 2005-03-03).
[4] Agenda 21, chapter 18; 18.6, see also 18.36.
[5] Falkenmark, 2003.
[6] Biswas, 1996, p. 3.

world,[7] this places transboundary water resource management as one of the most important water issues today. Access to water has long been a cause for dispute and contention, but shared waters can also be a source of co-operation. This can be seen through a global increase of initiatives related to joint river basin management of transboundary resources.[8] The 1966 Helsinki Rules paved the way for water management agreements, laying down the foundation for international principles for shared watercourses, and the rules have influenced many specific river treaties. Since then there have been various international efforts on the subject, including the work of the International Law Commission, which in 1997 led to the United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses (hereafter abbreviated 'the 1997 Water Convention'). This global instrument has however not entered into force.

The focus of this thesis is on the Mekong River in Southeast Asia. The Mekong is shared by China, Myanmar, People's Democratic Republic of Lao (Lao PDR), Thailand, Cambodia and Vietnam. The Agreement on the Co-operation for the Sustainable Development of the Mekong (hereafter shortened 'the Mekong Agreement', or simply 'the Agreement') is the instrument governing the Mekong River co-operation by the four Lower Mekong River countries; Cambodia, Lao People's Democratic Republic (Lao PDR), Thailand and Vietnam. The two upper Mekong riparian states, China and Myanmar have chosen to remain outside the Agreement.

1.2 Aim of the Study

The overlying aim of this thesis is to study the Mekong Agreement's potential from a viewpoint of sustainable use of the Mekong River. The Mekong Agreement will be compared to relevant international principles on sustainable use with the aim of analysing how the Agreement relates to such principles and to what extent they have been included in the Mekong Instrument. The focus on principles will however not be strictly adhered to. The concepts of Public Participation and Environmental Impact Assessments are very important components of sustainable use and although they are not principles in its strictest sense they will be viewed as such in the context of this thesis.

A clear and non-contradictory legal outline of the instrument is essential for the effectiveness of the regime in the field of sustainable use, as well as for conflict prevention. Hence the Mekong Agreement and its subsequent rules will also be studied with the aim of locating their strengths and weaknesses as legal instruments.

[7] Today a total of 261 rivers, covering 45.3 per cent of the total land area (excluding Antarctica), are shared by two or more countries, adding up to a total of 145 nations (UNEP, 2002, p. 154; Wolf, 2001, p. 2).
[8] UNEP, 2002, p. 154 f; Meredith and Wolf, 2003, p. 165.

1.3 Methodology, Material and Disposition

To some extent I have used a traditional method for legal research, combining a descriptive and analytical study of available legal sources as method in this thesis, with some exceptions which will be discussed in relation to my delimitations (section 1.4). Chapter 2-4 are largely descriptive, whereas chapter 5 is more analytical.

Where appropriate and needed, extensions into the actual situations of the member countries will be made. These extensions will primarily be conducted in relation to important principles and concepts of sustainable use which have been excluded from the Agreement, or been included to a very limited extent.

In chapter two, I have mainly used sources from the internet to try to give an understanding of the region, its environmental problems and a brief insight into national environmental laws and management of the countries. During my three months internship at UNEP (United Nations Environmental Programme) in Bangkok in the summer and autumn of 2004, (working with the legal Officer), I also gained valuable practical insight into the legal environmental regimes of the four lower Mekong states, as well as access to the UN library.

Chapter three gives an overview of international principles relating to transboundary freshwaters. In writing this chapter I have used the traditional analytic method used in international law – examination of the sources of international law: treaties, custom, general principles, subsidiary sources and state practice, and the views of prominent authors. The principles I have chosen to include in the chapter are the most frequently discussed principles in relation to transboundary waters, relevant in view of sustainable use.

Chapter four presents the Mekong Agreement and its subsequent rules. The material used for this chapter is mainly the legal texts themselves.

In chapter five the Mekong Agreement and its rules are analysed and discussed in light of principles presented in chapter three, but also to some extent in light of the factual situation in the region. This chapter includes my own analysis, as well as analyses of other authors.

Chapter six presents my conclusions.

1.4 Delimitation

Because the Mekong Agreement is fairly new, there is still not a very large bulk of information or analysis available regarding it. The distance to the region has furthermore made it very difficult to meet ‘in person’ with people who might have been able to provide me with additional information.

A fully satisfactory study of regional or international agreements, in line with a traditional legal research method, would normally include commentaries and/or explanations of the legal text. Such additional material would have been beneficial for the full understanding of the Mekong Agreement. However it appears that this kind of material does not exist regarding the Mekong Agreement (or if it does it has not been made

public).[9] Neither have I come across any legal cases where the Mekong Agreement has actually been put into practice, why such inputs have also been excluded from the thesis. The Mekong Agreement is still in its first phases, and the Mekong River Commission (MRC), governing the Agreement, is presently working on developing more specific rules under the Agreement. New rules on water quantity and quality are under progress by the MRC but as the content of these rules has not yet been made public they will be discussed to a very limited extent and focus will be on the situation today.

Implementation of the Mekong Agreement into national legislation of the member countries has only very briefly been included in this thesis. The Mekong Agreement has been given the form of a framework instrument with only general requirements which cannot be enacted into national law in their present form. The rules which have been agreed upon to complement the Agreement are fairly new and have not yet reached the stage of implementation in the member countries. To some extent the prevailing situation in the region has however been studied in the analysis of the Mekong Agreement (chapter 5). This has been done especially in regard to public participation and environmental impact assessments.

The section on international principles does not aspire to be all-embracing. The aim of the chapter is merely to give an overview of relevant principles in order to use them as a base for evaluation of the Mekong Agreement.

The principle of sustainable development is important in regard to international environmental law and has been incorporated in the Mekong Agreement. The exact interpretation of the principle is still not very clear in international law, but certain components have been emphasized as composing part of it.[10] These elements have been included in this thesis to a varying extent. Different degrees of relevance for the context of the thesis, as well as limited space have compelled me to focus on selected components.

[9] Correspondence with the Mekong River Commission has not provided me with any such material. Studying published evaluations of the Mekong Agreement has also left me with the conclusion that *if* such material indeed exists it has not been made public, since none of these evaluations relate to any such material.

[10] See section 5.2 of this thesis.

2 The Lower Mekong River and its Countries

2.1 Geography, Economy and the Importance of the Mekong

Map of the Mekong River and of its riparians.[11]

The Mekong, flowing through central Southeast Asia, from Southwest China to the Mekong Delta in Vietnam, is 4,800 km long, making it the world's 12th longest river. In terms of water volume, it rates as the 8th largest river of the world. In September, during the peak of the rainy season, the water quantity of the Mekong is 20 to 25 times higher than during the dry season.[12]

The river runs through or along the borders of six countries; China, Myanmar, Lao PDR, Thailand, Cambodia and Vietnam, making up the 'Greater Mekong Sub Region' (GMS). The 'Lower Mekong Region' (LMR), comprising of the four downstream Mekong countries; Lao PDR, Thailand, Cambodia and Vietnam is home to 65 million people,[13] most of

[11] http://www.mekongforum.org/mapindo.jpg 2005-02-10
[12] MRC, 2003(b), p. 27.
[13] MRC, 2003(c), p. 30.

them living in rural areas.[14] The region is experiencing rapid population growth; by 2025, the LMR population is expected to reach 90-120 millions.[15] The population of Cambodia is growing by 2.6% a year and that of Laos by 2.3% - among the highest rates in Asia. Population growth is lower in the Thai and Vietnamese parts of the basin, but they have long been more densely populated.[16]

Economic growth is even faster than demographic: 5-6% last year in Thailand, Lao PDR and Cambodia, 7-8% in China and Vietnam.[17] Lao PDR is the poorest country in the region, with an annual per capita Gross Domestic Product (GDP) of US$ 1,700, followed by Cambodia (US$ 1,900), Vietnam (US$ 2,500) and Thailand (US$ 7,400).[18] Although Thailand is comparatively rich, the Thai population along the Mekong is substantially poorer than that of the rest of the country.[19]

The Mekong is rich in natural resources. The river and its tributaries yield more fish than any other river system in the world; the annual harvest, including fish farms, amounts to about 2 million tonnes, or roughly twice the catch from the North Sea. The Mekong, with more than 1,500 different fish species is the world's most species rich river, save the Amazon and the Congo,[20] and gives rise to the very rich ecosystem that supported Cambodia's great Anchor civilisation a thousand years ago. Over 1 million people in Cambodia depend solely on fishing to make a living, while in Laos 70% of rural households get income supplements from fishing.[21] Three quarters of the Basin's people earn their living from agriculture and fishing – occupations that account for 50 percent of the Lower Basin's GDP.[22]

2.2 Governmental and Legal Structure of the LMR Member Countries

Thailand is the only 'real' democracy among the four countries. Cambodia is a so called 'pseudo-democracy', a state with democratic structures but without a real chance for an alternance of power. Lao PDR and Vietnam are among the five remaining communist states in the world.[23] They are one-party states, with a President as head of state and a Prime Minister leading the government.[24] Thailand and Cambodia are constitutional monarchies, with the King as head of state and a Prime Minister leading the

[14] MRC, 2003(b), p. 27.
[15] MRC, 2003(a), p. 12; Pech, 2004, p. 3.
[16] The Economist, Jan 3, 2004.
[17] The Economist, Jan 3, 2004.
[18] (2003 figures) CIA webpage (http://www.cia.gov/cia/publications/factbook/rankorder/2004rank.html 2005-03-27).
[19] Guo and Yang, 2003, p. 433.
[20] MRC, 2003(b), p. 27.
[21] The Economist, Jan 3, 2004.
[22] Pech, 2004, p. 3.
[23] The other three are; China, North Korea and Cuba (http://www.nationmaster.com/encyclopedia/Communism 2005-03-17).
[24] http://www.nationmaster.com/red/graph-T/gov_gov_typ&int=-1 2005-03-17

government.[25] Even in Thailand democracy is fairly recent (in place since 1992) and somewhat weak and fragile.[26] The level of public participation and access to information varies among the four countries; Thailand is the forerunner in this sense, even though it should not be compared to the openness of more settled democracies of the world. Cambodia, Lao PDR and Vietnam have a very limited tradition of public participation and openness and the concept is weak in these countries.[27]

Three centuries of civil war and instability in Cambodia came to an end with the final fall of the Khmer Rouge senior leadership in 1999.[28] The country is now trying to rebuild the economic, institutional and social structures that where devastated during the war.[29] The present Cambodian government is strongly centralised, and local authorities are directly appointed and supervised by the central government.[30] However, a scheme for decentralisation is slowly being implemented.[31]

In Lao PDR the Lao People's Revolutionary Party came to power in 1975, replacing monarchy after more than two decades of civil conflict.[32] Lao PDR and Vietnam have begun a shift from centralized economic planning to a more market-oriented development agenda, however, broad-based democratization progresses at a slower pace.[33]

2.3 Mekong Environment

Due to former geopolitical tensions among the riparian countries, the Mekong is still comparatively undeveloped and has been subject to limited resource exploitation.[34] This should be seen against the background of rapid economic growth and high resource potential in the region at large. Industrial development in the Mekong region has, so far, been sparse and infrastructural development and mining has also been limited except in northeast Thailand and the Vietnamese Delta. Existing industries in Cambodia and Laos are concentrated to the respective capitals, whereas in Thailand and Vietnam industrial development can be found in several areas of the Mekong basin.[35] The greatest city along the Mekong is the Cambodian capital Phnom Penh, with a mere population of 1.1 millions. This situation of limited development is however likely to change as the

[25] http://www.nationmaster.com/countries.php 2005-03-22
[26] Brief periods of democracy however prevailed the final shift from military power to democracy in 1992 (http://www.nationmaster.com/encyclopedia/History-of-Thailand 2005-03-17).
[27] See Section 5.7 of this thesis for a more extensive discussion of public participation and access to information.
[28] http://www.countryreports.org/content/thailand.htm2004-07-28
[29] Badenoch, 2002, p. 5.
[30] http://www.countryreports.org/content/thailand.htm2004-07-28
[31] Rusten, 2004, pp. 1-5; Oberndorf, 2004, p. 9.
[32] Bush, 2004, p. 2.
[33] Badenoch, 2002, p. 5.
[34] Hirsch and Cheong, 1996, chapter 4.
[35] Ringler, 2001, p. 13; GEF, 1999, p. 5.

Mekong River is forecast to be the centre of major regional development in the near future.[36]

Forest exploitation and intensification of agriculture are some issues having a negative effect on the Basin's environment. However, institutional capacity to deal with these types of environmental problems and cumulative impacts is weak throughout the region. Flood management and mitigation are other major concerns for the member countries. In the past, excessive flooding during the wet season has caused great economic and human loss in the Basin. However, floods are also of great importance to replenish the wealth of the aquatic ecosystems.[37] The Mekong ecosystems and an extensive network of wetlands are supported by and depend on annual flooding and in years of extensive flooding, fish catch increases significantly.[38] Planned damming and blasting of the Mekong threaten to disrupt these cycles and presents a severe risk to the river ecosystems.[39] Consequently, such plans are threatening the livelihoods and food security of the peoples dependent on the Mekong River.

Southeast Asia, as many other regions of the world, is facing both water stress and severe water pollution problems.[40] The Mekong region is however not experiencing water stress *per se,* as the Mekong provides an abundant water resource.[41] Neither is water quality perceived as a very critical issue at present. The waters of the Mekong River are generally considered to be of fairly good quality, especially when compared to many other great rivers in the world, but there are localised exceptions. Present pollution is principally caused by natural processes such as saltwater intrusion into the Mekong delta, soil erosion and siltation, and human activities, such as industrial production, urban waste disposal and sewage, use of fertilisers and pesticides and water reservoirs.[42] In other parts of the world it has been noted that impacts of development often have a significant negative influence on water quality. Massive infrastructure developments are in progress and under consideration in the region,[43] and combined with major expansions of irrigated agriculture they present a serious threat to the water quality of the Mekong River.[44] Plans to further expand the use of

[36] http://www.unep.or.jp/ietc/Publications/Insight/Jan-01/3.asp 2004-10-28
[37] MRC, 2003(c), pp. 2-3.
[38] ADB, 2000, p. 3.
[39] China is engaged in an extensive program of dam building on the river itself and has already completed several dams, with more being under consideration. It is widely feared that these will prevent sediment from flowing, which would seriously harm downstream agriculture and fishing. Dams will lessen the natural seasonal fluctuations in water volume on which the river is dependent. This could affect the Cambodian Tonle Sap Lake. Dams have also been built by Thailand and are planned by the Cambodian and Lao governments. China has also carried out work clearing rocks and sandbars from its stretch of the river, in an effort to aid navigation, which has encouraged Laos to do the same. This is feared to bring an increased flow of water, which in turn would cause increased erosion, as well as damage fish spawning areas and fish stocks (http://www.nationmaster.com/encyclopedia/Mekong-River 2005-03-19).
[40] UNEP, 2002, pp. 161-162; ADB and UNEP, 2004, p. 35.
[41] Wolf, 2001, p. 24.
[42] MRC, 2003(c), p. 3; MRC, 1997, p. 7.
[43] Presently, the two main issues in the management of the river basin seem to be dam constructions and blasting of rapids.
[44] http://www.unep.or.jp/ietc/Activities/Cross-Cutting/MekongRiver.asp 2005-03-10

hydro-power might also disrupt the water quantity situation and water allocation has emerged as a more critical issue. This is true especially from an ecological point of view, as enough water will need to be allocated to sustain ecological systems in and around the river.

Water quality management has been subject to extensive discussion among the Lower Mekong riparian countries since the signing of the Mekong Agreement. Dearth of knowledge on the conditions governing water quality and how it is related to land and water use combined with a lack of agreement on individual and collective responsibilities to water quality have given rise to considerable debate. Salinity management in the Vietnam Delta is an example of the latter disagreement since it is dependent not only on upstream water use and sufficient outflow during the dry season but also on irrigation and drainage management in the delta by Vietnam itself.[45]

2.4 Environmental Legislation and Management

The countries of the Lower Mekong region have reached different stages of development when it comes to environmental legislation. Cambodia has begun its environmental legislation process relatively recently, while Thailand's history of environmental laws dates back to the 1970s. However, the present key environmental laws of the four countries have all been formulated during the 1990s.[46] In Thailand, environmental management and pollution control issues such as water pollution control and water quality management are incorporated into the principal environmental act.[47] Cambodia has a framework environmental law,[48] stipulating general goals and principles. The law needs further specification through sub decrees to become an effective instrument for prevention of environmental degradation. Water pollution issues have been addressed through the Sub Decree on Water Pollution Control. Vietnam has also adopted the concept of a framework environmental law,[49] and the law has functioned as a base for formulation of water quality and wastewater standards. Other Vietnamese laws with provisions concerning water management include the Law on Water Resource, the Public Health Law and Municipal Law. The Environmental Protection Law, from 1999, is the main environmental legislation in Lao PDR, but Lao PDR also has a separate law for water resources.[50]

Thailand, Cambodia and Vietnam all have Ministries responsible for handling national environmental issues.[51] Water management and water

[45] GEF, 1999, p. 5.
[46] Thailand: 1992, Vietnam: 1994, Cambodia: 1996, Lao PDR: 1999.
[47] The Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992).
[48] 1996 Law on Environmental Protection and Natural Resource Management.
[49] 1994 Law on Environmental Protection.
[50] The 1996 Water and Water Resources Law.
[51] In Thailand and Vietnam; the Ministry of National resources and Environment, In Cambodia; the Ministry of Environment.

quality are generally the responsibility of departments such as pollution control departments and water resources departments. Lao PDR does not have a specific ministry handling environmental and water issues. The Science, Technology and Environmental Agency (STEA), under which the Department of Environment is especially appointed to handle environmental issues, is however responsible for co-ordination of environmental affairs and policy development. STEA has no implementing role, but is responsible for EIAs.[52] Management of natural resources in Lao PDR is handled by the Ministry of Agriculture and forestry and Ministry of Communications, Transport and Post is responsible for pollution control and urban waste disposal.[53] Since most of Lao PDR falls within the Mekong basin the Lao National Mekong River Commission (NMC)[54] has a major role in the co-ordination of water management activities.

During my internship at UNEP in Thailand I came to the conclusion that overlapping responsibilities of government agencies, reducing their effectiveness, is a problem in all four countries in the field of environment and water resources.

2.5 Cooperation over the Mekong River

To sum this up: the Lower Mekong Region is poor, with a high population rate and fast economic growth. The starting point for cooperation over the Mekong River can be simplified thus: the Thais want more water for agriculture, domestic and industrial use while the Laotians want capital and expertise to develop hydropower for export to Thailand and Vietnam. The Cambodians need capital and infrastructure and want to secure sustainable fishery resources in the Tonle Sap Lake, which relies on inflows from the Mekong. The Vietnamese need capital for the management of resources, but they also want to limit upstream development since this might lead to salt-water intrusion in the Mekong delta during the dry season, threatening the nationally important rice production.[55] These concerns obviously represent competing interests. The apparent different levels of economic, legal and democratic development as well as diverse interests in the Mekong River are brought into the cooperation and will need to be addressed by the MRC. Different views on management of the Mekong will need resolving in order to not cause conflicts among the riparian states. As will be seen in the chapter on the Mekong Agreement, the principle of sustainable development is meant to govern the cooperative efforts of the nations involved and hence environmental factors will also need to be considered.

[52] 1999 Decree On the Establishment and Activities of The science, Technology and Environment Agency, No. 68/PM, Art. 2.
[53] http://www.laoembassy.com/news/laoorga.html 2005-03-22
[54] See Section 4.2.2 of this thesis for a review of NMCs.
[55] Browder, 2000, p. 242; http://www.thewaterpage.com/mekong_river.htm 2005-03-27

3 International Principles Relating to Sustainable Use of Transboundary Watercourses

'Water is the greatest element of nutrition in gardens, but is easily polluted. You cannot poison the soil, or the soil [sic.] or the sun, or the air, which are other elements of nutrition in plants, or divert them, or steal them; but all these things may very likely happen in regard to water, which must therefore be protected by law.'

Plato, Laws, Book VIII, 380 BC, translated by Benjamin Jowett

3.1 Introduction

An international watercourse fits the description of a shared resource which riparian states might be tempted to use at free will to gain maximum benefits for themselves.[56] Especially upstream states have much to gain and little to loose from such an approach. The behaviour of upstream states might however have devastating results on the water that flows into downstream countries. Hence, it lies in lower riparian countries' interest to persuade upstream states into taking effective measures to ensure that the transferred water comprises an equitable amount and is unpolluted. It is also mainly in the lower riparian states' interest to bring an agreement into place, thus agreeing on a consensus on how the river should be managed. The very nature of a watercourse consequently gives upstream countries an advantage in the negotiations over transboundary watercourses. This disparity typically provides the opening point for negotiations over shared watercourses and the principles that have sprung from this situation will be discussed further in this chapter.

However, international environmental law seems to have experienced a shift since the end of the 20th century; moving towards a stance where it to a larger extent focuses on the environment as such, independent of any transboundary effects. Such a shift can also be distinguished in international water law in which a "growing emphasis on

[56] I have adopted Birnie and Boyle's explanation of the term 'international watercourse' or 'transboundary waters' which is thus meant to include rivers, lakes, or groundwater sources shared by two or more states which normally will either form or straddle an international boundary. In the cases of rivers, they may flow through a series of states (Birnie and Boyle, 2002, p. 299).

incorporating ecological values into water policy" can be noted.[57] This new approach, which has manifested itself through a series of statements, documents and rules made by the international community,[58] has the potential to change the discrepancy in negotiations over shared watercourses since riparian states will be obligated to comply with such rules independently of where along the watercourse they are situated.

International disputes regarding non-navigational uses of freshwater were rare during the pre-industrial era and have mainly emerged along with industrialisation and its new and more intensive water usage.[59] Frequent state behaviour patterns have given rise to strongly held expectations which eventually have crystallised into rules and principles of customary international law.[60] An extensive body of customary law regarding internationally shared fresh water has consequently emerged, especially during the last century.[61]

Sustainable use of an international watercourse is somewhat difficult to define. According to the Division of Sustainable Development of the UN Department of Economic and Social Affairs, a sustainable use of water however has to ensure a long-term balance between abstraction and natural rate of recharge, a high level of environmental protection, and a secure supply of high quality water for human consumption and economic purposes. Several international forums and conferences have outlined the main principles and guidelines on the sustainable use of water resources.[62] In this chapter I will present relevant rules and principles relating to management of international watercourses and thus try to give an overview of the backbone upon which specific treaties are built. Main focus will be on the three core principles of international water law aimed at promoting sustainable use of watercourses and the prevention of conflicts among riparian states; the principle of equitable utilisation, the obligation not to cause significant harm and the duty to cooperate. In their general form they are binding upon states as customary international law. They have also been incorporated in concrete form into watercourse agreements regarding specific watercourses.[63]

Instruments which are specific for international watercourses include the 1966 Helsinki Rules on the Uses of the Waters of International Rivers[64] and the 1997 UN Convention on the law of Non-navigational uses of International Watercourses. The 1966 Helsinki Rules were the first attempt by an international association to codify the entire law regarding international watercourses. These rules have deeply influenced state practice and the efforts of international associations, such as the work of the ILC in

[57] Gleick, 2000, p. 127. See also: Birnie and Boyle, 2002, pp. 111, 250 299; Tarlock, 1996, p. 181; Nollkaemper, 1993, p. 6.
[58] E.g. 1982 UNCLOS, Article 194(2).
[59] Dellapenna, 2001, p. 269.
[60] Naff and Dellapenna, 2002, p. 468.
[61] Dellapenna, 2001, p. 269.
[62] http://www.un.org/esa/sustdev/sdissues/consumption/cpp1224m11.htm 2005-03-31
[63] Mechlem, 2002, p. 3.
[64] Made by the International Law Association (ILA), a highly regarded non-governmental organization of legal experts, founded in 1873.

examining the law of transboundary fresh waters.[65] The 1997 UN Convention has been recognised by the International Court of Justice (ICJ) in the Gabcíkovo- Nagymaros case and by a significant number of states as an authoritative statement of fundamental principles of international water law.[66] It also contains some provisions that take the development further than customary law. Regardless of when, and whether, the Convention comes into force, it plays an important role in the management of international watercourses and its provisions are increasingly being incorporated by international forums.[67]

From the viewpoint of international environmental law in general the 1972 Stockholm Declaration and later the 1992 Rio Declaration are of major importance[68] and their principles will be viewed more closely in this section.

3.2 The Basin Approach and the Concept of Common Management

In discussions over transboundary watercourses it is of great importance to determine how much of the watercourse to include in the dialogue. This makes the provisions practically functioning and effective and limits conflicts. The geographical and hydrological scope of specific treaties determines their boundaries and presents a 'framework' for the cooperation.

The 1966 Helsinki Rules focused on the concept of an international drainage basin, attempting to integrate the entire watershed. Rivers, lakes, canals, groundwater, and glaciers were thus included in the concept in order to "effect maximum utilisation and development of any portion of its waters".[69] Agenda 21 recommends a catchment management approach since "the complex interconnectedness of freshwater systems demands that freshwater management be holistic".[70] In the 1997 Water Convention the 'drainage basin' concept has however been rejected as being too extensive.[71] ILC thus replaced the concept with the term 'watercourse' which in Article 2 has been defined as "a system of surface waters and ground waters constituting, by virtue of their physical relationship, a unitary whole and normally flowing into a common terminus". This approach excludes components such as confined ground waters and land in the

[65] Beaumont, 2000, p. 476; Dellapenna, 2001, p. 273.
[66] Wouters, 2001, p. 5. Case Concerning the Gabcíkovo- Nagymaros Project on the Danube, between Hungary and Slovakia, International Court of Justice (1997), 25 September 1997. The Judgment and Opinions can be found on www.icj-cij.org.
[67] Meredith and Wolf, 2003, p. 167; Wouters, 2001, p. 5.
[68] Beaumont, 2000, p. 478.
[69] Helsinki Rules, 1966, Article II and comment (a) to Article II (ILA, Report of the 52nd Conference (1966) 477).
[70] Agenda 21, chapter 18, 18.36.
[71] Birnie and Boyle, 2002, p. 300. The UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992) is closer to the Helsinki rules as it encompasses a number of different components through which water flows both on and under the surface of land including rivers, lakes, aquifers, glaciers, reservoirs and canals (Article 1.1).

watershed and as a result some authors have seen it as a backward step compared to previous definitions of international river systems. [72]

Although the modern view tends to favour the 'basin approach', to include the whole basin in the concept, international codification and state practice reflect different views on this matter.[73] In combination with disagreements over the issue in the work on the 1997 Water Convention, the conclusion has been drawn that no clear position can be determined regarding what constitutes customary law on this subject.[74]

Common management, e.g. through regional water agreements is perceived as a very important method of regulating water use to sustain and prevent further degradation of them.[75] They also offer a way of allocating water between riparian states.

3.3 Upstream-downstream Issues

As mentioned above, the core problem in transboundary water issues can be simplified to revolve around the upper riparian country's wish to use waters within its own borders at free will, and the downstream countries' desire to receive natural and unaltered water flow over their borders from upstream states. These wishes are obviously not fully compatible, and neither are the principles they have given rise to. The 'absolute territorial sovereignty principle' claims that states are free to use the water within their boundaries at free will, regardless of the needs and uses of downstream nations. In this view states do not have any legal responsibility for harm caused to downstream states due to upstream usage.[76] The best-known case where this view was expressed is the 1895 Rio Grande case between Mexico and the USA concerning international legal responsibility for injure caused to Mexican farmers by irrigation diversions of water from the Rio Grande in the USA.[77] However this doctrine never won international acceptance and does not represent current international law.[78] Even so, the initiation of basin-wide programs is highly influenced by the idea of sovereignty, and this can be a major impediment to accomplishing integrated development of international rivers. Consequently many international agreements only refer to certain aspects of water planning, e.g. data collection or they form organisations with a coordinating, rather than an overall planning and management role.[79] The first part of principle 2 of the Rio Declaration clearly shows the legacy of the sovereignty approach. It declares that:

> *States have, in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit*

[72] Scheumann, and Klaphake, 2001, p. 5; Tarlock, 1996, Section IV A; Eckstein, 1998.
[73] The Basin approach has been applied in case of e.g. the Rhine and the Danube in Europe, the Senegal River and the Zambezi River in Africa and the Amazon in South America (Birnie and Boyle, 2002, p. 299).
[74] Birnie and Boyle, 2002, p. 301.
[75] Agenda 21, chapter 18; 18.3 and 18.4.
[76] Beaumont, 2000, p. 476; Kliot et al., 2001, p. 232.
[77] The judge in that case, US Attorney-General Harmon has also made the principle known as the Harmon doctrine (Beaumont, 2000, p. 477).
[78] Kliot et al., 2001, p. 232; Shaw, 2003, p. 760.
[79] Kliot et al., 2001, p. 234.

their own resources pursuant to their own environmental and developmental policies…

The second part of the principle, which reduces the negative implication of sovereignty, will be discussed in relation to the 'no harm rule'.

The 'absolute territorial integrity principle' represents the opposite view to the 'absolute territorial sovereignty principle'. According to this principle a state has the right to unaltered water flow from upstream states. This means that states are not allowed to develop the waters flowing through its territory if the country thereby causes harm to downstream states. The principle lays duties only on upstream nations and supporters of the 'absolute territorial integrity principle' have not managed to gain international acceptance for 'their' principle either.[80] A third principle is 'the principle of prior appreciation', implying that the first user of the watercourse has the strongest right to preserve its uses.[81] This principle has not either reached the status of international customary law, and it has been counteracted by e.g. Article 6 of the Helsinki Rules and Article 10 of the 1997 Water Convention, of which the latter states: "in the absence of agreement or custom to the contrary, no use of an international watercourse enjoys inherent priority over other uses".

The solution to the allocation problem has mainly been a principle which has become known as 'equitable utilisation' and has emerged as a key phrase in water use and a principle of international customary law.

3.4 Equitable Utilisation

The principle of equitable utilisation "entails a balancing of interests and consideration of all relevant factors".[82] As such, it is concerned with what is equitable in relation to other states using the same watercourse. The extent of a state's right to equitable use depends upon the facts and circumstances of each individual case, and relevant factors will be weighed against one another.[83] What constitutes relevant factors will naturally vary from case to case. The 1997 Water Convention, incorporating the principle through Article 5 and 6,[84] gives some examples of what factors may be relevant.[85] In the last phase of negotiations over the 1997 Water convention the concept of sustainable utilisation was included into the notion of equitable utilisation.[86]

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[80] Beaumont, 2000, p. 477; Kliot et al., 2001, pp. 232-233.
[81] Waterbury, 1997, p. 281.
[82] Birnie and Boyle, 2002, p. 146 f.
[83] Helsinki Rules, 1966, Article IV and comment (a) of ILA, Report of the 52nd Conference (1966) 477, and 1997 Convention, Article 6.
[84] The principle is also included in the 1966 Helsinki Rules (Articles IV and V).
[85] (a) Geographic, hydrographic, hydrological, climatic, ecological and other factors of a natural character; (b) The social and economic needs of the watercourse States concerned; (c) The population dependent on the watercourse in each watercourse State; (d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States; (e) Existing and potential uses of the watercourse; (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; (g) The availability of alternatives, of comparable value, to a particular planned or existing use (Article 6 of the 1997 Water Convention). See e.g. Birnie and Boyle, p. 303 for a discussion on these factors.
[86] Birnie and Boyle, 2002, p. 85; Scheumann and Klaphake, 2001, p. 6.

The principle of equitable utilisation counteracts the principle of prior appropriation through giving new or future uses the same right as existing uses.[87]

The concept of equitable utilisation seems to have originated from riparian rights developed in England and Wales and refined in a series of interstate American water disputes around the turn of the century (1800-1900). It is however clear that the rule is easier applied within the unified jurisdiction of a single nation than at the diverse international level. Although the principle is widely recognised and accepted in international law the question of interpretation has not been settled and it appears that different countries have very dissimilar views as to how this phrase should be interpreted.[88] Since the result of applying the principle is highly 'case-sensitive', dependent on the factors in each case, it is naturally very difficult for countries to determine its exact interpretation beforehand.

3.5 The 'No Harm' Rule

The general view in international law appears to be that unless stated by specific agreements pollution of rivers is not *per se* forbidden. States are instead required to control and regulate pollution of rivers and only certain forms of pollutions are prohibited. In relation to permissibility there also seems to be a distinction between new and existing pollution sources.[89] The duty to prevent transboundary environmental harm, the 'no harm rule' is a widely accepted rule of international law, well known from the Trail Smelter Arbitration,[90] and confirmed by the ICJ in the Corfu Channel Case.[91] The Lac Lanoux Case presents another example of the application of the principle.[92] In the Legality of the Use by a State of Nuclear Weapons in Armed Conflict the principle was recognized by the International Court of Justice as forming "part of the corpus of international law relating to the environment".[93] As the name implies, the principle includes a responsibility to use international watercourses in a manner so as not to cause harm to other riparian states. It is based on the maxim 'sic utere tuo, ut alienum non laedas' (the principle of good neighbourliness),[94] and now forms the basis of many international environmental law conventions.[95] The key statement is Principle 21 of the 1972 Stockholm Declaration, repeated almost exactly in the 1992 Rio Declaration. As seen in section 3.3, the first part of Principle 2 of the Rio Declaration is concerned with the sovereignty of states. The

[87] Waterbury, 1997, p. 281.
[88] Beaumont, 2000, p. 478.
[89] Birnie and Boyle, 2002, p. 306.
[90] Trail Smelter Arbitration (United States v. Canada), 1939 33 AJIL.
[91] Corfu Channel Case (Merits) (United Kingdom v Albania), 1949 ICJ Rep. 4.
[92] Lac Lanoux Arbitration (France v Spain), 1957 24 ILR 101.
[93] Advisory opinion of 8 July 1996, ICJ, Reports 1996, p. 15, para 29; ILC Draft Commentaries, 2001, General Commentary (3) p. 378.
[94] Beaumont, 2000, p. 477 f. However, Birnie and Boyle maintain that the principle of good neighbourliness is not a part of customary international law (Birnie and Boyle, 2002, Ch.6, endnote 101).
[95] Beaumont, 2000, p. 478.

second part of the principle limits the sovereign rights of states to exploit their resources…

> *…pursuant to their own environmental and developmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.*[96]

Principle 2 thus recognises a state's right to use waters within its boundaries, but also acknowledges that it has responsibilities towards other states that could be harmed by its actions.[97] Emphasis of the principle is on prevention of transboundary harm, thus placing prevention, and not compensation in the first place. The same standpoint is taken by the ILC in its Draft Convention on the Prevention of transboundary Harm from Hazardous Activities (hereafter abbreviated 'the ILC Draft'), an attempt to codify existing general principles relating to transboundary harm. The reason given by ILC for this stance is that compensation in case of harm rarely can restore the situation prevailing prior to the event or accident.[98] The concept of prevention of transboundary harm has reached great significance in international environmental law and can be found in numerous international instruments.[99]

In this context the precautionary principle should also be mentioned. Principle 15 of the Rio Declaration requires a wide application of the precautionary principle, defined as "where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation". The precautionary principle is an important element of sustainable utilisation, as it addresses the key question of uncertainty in the prediction of environmental effects.[100] It is however difficult to make confident assertions regarding its general applicability in international law and according to Birnie and Boyle the principle is not universally accepted.[101] The principle is included in the 1992 UNECE Transboundary Watercourse Convention,[102] but has been left out of the 1997 Water Convention.

An important question regarding sustainable use of international watercourses is the threshold at which harm should be prevented; is the obligation not to cause harm one of due diligence or must the state in fact meet some stricter standard of pollution prevention? The conclusion of Birnie and Boyle is that international law favours due diligence over stricter applications.[103] This stance might be exemplified by Article 7(1) of the

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[96] See also Birnie and Boyle, 2002, pp. 105, 110 ff.
[97] Beaumont, 2000, p. 478.
[98] ILC Draft Commentaries, 2001, General Commentary (2) p. 377.
[99] Principle 21 of the Stockholm Declaration and Principle 2 of the Rio Declaration, General Assembly resolution 2995 (XXVII) of 15 December 1972 on cooperation between States in the field of the environment, Principle 3 of the 1978 Draft Principles of Conduct in the Field of the Environment for the Guidance of States in the Conservation and Harmonious Utilization of Natural Resources Shared by Two or More States. (ILC Draft Commentaries, 2001, General Commentary (2, 3) pp. 377-378.)
[100] Birnie and Boyle, 2002, p. 88.
[101] Birnie and Boyle, 2002, pp. 118-119.
[102] Article 2.5.a.
[103] Birnie and Boyle, 2002, p. 311 f.

1997 Water Convention which places an obligation of due diligence on riparian states when utilizing an international watercourse in their territories. States are thus required to 'take all appropriate measures to prevent the causing of significant harm to other watercourse States'.

3.6 The Relationship Between Equitable Utilisation and the 'No Harm' Rule

One of the most controversial issues in international law relating to freshwater resources has been the relationship between the principle of equitable utilisation and the 'control of pollution and protection of the environment' or in other words the 'no harm rule'.[104] Disagreements over the relationship between these principles nearly caused the work on the 1997 Water Convention to collapse.[105] In the negotiations upstream states generally favoured the principle of equitable utilisation to prevail over the 'no harm rule' since this would allow a more extensive freedom to develop their waters. Downstream riparians, on the other hand, preferred the reverse order, securing the waters flowing into their countries.[106] When applying these two principles the view that seems to have gained most weight in international law is that water quality and the environment are factors to be *taken into consideration* when balancing the interests within the concept of equitable utilisation.[107] In the Gabĉíkovo- Nagymaros Case,[108] environmental effects were found to have a major impact on the overall equitable balance. This implies that the principle of equitable utilisation overrides the 'no harm' rule and that water quality and other aspects of environmental concern will not necessarily outweigh interests such as industrial use or irrigation in the balancing of interests under the equitable utilisation principle.[109] This view can also be deduced from both the Helsinki Rules,[110] and to a lesser extent, from the 1997 Water Convention. Birnie and Boyle draw the conclusion, from Article 7(1), 20 and 21 of the 1997 Water Convention,[111] that the obligations of due diligence required therein are not *per se* subject to equitable utilisation.[112] If a state however, despite taking all appropriate measures, causes significant harm, the equitable utilisation principle overrides the no harm rule. Article 7(2) *thereafter* requires states to take account of equitable utilisation in eliminating or mitigating such harm.

[104] Birnie and Boyle, 2002, p. 307.
[105] Caflisch, 1998, p. 9.
[106] Birnie and Boyle, 2002, p. 307.
[107] Birnie and Boyle, 2002, p. 309 ff.
[108] International Court of Justice (1997), 25 September 1997, Case Concerning the Gabcíkovo- Nagymaros Project on the Danube, between Hungary and Slovakia.
[109] Birnie and Boyle, 2002, p. 307.
[110] Helsinki Rules 1966, Article X and comment (b) (ILA, Report of the 52nd Conference (1966) 477).
[111] These articles deal with the obligation not to cause significant harm, protection and preservation of ecosystems and prevention, reduction and control of pollution.
[112] Birnie and Boyle, 2002, p. 309.

If the aim is to give riparian states equal rights to the river this hierarchy of principles must be upheld. The reverse situation; where the no harm rule prevailed over equitable utilisation would place upstream states in a position where they would have a very limited possibility of developing their part of the river, since this often causes some degree of harm to downstream states. Downstream countries would consequently be likely to object to most developments in upstream countries.

3.7 Cooperation, Consultation and Prior notification

The duty to provide prior notification, consultation, negotiation and relevant information to potentially affected States on activities that may have a significant adverse transboundary environmental effect is recognized as part of customary international law relating to international watercourses, and reflected in many international instruments.[113] Adverse effects of river pollution are also embraced by this rule.[114] The tribunal in the 'Lac Lanoux case' was concerned with whether France had complied with its obligations under customary law; to consult and negotiate in good faith before diverting a watercourse shared with Spain. It was considered that "under the rules of good faith, the upstream state has an obligation to take into consideration the various interests concerned, to seek to give them every satisfaction compatible with the pursuit of its own interests and to show that it has in this matter, a real desire to reconcile the interest of other riparian with its own."[115] These obligations of consultation do not, however, imply the possibility of veto for the affected states.[116]

3.7.1 Environmental Impact Assessment, EIA

It has been suggested that the duty of cooperation, through notification and consultation of uses, implies an obligation to undertake an environmental impact assessment (EIA) in order to determine what needs to be notified and to make such cooperation procedures meaningful.[117] The process of

[113] ILC Draft commentary, 2001, Article 8 and comment (3) (pp.406-407); Birnie and Boyle, 2002, p. 319. The duty is included in e.g. Principle 24 of the Stockholm Declaration, Principle 7, 19 and 27 of the Rio Declaration, as well as in the 1997 Water Convention, Article 5(2), 7, 8. The fact that only 3 countries rejected the inclusion of the principle into the 1997 Water Convention further indicates its incorporation into international law (Birnie and Boyle, 2002, p. 319).
[114] Birnie and Boyle, 2002, p. 319.
[115] Lac Lanoux Arbitration (France v Spain), Award of 16 Nov 1957 24 ILR 101, p. 139 (par. 22).
[116] Lac Lanoux Arbitration (France v Spain), Award of 16 Nov 1957 24 ILR 101, pp. 141-142 (par. 24); Birnie and Boyle, 2002, p. 321.
[117] Nollkaemper, 1993, p. 181. The same view is held by Birnie and Boyle, 2002, p. 131. According to FAO an EIA is: "A formal process to predict the environmental consequences of human development activities and to plan appropriate measures to eliminate or reduce adverse effects and augment positive effects" (http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/V8350E/v8350e0f.htm 2005-02-28).

conducting an EIA is also relevant in regard to the 'no harm rule'. The duty not to cause transboundary harm must logically include an intrinsic risk assessment which needs to be quantified or else the duty will be of little relevance. One method of quantifying risk is through the creation of an EIA. The ILC Draft Convention on Prevention of transboundary harm from hazardous activities requires states to prevent or minimise the risk posed by harmful activities. 'Risk' in this sense includes both "risks taking the form of a high probability of causing significant transboundary harm and a low probability of causing disastrous transboundary harm",[118] implying that both the magnitude and the probability of harm should be taken into consideration. The practice of requiring an EIA has become a very widespread method to assess whether a particular activity has the potential of causing significant transboundary harm.[119]

The high number of countries with EIAs included in their national legislation as well as state practice, through international agreements, points toward the conclusion that the process of conducting an EIA can be regarded as a requirement of customary law.[120] The 1997 Water Convention requires a notification concerning planned measures with possible adverse effects to be accompanied by available technical data and information, including the results of any EIA, in order to enable the notified States to evaluate possible effects of the planned measures.[121]

The concept of EIAs incorporates the precautionary principle, the principle of preventing environmental damage and public participation. According to a United Nations study the EIA has hence shown its value for implementing and strengthening sustainable development.[122]

3.7.2 Data and Information Exchange

Exchange of data and information is closely related to the topic of cooperation and can be regarded as part of the general obligation to cooperate. It is also an important feature in performing the obligations of equitable utilisation and the 'no harm' rule.[123] Data exchange is recommended by the Helsinki rules and required in Article 9 of the 1997 water Convention as well as in Principle 9 of the Rio Declaration. Birnie and Boyle conclude that the concept has gained substantial enough support by the international community to include it as an obligation of international law.[124]

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[118] ILC Draft, 2001, Article 2(a) See also the Code of Conduct on Accidental Pollution of Transboundary Inland Waters, adopted by the Economic Commission for Europe in 1990 (E/ECE/1225-ECE/ENVWA/16) which adopts the same definition.
[119] ILC draft, 2001, commentary (4) to article 7
[120] Birnie and Boyle, 2002, p. 131. The concept of EIA is included in e.g. 1991 Espoo Convention; ASEAN Agreement on the Conservation of Nature; Rio Convention (Principle 17) and the ILC 2001 draft (Article 7). See note 946 of ILC 2001 draft (p. 402) for an extensive list of international instruments that include EIAs.
[121] 1997 Convention, Article 12.
[122] ILC 2001 draft commentary (4) to Article 7.
[123] Birnie and Boyle, 2002, p. 322.
[124] Birnie and Boyle, 2002, p. 322.

3.8 Emergency Notification

It is a general principle of international law that states must notify one another to avoid harm in cases of emergency, and this duty also applies to international watercourses.[125] Principle 18 of the Rio Declaration obliges States to immediately notify other States of any natural disasters or other emergencies that are likely to produce sudden harmful effects on the environment of those States. Article 17 of the ILC draft requires states to, without delay and by the most expeditious means at its disposal, notify the State likely to be affected by an emergency and provide it with all relevant and available information. The 1997 water convention takes the obligation one step further, when it requires states not only to notify other states, but also to immediately take all practicable measures necessitated by the circumstances to prevent, mitigate and eliminate harmful effects of the emergency.[126] This last extension of the rule should, however, not yet be viewed as part of customary international law in relation to transboundary watercourses.[127]

3.9 Public Participation and Access to Information

The ILC Draft recognises that the modern trend in international environmental law is to seek to involve, "in the decision-making processes, individuals whose lives, health, property and environment might be affected by providing them with a chance to present their views and be heard by those responsible for making the ultimate decisions".[128] The participation of all involved stakeholders is an important aspect of sustainable use of natural resources such as international watercourses, as the interests of people who live along the watercourses should be regarded in the allocation and use of waters. This has been pointed out by Principle 10 of the Rio Declaration, declaring that "Environmental issues are best handled with the participation of all concerned citizens, at the relevant level, each individual shall have appropriate access to information concerning the environment /…/and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided". The inclusion of local communities in the management of watercourses also has the advantage of adding local knowledge of ecosystems etc. to the management knowledgebase. The principle of public participation has been included in numerous international treaties.[129] Birnie and Boyle detect an

[125] Birnie and Boyle, 2002, p. 322.
[126] 1997 Convention, Article 28(3).
[127] Birnie and Boyle, 2002, p. 323.
[128] ILC 2001 draft commentary (3) to Article 13.
[129] Inter alia Principle 2 of the 1992 Dublin Statement and Principle 2 of the New Delhi Declaration 1990. See the ILC 2001 draft commentary (5) to article 13 for a list of instruments which have included the principle into their texts.

emerging legal significance of the principle but nevertheless maintain that the status of the principle under international law is somewhat questionable.[130]

[130] Birnie and Boyle, 2002, p. 105.

4 The Mekong Agreement

4.1 Introduction

The 'Agreement on the Co-operation for the Sustainable Development of the Mekong' is the instrument governing the Mekong River co-operation by the four Lower Mekong River countries; Cambodia, Lao PDR, Thailand and Vietnam.[131] The two upper Mekong riparian states, China and Myanmar, have chosen to remain outside the Agreement.

The history of the Mekong Agreement dates back as far as 1957, when Cambodia, Lao PDR, Thailand and South Vietnam agreed on the Mekong Development Project under leadership of the Committee for the Coordination of Investigations of the Lower Mekong Basin,[132] the first Mekong Committee.[133] This first phase of co-operation lasted until 1978 and was followed by the Interim Mekong Committee (1978-1995),[134] which included Socialist Vietnam but without Cambodia which was ravaged by war.[135] In 1995 Cambodia again joined the co-operation and the present-day Mekong Commission (MRC), was established through the 1995 Mekong Agreement.

The first Mekong cooperation phase focused on extensive hydropower cascades in the river, plans which were never actually realised. The second phase was aimed at national irrigation projects as well as hydropower.[136] These first periods of the Mekong cooperation where mainly designed towards economic development. Social and environmental issues where given minimal consideration in the cooperation at this stage.[137] The 1995 Mekong Agreement has been said to represent a shift from a more narrow and profit-orientated view on river management to a broader, more modern perspective of integrated sustainable ecosystem development.[138] It deals primarily with water allocation and the environment and the principle that is to guide the cooperation is the principle of sustainable development. In section 4.3 of this thesis I will present the Agreement itself, section 4.4 deals with rules agreed upon under the Agreement while section 4.6 briefly presents the programs through which the goals and objective of the Agreement are to be achieved. Firstly I will present the organisation

[131] The Agreement was signed in Chiang Rai, Thailand on April 5, 1995.
[132] The statute on the Establishment of the Committee for the Coordination of Investigation of the Lower Mekong Basin, on 17 September 1957.
[133] Funding came from the United Nations' regional organisation, the Economic Commission for Asia and the Far East (ECAFE), pre-cursor to the Economic and Social Commission for Asia and the Pacific (ESCAP) (Hirch and Cheong, 1996, chapter 4).
[134] the Declaration concerning the Interim Committee for the Coordination of Investigations of the Lower Mekong Basin of 1978.
[135] Jacobs, 2002, p. 358; Weatherbee, 1997.
[136] Browder, 2000, p. 251f.
[137] MRC,2004, p. 1.
[138] E.g. MRC, 2003(b), p. 23.

governing the Mekong Agreement, the MRC and the National Mekong Committees.

4.2 The Mekong River Commission

4.2.1 MRC

The aim of the MRC is to promote and co-ordinate sustainable management and development of water and related resources for the countries' mutual benefit and the people's well being.[139] The MRC's strategy to fulfil these aims is through developing strategic programmes and activities and providing scientific information and policy advice.[140]

The MRC comprises a three level hierarchical structure with the Council at the highest level. The Council consists of one member from each participating riparian State at Ministerial and Cabinet level. Each Council member must be empowered to make policy-decisions on behalf of his/her government.[141] This structure gives the MRC the ability to formulate political agreements, joint research and development programs. The Council is responsible for political decisions on the implementation of the Agreement, approval of projects and other implementation steps as well as the resolution of issues, differences and disputes.[142] The Joint Committee (JC), which answers to the Council, consists of departmental heads and is responsible for implementation of the Council's policies and decisions, the preparation of the Basin Development Plan, the collection of information, studies and assessments, and for supervision of the Secretariat.[143] The Secretariat (MRCS) renders technical and administrative services to the Council and Joint Committee.[144] The Secretariat also plans projects, but it is left to the individual countries to implement them at the national level, with MRC oversight. [145] The MRC also has several sub-committees working on different issues such as Basin Development Planning and Water Quantity Rules as envisioned under Article 26 of the Agreement.[146]

The MRC headquarters are presently situated in Vientiane, Lao PDR. The site is meant to rotate every five years, a system which has certain advantages, but also poses some financial and logistical problems.[147] The

[139] MRC, 2003(c), p. 4.
[140] See section 4.5 of this thesis.
[141] Mekong Agreement, Articles 12, 15, 18.
[142] Dudgeon, 2003, p. 308.
[143] Mekong Agreement, Articles 12, 21, 24.
[144] Mekong Agreement, Articles 12, 28.
[145] http://www.thewaterpage.com/mrc_notes.htm 2005-03-39
[146] http://www.thewaterpage.com/mrc_notes.htm 2005-03-29
[147] www.mrcmekong.org/mekong_news 2004-10-24. Article 29 of the Agreement states that the location and structure of the permanent office of the Secretariat shall be decided by the Council, and if necessary, a headquarters agreement shall be negotiated and entered into with the host government. Previous to the 1995 Agreement, the headquarters were located in Bangkok. In 1998 the four parties concluded a separate Headquarters Agreement, stating that headquarters should rotate between Cambodia and Laos every five years (Birnie, 2004, p. 29).

head of the MRC (the Chief Executive Officer) is not a national of the member countries. This is meant to provide a neutral basis for the day-to-day management of MRC activities. [148]

4.2.2 National Mekong Committees

Each country has a National Mekong Committee (NMC), but they are established under national riparian laws, not by the Agreement. The NMCs formulate national policies in relation to the MRC, act as co-ordinators between the nations and the MRC and implement MRC programs in their respective nations. Since it is left to the discretion of each country as to how the NMC is structured, this varies among the different countries. The Thai NMC is composed of officials from different water ministries and other relevant government departments and chaired by the Prime Minister. In Cambodia the NMC is also composed of officials from water ministries and other relevant government departments and institutions related to water, but there is a standing national institution with a fully-fledged secretariat headed by a full-time Secretary. The situation in Laos and Vietnam is similar to that in Cambodia.[149] The inclusion of ministers from relevant water related departments assists in ensuring integration of water management.

Annual work programs of the MRC are given to the NMCs for review before they are submitted to the Joint Committee and the Council for approval which helps to ensure that national priorities are reflected in the programs.[150] However, there is no clear and defined relationship between the MRC and the NMCs. The Agreement does not mention NMCs, but in the Agreement on Procedures for Notification, Prior Consultation and Agreement and in the Procedures for Water Use Monitoring they have been given certain functions as links in the processes of notification and prior consultation and of monitoring.[151]

4.3 The Mekong Agreement

4.3.1 General Principles

The 1995 Mekong Agreement has been outlined as a framework agreement with broad principles and it is thus not very comprehensive.[152] It leaves the finer details to rules, protocols, or annexes and requires a continuous process of dialogue and negotiation.[153]

The purpose of the 1995 Agreement is to achieve "optimum use and prevention of waste of the waters"[154] with the philosophy of improving the

[148] http://www.thewaterpage.com/mrc_notes.htm 2004-09-06. The present Chief Executive Officer is from Belgium (www.mrcmekong.org/mekong_news 2004-10-24).
[149] http://www.thewaterpage.com/mrc_notes.htm 2005-03-29
[150] http://www.thewaterpage.com/mrc_notes.htm 2005-03-29
[151] NCA Sections 4.3.1 and 5.3.1 and Procedures for Water Use Monitoring, section 4.3.3.
[152] See e.g. Articles 5 and 7 of the Mekong Agreement.
[153] http://www.thewaterpage.com/mekong_comments.htm 2005-03-29
[154] MRC, 2003(c), p. 1.

livelihood of the people living within the Lower Mekong River Basin. The Agreement is divided into six chapters with a total of 42 Articles.

There is no requisite requiring the Agreement to be incorporated into national laws, neither does the Agreement contain a timeframe for implementation or penalty for not implementing key provisions.[155] Member States are free to venture into bi- or multilateral special agreements for implementation and management of any programs and projects to be undertaken within the framework of the Mekong Agreement, either among themselves, or with non party states. Such agreements should naturally not be in conflict with the Agreement.[156]

Through the Agreement the four Member States agree to co-operate in all fields of sustainable development, utilisation, management and conservation of the water and related resources of the Mekong. The co-operation includes, but is not limited to: irrigation, hydropower, navigation, flood control, fisheries, timber floating, recreation and tourism. Co-operation should be carried out in a manner to optimise the multiple-use and mutual benefits of all riparians and to minimise the harmful effects that might result from natural occurrences and man-made activities.[157] The Parties also agree to promote, support, co-operate and co-ordinate in the development of the full potential of sustainable benefits to all riparian States and the prevention of wasteful use of the Mekong River basin waters with emphasis and preference on joint and/or basin-wide development projects and basin programs through the formulation of a Basin Development Plan.[158] Furthermore, the Parties agree to protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong River Basin from pollution or other harmful effects resulting from any development plans and uses of water and related resources in the Basin.[159] The term "water and related resources of the Mekong river Basin", in Article 1, implies that the approach should be towards integrated river management.

4.3.2 Water Allocation

The Agreement does not deal specifically with the distribution of water to the member states; this is to be regulated through more specific rules.[160]

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[155] Browder, 2000, p. 256.
[156] Mekong Agreement, Article 38.
[157] Mekong Agreement, Article 1.
[158] Article 2 of the Mekong Agreement. The Basin Development Plan is meant to be both a general planning tool, and an enduring, dynamic process, for use by the Joint Committee to help identify and prioritise development programmes and projects that meet the cooperative and sustainability criteria of the Agreement. Formulation of the Basin Development Plan commenced in October 2001 and will run until mid-2005 (Chapter II of the Agreement and MRC, 2003(c), p. 10).
[159] Article 3 of the Mekong Agreement. Environment is meant to encompass "The Conditions of water and land resources, air, flora, and fauna that exists in a particular region" (Chapter II of the Agreement).
[160] A number of reasons were given during negotiations over the Agreement for not specifying minimum dry season flows in the Agreement itself: there was a severe shortage of hydrological data for Cambodia, thus excluding a large part of the hydrological picture; the framework appearance of the Agreement wasn't suitable for technical details; Dry

Development of these rules (under Article 26 of the Agreement) is on MRC's agenda as one of its top priorities.[161] However, the basic principles to be applied in developing rules for water distribution are set forth in Article 5 of the Agreement.[162] Therein is stated that water shall be utilised in a "reasonable and equitable manner", "pursuant to all relevant factors and circumstances, the Rules for Water Utilisation and Inter-basin Division provided for in this article and in article 26". This Article relates to the rules on Notification, Prior Consultation and Agreement and will be further discussed in relation to these rules. Article 6 addresses maintenance of flows on the mainstream. Riparian States are required to maintain natural dry season flows, and large enough wet season flows to protect the Cambodian Tonle Sap Lake. The aim is furthermore to prevent average daily peak flows greater than what naturally occur during the flood season.[163] No figures are specified, the minimum amount of water each country must discharge downstream is presumably to be formulated by the MRC through the water quantity rules.[164] In 1998, the MRC established the contribution of each country to the average river flow.[165] The Basin Development Plan, mentioned in Article 3, is also meant to relate to water allocation.[166]

4.3.3 No Harm, Cessation of Harmful Effects, State Responsibility and Emergency Notification

Article 7 declares that member states shall make every effort to avoid, minimise and mitigate harmful effects that might occur to the environment, especially the water quantity and quality, the aquatic (eco-system) conditions, and ecological balance of the river system, from the development and use of the Mekong River Basin water resources or discharge of wastes and return flows. Where a State is notified with proper and valid evidence that it's use of and/or discharge to the Mekong River is causing substantial damage to another riparian it shall cease the alleged cause of harm immediately and until the cause of harm is determined. The concerned parties shall then determine all relative factors, the cause, extent and responsibility of damage caused by that State in conformity with principles of international law relating to state responsibility. The Parties are also required to address and resolve all issues, differences and disputes in an "amicable and timely manner" by peaceful means as provided in Articles 34 and 35 of the Agreement, and in conformity with the Charter of the United

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season flows are likely to be subject to change and thus are better specified in additional rules; finally, the parties had reached "agreement in principle" and where afraid to upset the delicate balance of the negotiations (Browder, 2000, p. 252).

[161] Browder, 2000, pp. 257-258.

[162] Formulation of this article was one of the hardest obstacles to overcome during the negotiations for the Agreement (Browder, 2000, pp. 245, 252).

[163] Mekong Agreement, Article 6.

[164] The Economist, Jan 3, 2004.

[165] Set to: Cambodia 19%: China 16%; Lao PDR 35%; Myanmar 2%; Thailand 17%; and Vietnam 11% (World Bank, 2003, p. 23).

[166] Browder, 2000, p. 251.

Nations. The cause of harm is then to be determined through an examination of all relative factors.[167]

Emergency notification is addressed through Article 10 of the Agreement. Whenever a Party becomes aware of any special water quantity or quality problem constituting an emergency that requires an immediate response, it shall notify and consult directly with the party (ies) concerned and the Joint Committee without delay in order to take appropriate remedial action.[168]

4.3.4 Conflict Management

The Council, or between regular Council sessions the Joint Committee, is the principal conflict solving body of the MRC.[169] Any difference or disputes that may arise between parties regarding matters covered by the Agreement and/or actions taken by the implementing organisation through its various bodies, particularly as to the interpretations of the Agreement and the legal rights of the parties, shall thus primarily be resolved by these bodies.[170]

If the Council or the JC is unable to resolve the difference or dispute within "a timely manner", the issue shall be referred to the governments for resolution by negotiation through diplomatic channels. The governments may communicate their decision to the Council for further proceedings as may be necessary to carry out such decisions. If the governments find it necessary or beneficial to facilitate the resolution of the matter, they may, by mutual agreement, request the assistance of mediation through an entity or party mutually agreed upon, and thereafter to proceed according to the principles of international law.[171]

4.4 Rules under the Agreement

As noted above, the Mekong Agreement has been outlined as a framework instrument. The Agreement includes provisions for the MRC to formulate Rules for Water Utilisation and other issues to make the Agreement become an effective instrument.[172] The rules are meant to provide ways of conflict prevention and resolution between member countries and to prevent uncontrolled economic development or environmental exploitation.[173] To date rules have been agreed upon for *Preliminary Procedures for Notification, Prior Consultation and Agreement* of proposed water uses

[167] Mekong Agreement, Article 8.
[168] Mekong Agreement, Article 10.
[169] Mekong Agreement, Articles 18.C and 24.F.
[170] Mekong Agreement, Article 34.
[171] Mekong Agreement, Article 35.
[172] Mekong Agreement, Article 26. After the signing of the Agreement efforts to formulate rules were delayed, mainly because of lack of funding, but in 2000, the MRC, through the World Bank, received a U.S. $11 million, six year, Global Environment Facility (GEF) grant to help start up WUP. A resolution was passed by the MRC Council in October 1999, committing their governments to a good-faith effort to negotiate Rules for Water Utilization by 2005 (Browder, 2000, p. 258).
[173] MRC, 2003(c), p. 9.

(hereafter shortened 'NCA'), in force since 12 November 2002, *Procedures for Data & Information Exchange* (in force since 01 November 2001) and *Procedures for Water Use Monitoring* (abbreviated 'Monitoring Procedures'), in force since 30 November 2003. Rules on water quantity and quality are under preparation and are planned to be finalised by the end of 2004 and 2005.[174]

To agree on water quality and –quantity provisions through rules instead of in the Agreement itself provides a flexible solution which might be more easily adjusted to reflect new scientific findings and situations. This is especially valuable in the Mekong region due to limited present knowledge on prevailing water uses and on ecological systems and their functions.

4.4.1 Notification, Prior Consultation and Agreement

In accordance with article 26, important procedures concerning 'Reasonable and Equitable Utilization' (Article 5), have been further specified through NCA.[175] The principles that are to govern the procedures under NCA are: sovereign equality and territorial integrity; equitable and reasonable utilization; respect for rights and legitimate interests; good faith; and transparency.[176] The rules for proposed uses and diversions of the Mekong River depend on in which section of the River the actions are being taken and whether they take place during the dry or the wet season. Proposed uses is meant to encompass "any proposal for a definite use of the waters of the Mekong River system by any riparian, excluding domestic and minor uses of water not having a significant impact on mainstream flows."[177]

Notification, which means "timely providing information by a riparian to the Joint Committee on its proposed use of water",[178] is required for proposed uses on the tributaries,[179] including the Tonle Sap lake, and for intra-basin use on the mainstream during the wet season.[180]

Prior consultation which aims at arriving at an agreement by the Joint Committee is required for any proposed use leading to inter-basin

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[174] MRC, 2003(c), p. 25.

[175] These rules were meant to be finalized by the end of 2003, however I have not been able to find the final rules, and neither has correspondence with the MRC provided me with them.

[176] NCA section 3.

[177] Chapter II of the Agreement and NCA section 1.

[178] Chapter II of the Agreement and NCA section 1and 4.1.1. The Notification shall include feasibility study report, implementation plan, schedule and all available data (section 4.2.1 of NCA).

[179] **Tributary** shall mean a natural stream that flows into or receives water from the mainstream of the Mekong River all year round. The Joint Committee will decide on the final definition (NCA section 1).

[180] Articles 5.A and 5.B.1.a of the Mekong Agreement and section 4.1.2 NCA. According to NCA section 1, the **wet season** starts during mid -May to mid -June and ends from mid-November to mid-December and dry season occurs during the rest of the year (my addition). The actual dates are to be decided by the Joint Commission. The **Mainstream** is to be understood as 'The River flowing through the six countries to the sea via My Thuan and My Tho in Viet Nam' (NCA section 1).

diversion during the wet season from the mainstream, as well as for intra-basin use of these waters during the dry season. Inter-basin diversions during the dry season are primarily subject to a Specific Agreement.[181] However, should there be a surplus quantity of water available in excess of the proposed uses of all parties in any dry season and this is verified and unanimously confirmed as such by the Joint Committee, an inter-basin diversion of the surplus could be made subject to prior consultation.[182]

Member States shall timely notify the JC as well as provide additional data and information to the Joint Committee that would allow the other member riparians to discuss and evaluate the impact of the proposed use upon their uses of water and any other affects. The objective of this agreement is to achieve an optimum use and prevention of waste of the waters through a dynamic and practical consensus in conformity with the Rules for Water Utilization and Inter-Basin Diversions set forth in Article 26. Prior consultation is neither a right to veto the use nor unilateral right to use water by any riparian without taking into account other riparians' rights".[183] This implies that consensus will not necessarily be reached on the proposed use,[184] a conclusion which is fully in line with the general view of customary law.[185]

The notification/ prior consultation documents shall be copied and distributed to each NMC by the MRC secretariat. In case of prior consultation, member states are given the opportunity to commit comments, evaluate and reply, and request additional information, but these options do not seem to apply to the notification process.[186] The timeframe for prior consultation is six months from the date of receiving documents, and can be extended by the JC. During this time the notifying state is not allowed to implement the proposed project. Consultation among concerned parties is carried out by the JC with the support of the MRC Secretariat.[187]

During the dry season any inter-basin diversion project shall be agreed upon by the Joint Committee through a Specific Agreement for each project prior to any proposed diversion. Such a specific agreement, signed/approved by all members of the JC, sets out agreed terms and conditions such as timing, quantity of diversion, etc. The format and content of the specific agreement shall be established by the Joint Committee on a case-by-case basis.[188] However, as mentioned above, inter-basin diversions of surplus quantities of water can be made subject to prior consultation.[189] Considerations of whether water quantities are in surplus will likely be influenced by the coming rules on water quantity under article 6 of the agreement and the acceptable minimum flows held therein.

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[181] Mekong Agreement, Article 5.B.2.b and NCA section 6.
[182] Mekong Agreement, Article 5.B.2.b.
[183] Articles 5.B.1b and 5.B.2.a and Chapter II of the Agreement and NCA section 1.
[184] Phommachanh , 2002 p. 31.
[185] See e.g. Lac Lanoux Arbitration, (France v Spain) award of 16 Nov. 1957, ILR 101, pp. 141-142 (par 24).
[186] NCA sections 4.3.2.b, 5.3.2.b, 5.4.1 and 5.4.2.
[187] NCA sections 5.3.3.b and c, 5.5.1, 5.5.2, 5.4.3.
[188] Mekong Agreement, Article 5.B.2.b and NCA section 6.
[189] Mekong Agreement, Article 5.B.2.b.

4.4.2 Water Quality Monitoring

The Water Quality Monitoring Network of the Mekong was launched in January 1985,[190] and has been monitoring physical and chemical parameters at 98 sites of the basin on a monthly basis. Measurements have included the amount of sediment in the water, salinity, and levels of nutrients.[191] The network was revitalised in 2003 focusing on transboundary aspects of water quality and it began operating in 2004 with new equipment and training of staff. The Procedures on Water Use Monitoring (Monitoring Procedures) provide a legal basis for a water use monitoring system to be established in the Lower Mekong Basin. It is mainly concerned with institutional arrangements, while detailed requirements of how monitoring is to be carried out is left to a technical support team.[192] The Monitoring System is meant to monitor water use in the Mekong Basin which "may have a significant impact to the water quality or flows regime of the mainstream of the Mekong River System". Inter-basin diversion (The diversion of water from the mainstream or a tributary of the Mekong river system into another basin") shall also be monitored by the parties.[193]

Agreements have also been reached with Myanmar for the setting up of two monitoring stations in Myanmar.[194] Those stations are however, only monitoring water flows as a mean of early flood warning. They are not concerned with water quality.

4.4.3 Data and Information Exchange

As can be seen in the previous section, the MRC has a long history of water monitoring. However, in the past the information exchange among the riparian nations has not been satisfactory.[195] The Procedures for Data and Information Exchange and Sharing were developed to implement Article 24 of the Agreement, "to regularly obtain, update and exchange information and data necessary to implement this Agreement", one of the main functions of the Joint Committee. The Joint Committee is also the body appointed to oversee the effective implementation of the Procedures as required by the Mekong Agreement.[196]

The objectives of the Procedures are to: "Operationalise data and information exchange among the member countries; Make available, upon request, basic data and information for public access as determined by the NMCs concerned; and to promote "understanding and cooperation among the MRC member countries in a constructive and mutually beneficial

[190] With financial support from the Swedish International Development Authority (SIDA).
[191] MRC, 2003(a), p. 5 and MRC, 2003(c), p. 19.
[192] Monitoring Procedures, section 4.2.
[193] Monitoring Procedures, section 1.
[194] Article in Xinhua (Chinese newspaper), October 8, 2004 (http://news.xinhuanet.com/english/2004-10/08/content_2063050.htm 2005-03-27).
[195] MRC, 2004, pp. 3-4.
[196] Article 5 of the Procedures for Data and Information Exchange and Sharing.

manner to ensure the sustainable development of the Mekong River Basin".[197]

The term 'Data' is understood to mean: "representations of facts, in a formalized manner, suitable for communication, interpretation or processing" while information is: "interpreted data, processed and refined, and then displayed by the competent authorities having ownership or possession thereof, which is required for exchange and sharing for the purpose of the implementation of the Mekong Agreement".[198]

Article 24 (c) of the Agreement, and Procedures for Data and Information Sharing (4(b)) state that data necessary to "implement the Agreement" shall be shared, but it is not further specified what this is meant to imply. However, in the procedures, twelve groups are mentioned as examples of such necessary information.[199] Data and information shall be subject to national laws and data vital to national defence or security or commercial-in-confidence and copyright protection data need not be shared by the riparian countries. This exclusion can be found in several international instruments relating to transboundary waters.[200] Cost for collecting additional data and information other than those required for the implementation of the MRC projects and programs, and not otherwise available, shall be borne by any requesting party.[201]

4.5 MRC Programs

In year 2001 MRC changed its focus from 'projects' to the more holistic 'programs' in an attempt to focus on objectives rather than on activities. The programs are meant to achieve the designated goals and the objective of the Agreement.

The three long term core programs that are central to the purpose of the MRC and the Agreement are: the Water Utilisation Programme (WUP), the Basin Development Plan (BDP) and the Environment Programme (EP).[202] A Support Program has been instated to help the other programs, mainly through capacity building of the MRC and riparian governments and is expected to diminish as their capacity grows. The sector programs complement the core programs through addressing important sectoral issues and have a regional focus which is intended to address developmental needs

[197] The Procedures for Data and Information Exchange and Sharing, section 2.
[198] The Procedures for Data and Information Exchange and Sharing, section 1.
[199] Water Resources; Topography; Natural resources; Agriculture; Navigation and Transport; Flood management and mitigation; Infrastructure; Urbanization/ Industrialization; Environment/Ecology; Administrative boundaries; Socio-economy; and Tourism (The Procedures for Data and Information Exchange and Sharing, section 4.b).
[200] See e.g. the 1997 Water Convention, Article 31, UNECE Convention on the Protection and Use of Transboundary Watercourse and International Lakes, Helsinki 1992, Article 8.
[201] Procedures for Data and Information Exchange and Sharing, Article 4.
[202] Inputs from WUP, Environment and Sector Programs, with regard to information and assessment tools for issues such as water quantity, water quality, environment and socio-economic impacts are to be included in the coming Basin development Plan (MRC 2003(c), p. 10).

from a basin-wide perspective, thus complementing and supporting national and bilateral development initiatives.[203]

From a legal point of view the WUP is the most important program. It is the body responsible for development of rules, initiated in early 2000 and planned to run for 6 years. Its aim is to "achieve reasonable and equitable water use among member countries while maintaining the Basin's ecological integrity". Apart from the drafting of rules, WUP also covers planning, data collection and development of a basin modelling and knowledge base.[204]

The Environment Programme, revised in 2003, has operated since 2001.[205] It aims to fulfil the environment-related provisions in the Mekong Agreement. Through provision of environmental data and development of tools for environmental planning and management it also supports the other Core Programs. An important task of the program is assessment and monitoring of water quality and ecosystem health. The Program provides advice to and promotes cooperation among national environmental agencies and thus aims to improve environmental policy and management. It also compiles existing knowledge and facilitates research activities in an attempt at promoting a better understanding of the environmental and ecological aspects of the Basin.[206]

The aim of the Basin Development Plan is to provide a joint planning process for research and identification of appropriate investments for development in the Mekong Basin in compliance with national planning practices of the riparian countries. One of the goals of the BDP is to bring environmental and social issues into the consideration of MRC actions and focus will be on transboundary issues.[207] The BDP is however still at the framework preparation stage.[208]

[203] MRC, 2003(c), p. 9. The Sector Programs are; the Fisheries Programme; the Agriculture, Irrigation and Forestry Programme; the Water Resources Management Programme; the Navigation Programme and; the Tourism Programme.
[204] MRC, 2003(c), p. 9.
[205] http://www.mrcmekong.org/annual_report/ar5b.htm 2005-03-29
[206] MRC 2003(c), p. 10.
[207] Such as Irrigated agriculture; watershed management fisheries; hydropower; navigation, transport, river works; tourism and recreation (water related); water supplies (domestic and industrial uses); and flood control and flood management; ... and cross-cutting themes such as: Environment (including specific ecosystems, and their water demand); human resources development; socio-economics (including poverty reduction, and cultural and gender aspects); and public participation.
[208] MRC 2003(c), p. 10

5 Analysis and Discussion

5.1 Introduction

The region has recently emerged from a long period of war and political unrest, and it is no easy task to unite the countries in cooperation. To these obstacles one must also add the issue of different levels of economic and legal development of the riparians, and different interests in the Mekong.

It has been noted and admitted that the Agreement is lacking in comprehensiveness and logic rigorousness. As a senior Vietnamese official, quoted by Browder said; "The Mekong Agreement is a compromise agreement based upon political realities". He continued; "We [The negotiating states] needed to make political compromises in order to keep the negotiations going and establish the institution". "The negotiations were a process to improve the trust and confidence between the four countries" and "the implementation of the Mekong Agreement will be a long-term process".[209] From Browder's findings it seems clear that the Agreement had to be outlined as a framework instrument, or else the parties would not have been able to agree on it. He notes that the framework approach in the Agreement has the advantage of allowing an early commitment to cooperation, whilst still allowing the parties to develop more specific rules as new information becomes available and confidence grows.[210]

The Mekong agreement includes many of the principles of the Helsinki rules and the UN Convention on the Law of the Non-navigational Uses of International Watercourses.[211] But it also goes somewhat further than these rules and the rules of customary law.

This chapter combines and intertwines discussion and analysis of three important parts of the thesis: The Mekong Agreement and its interpretation, the Mekong Agreement's relationship with international principles on sustainable use and the Agreement and international principles in light of the factual situation in the region. Especially in relation to the concepts of public participation and environmental impact assessment the national situations of the member states are of interest, as the Mekong Agreement does not contain provisions for these very important procedures. In the absence of regional agreements the national rules are of importance for the inclusion of these concepts into the cooperation. This chapter also includes the issues of budget and funding, and briefly addresses the problems surrounding implementation and enforcement of the Agreement.

[209] Browder, 2000, pp. 255-256.
[210] Browder, 2000, p. 259.
[211] McKinney, 2003.

5.2 Sustainable Development

The principle of sustainable development has been pointed out as a core principle in the Mekong Agreement.[212] This approach is fully in line with the general development of treaties and national policy after the 1992 World summit in Rio after which visionary treaties and Agreements are including this principle in their texts.[213] The same approach has been adopted in treaties on international watercourses.[214] According to Birnie and Boyle the components of the principle of sustainable development are set out in principles 3-8, 10, 16 and 17 of the Rio Declaration.[215] Principle 10 relates to public participation and principle 17 to EIAs, components which will be further discussed below (section 5.6 and 5.7). Principle 27 of the Rio Declaration explicitly calls for further development of international law in the field of sustainable development. The Gabčíkovo - Nagymaros Case was the first case in which ICJ referred to the principle of sustainable development and the need to reconcile economic development with protection of the environment.[216] In the view of Birnie and Boyle the inclusion of the principle into treaties on transboundary watercourses has had the effect of redefining the principle of equitable utilisation and is a step towards modernising the law of international watercourses in line with the views of ILC and the 1997 watercourse convention.[217]

5.3 The Basin Approach and Common Management

The Mekong Agreement relates to the 'Mekong River Basin',[218] but the Agreement does not clarify how the term should be interpreted or what it encompasses. From the context of the Agreement it can however be assumed that the adopted approach is more closely in line with the concept of the 1997 water Convention than with the basin approach of the Helsinki Rules. Contrary to what can be deduced from the phrasing of 'Mekong River Basin' in e.g. articles 1-3 and to Birnie's and Boyle's findings,[219] I find that the basin approach has not been applied in the case of the Mekong River. China and Myanmar are not parties to the Agreement, thus excluding the upper parts of the river basin from the scheme of joint management within MRC.[220] Even within the lower basin the MRC is only responsible

[212] Mekong Agreement, Article 1.
[213] See 1992 Convention on Climate Change, Article 3; 1992 Convention on Biological Diversity, Articles 8 and 10; 1994 Convention to Combat Desertification, Articles 4 and 5.
[214] E.g. 1992 UNECE Convention on Transboundary Watercourses, Article 2, 3; 1994 Danube Convention, Article 2; 1999 Rhine Convention, Articles 2, 3; 1995 SADC Protocol on Shared Watercourses, Article 2 (Birnie and Boyle, 2002, p. 317).
[215] Birnie and Boyle, 2002, p. 86.
[216] Birnie and Boyle, 2002, p. 85.
[217] Birnie and Boyle, 2002, p. 85.
[218] E.g. Mekong Agreement, Articles 1, 2 and 3.
[219] Birnie and Boyle, 2002, p. 299.
[220] A possible explanation of why the term 'Mekong Basin' has been used, even though the upper riparians are not parties to the Agreement might be that the parties want to keep the

for management of the mainstream parts of the river; the tributaries are managed by each riparian country independently and utilised with the objective of the countries own development.[221] Although article 2 stipulates prevention of wasteful uses of *Mekong River Basin waters*, indicating that at least the whole *lower* Mekong river basin is meant to be included, this approach is not adhered to in the subsequent procedures of NCA which will be further discussed in section 5.5.3. These factors make the reference to 'the Mekong River Basin' in the Agreement somewhat misleading. In addition, a number of major tributaries flow through more than one country,[222] and it is inconsistent to treat international tributaries differently than the Mekong River itself.[223] Groundwater also falls outside of the scope of the Agreement. The modern trend is to include the whole basin in the management of international rivers,[224] and instruments such as the 1992 UNECE Convention embrace surface and groundwater, as well as the entire runoff area.[225] In this sense the Mekong Agreement differentiates itself from the general line of development on this issue. However, this does not mean that the Agreement is not in line with customary law on the subject. As seen in section 3.2 of this thesis the basin approach is a relatively recent phenomenon and has only partly been reflected in state practice.

5.4 Equitable utilisation and the 'No harm rule'

Equitable utilisation is included in the Agreement through article 5, but traces of it can also be found in article 1, through the aim of optimizing benefits. The integration of the definition of 'reasonable and equitable use' based on the 1966 Helsinki rules makes the Mekong Agreement the first (and reportedly the only) international agreement to adopt this precise definition.[226] The principles of sovereign equality and territorial integrity in the utilisation and protection of water resources are emphasised in Article 4 of the Mekong Agreement. All "relevant factors and circumstances", as well as the provisions stated in Article 5 A. and B. and future rules on water quantity are to be taken into consideration in the utilisation. Relevant factors, similar to those mentioned in the 1997 Water Convention,[227] are however not exemplified in the Agreement.

Water quality does not comprise an extensive part of the Agreement, but is instead meant to be accommodated for through subsequent rules. The 'polluter's pays principle', composing part of the concept of sustainable development and addressed in Article 16 of the Rio Declaration has not

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possible inclusion of China and Myanmar open for the future (See section 5.8 of this thesis).

[221] http://www.thewaterpage.com/mrc_notes.htm 2005-03-29

[222] For example the Se Kong (Laos and Cambodia), Se San (Vietnam and Cambodia), and the Sre Pok (Vietnam and Cambodia) (Browder, 2000, p. 255)

[223] Browder, 2000, p. 255.

[224] See section 3.2 above.

[225] 1992 UNECE Convention, Article 1.1.

[226] Lauridsen, 2004, p. 48.

[227] Article 6 of the 1997 Water Convention (see section 3.4 above).

been incorporated in the Agreement. The possibility however still exists that the principle will be incorporated in the future rules on water quality. Ensuring that the river and its tributaries have sufficient legal protection to thwart the devastating deterioration of its waters that so many of the world's other rivers have endured due to economic development is vital for the well-being and prosperity of the region and its inhabitants. In this sense the 'no harm' principle, an essential part of the regime of international watercourses, especially in relation to pollution prevention, is of major importance. This rule has been incorporated into the Agreement through article 7. However, the Agreement also includes the requirement to "cease immediately the alleged cause of harm" when presented by another member with proper and valid evidence of substantial damage,[228] an obligation which goes further than customary law on transboundary watercourses, but is close in line with the 1997 Water Convention.[229] Article 1 furthermore requires parties to "minimize the harmful effects that might result from natural occurrences and man-made activities", an obligation which is repeated in Article 7. Combined with the additional obligation to "make every effort to avoid /…/ and mitigate harmful effects that might occur to the environment" in Article 7 the inclusion of the preference of prevention over compensation has been made in the Agreement. Traces of the precautionary principle are however more difficult to find in the Agreement.

The term 'notify' in the sense of Article 7 and 10 is not clear and whether this means 'notify' in the sense of Article 5 and chapter II of the Agreement, or has some other meaning cannot be deduced from the Agreement. Hopefully this will be clarified through the final NCA or through the rules on water quality. Neither is 'substantial damage' given any explanation in the Agreement. Especially the lack of explanation of the latter phrase diminishes the worth of the 'no harm' rule in the Agreement and will need clarification in order to transfer the concept of no harm from merely pretty words into a functional and effective part of the cooperation.

5.5 Monitoring, Cooperation, Notification etc.

Cooperation through both the procedures of notification and consultation and through data and information exchange complement equitable utilisation and the no harm rule and they are very important measures for accomplishing the goals of these principles, as well as to prevent conflicts and promote sustainable use. In close relation to these subjects is also the process of river monitoring, e.g. of water quality.

5.5.1 Monitoring

One of the primary steps in providing for an efficient regime for protection from water pollution and for reasonable and equitable use of waterways

[228] Mekong Agreement, Article 7, second sentence.
[229] 1997 Convention, Article 28 (3).

such as the Mekong is to have an effective water quality monitoring system. Without knowledge of the present water quality and the causes of contaminants in the river the MRC and the riparian states will have little comprehension of where to turn their pollution prevention efforts. Hence, decisions on such issues cannot be properly made. A potential rise in the levels of pollutants in the river might go unnoticed and even if it is detected it will be difficult to gain knowledge of the source of the contamination. With adequate numbers of strategically placed monitoring stations this difficulty may be diminished. Relevant and properly conducted monitoring may also act as an 'early warning' measure, thus warning riparian states so that action may be taken in proper time. In this sense the practice of monitoring works well in line with the precautionary principle. Present and future uses also need to be examined to provide for an effective application of the equitable utilisation principle.

The monitoring system has been revised recently, but from the procedures it is still rather unclear how the monitoring is meant to work. The Monitoring Procedures do not provide any insight into what will be monitored, where the monitoring will take place, or how often monitoring will be conducted. These questions will supposedly be settled by technical support teams, the MRCS and the JC.[230] Monitoring is another example of how the tributaries have been excluded from the scope of the Mekong Cooperation, as only water uses on the mainstream are subject to monitoring.[231]

5.5.2 Data and Information Exchange

Procedures for data and information exchange are needed to assess the factual water use situation in each country. Data on water uses of the riparian countries are needed to properly carry out the balancing of interests and uses under the equitable utilisation principle. Data and information exchange is also of great importance in relation to the principle of not causing substantial harm. In applying article 7 and 8 of the Agreement it is essential to know where the pollution stems from.

It should be fully in the interest of the Lower Mekong Countries to include China and Myanmar in the cooperation. An agreement on information exchange has been instated between China and the MRC over water level and rainfall data to aid in flood forecasting.[232] Information on dry season flow, which is of critical importance to downstream countries, has however been left out of the present agreement.[233] The procedures for data and information sharing and exchange do not seem to provide for data and information sharing with third parties. The objectives of the procedures

[230] Monitoring Procedures, sections 4.2, 4.3.1, and 4.3.2.
[231] Monitoring Procedures, section 1, see section 5.5.3 of this thesis for a further discussion on the tributaries.
[232] Following a technical cooperation agreement signed between the MRC and China in April 2002, which was implemented in 2003.
(http://www.mrcmekong.org/news_events/press_release/2004/Press10.htm 2004-10-28)
[233] Dore, 2003, p. 15, note 20.

only refer to exchange "among the four MRC member countries."[234] It is unclear, from the procedures, if third parties such as China and external donors are entitled to access to the database.[235]

An issue closely related to public participation is the right to information. Not only states, but also the public should be given the right and possibility to gain information on operations in the river. This has been deemed an "essential prerequisite to the exercises of the right to take legal or other action to protect his interests".[236] In relation to water pollution, the public should be given access to information on what substances are discharged into the river, and what injury, inconvenience or damage discharges may cause.[237] A flood warning system is now publishing daily updated water level information on the MRC webpage, as a mean of warning the public of rising water levels.[238] In relation to water flow the public should also be provided with information on releases from hydropower stations. It has been reported (from Cambodia) that hydropower dams in Vietnam have released water without prior warning, killing people and damaging agriculture and livestock in downstream Cambodia.[239] Public access to information will be discussed further in section 5.7 of this thesis.

5.5.3 Notification and Consultation

The process of consultation and prior notification gives the member states an opportunity to discuss and evaluate proposed projects and their potential deteriorating effect on the water quality and other aspects of the river. Hence 'Proposed uses' of the Mekong water by riparians are subject to certain procedures.[240] The term 'proposed use' is however not very clear in the Agreement. It cannot be inferred from this definition if it is also to include deteriorations of the water quality, or if it is mainly the quantity of water that is intended in these rules, neither is it clear whether projects on land, effecting the river are to be included. This again draws attention to the ambiguity of the term 'Mekong River Basin' as discussed in section 5.2.2 of this thesis. The statements in articles 2 and 3 of the Agreement might however shed some light on the issue. Article 2 requires parties to "cooperate in all fields of sustainable development, utilization, management and conservation of the water and related resources of the Mekong River Basin". Parties are also supposed to "protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong River Basin from pollution or other harmful effects resulting from any

[234] Procedures for data and information sharing and exchange, Section 2.
[235] Phommachanh, 2002, p. 21.
[236] McLoughlin, 1993, p. 136.
[237] McLoughlin, 1993, p. 136.
[238] The water level information can be found on the following webpage: http://www.mrcmekong.org/info_resources/ffw/overview.htm last accessed 2005-03-29.
[239] Badenoch, 2002, p. 1; Sesan Protection Network, 2003, p. 5.
[240] By the tem 'Proposed Use' is meant: "any proposal for a definite use of the waters of the Mekong River system by any riparian, excluding domestic and minor uses of water not having a significant impact on mainstream flows" (Chapter II of the Agreement and NCA section 1).

development plans and uses of water and related resources in the Basin".[241] In order to reach these goals it is my interpretation that water quality related issues should be considered included in the requirements of notification, consultation and agreements. The terms however need clarification to avoid misinterpretations.

Other terms such as 'inter-basin' and 'intra-basin' are also unclear,[242] as are the phrases 'minor or domestic use' and 'significant impact'. As Phommachanh so accurately put it; an accumulation of minor or domestic uses has the potential to cause significant impact on the mainstream flows.[243] Does this then transform a minor impact into a significant impact? These are questions that need clarification in order to prevent conflicts among the riparian states, or unreasonable damage to the environment.[244]

The process of *Notification* applies to the tributaries,[245] but this procedure does not include any obligatory discussions among the riparian nations. As a consequence developments, such as e.g. hydropower dams, on the tributaries are not subject to any debate between concerned states. On the other hand, at least the more extensive projects on the mainstream require consensus of all the riparian nations,[246] a fact that might restrain projects on the mainstream. This could be an important reason for the fact that larger projects are mainly situated, and planned, on the tributaries, not on the mainstream.[247] However, extensive projects on the tributaries have a potential to negatively affect the water quality of the whole downstream basin. The distinction between tributaries and the mainstream is questionable from a hydrological perspective also in relation to water quantity since diversions from a tributary in the dry season will have the same effect as diversions from the Mekong River on total water flows,[248] although maybe on a smaller scale. Here again, the question of accumulation of potentially harmful uses needs to be settled. The interpretation of this discrepancy must be that although projects on the tributaries leading to water diversions are not subject to any consultation

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[241] Article 3 of the Mekong Agreement.

[242] These terms are not explained in the Agreement, or in NCA. In the Monitoring Procedures an interbasin diversion is to be understood as "The diversion of water from the mainstream or a tributary of the Mekong river system into another basin" (section 1), and it seems reasonable to give the phrases the same meaning in other instruments under the cooperation, although this should ideally have been more clearly expressed in the legal texts of the cooperation.

[243] Phommachanh , 2002 p. 26.

[244] The unclearness of the phrase is also troubling in regard to water use monitoring. The Monitoring Procedures furthermore refer to the phrase 'significant impact' (section 1) without further explaining its meaning.

[245] Chapter II of the Agreement and NCA sections 1and 4.1.2.

[246] Mekong Agreement, Article 5.B.2.b and NCA section 6.

[247] Such as the Pak Mun dam and the Ubol Ratana dam in Thailand; the Nam Theun 2, the Nam Ngum dam and the Theun-Hinboun dam in Laos. The Kong-Chi-Mun project, comprising more than 20 dams is being constructed on two Thai tributaries (http://www.panda.org/about_wwf/where_we_work/asia_pacific/where/indochina/mekong_river/mekong_river_threats.cfm 2005-04-01). The Manwan dam, in Yunnan, is one of the few dams built on the mainstream, although China has plans to build an additional number of dams on its part of the mainstream See Bakker, 1999, pp. 213-215.

[248] Browder, 2000, p. 255.

etc, parties must still consider them in their overall development. Such considerations will be important in order to comply with the goals of article 6 in the Agreement, i.e. to maintain minimum flows on the mainstream. Mainstream flows are dependent on e.g. flows from the tributaries.

From the wording of the Agreement and the procedures it seems that it is up to each riparian state to decide whether the proposed use falls within or outside of the scope of 'minor or domestic use' and 'significant impact' and thus needs to be notified etc. Birnie and Boyle maintain that the question of deciding who determines when the situation requires prior notification and consultation is problematic.[249] In the Lac Lanoux case it was observed that "a State wishing to do that which will affect an international watercourse cannot decide whether another state's interest will be affected; the other state is sole judge of that and has the right to information on the proposals".[250] If a watercourse State has reasonable grounds to believe that another watercourse State is planning measures that may have a significant adverse effect upon it, the former State may request the latter to apply the procedures of notification and consultation if it does not itself initiate the process.[251] Birnie and Boyle draw the conclusion that once the possibility of adverse effects is foreseen, it is no longer solely up to the proposing state to take the decision whether the procedures of notification and consultation shall be initiated.[252] Enforcement of the Mekong procedures is mainly up to the NMCs; if no notification is given or the required documents for prior consultation have not been provided, the JC will request the relevant NMC to fulfil its responsibilities as provided for in the procedures.[253]

The timeframe of six months for prior consultation corresponds with the time set out in the 1997 Water Convention,[254] but goes somewhat further than customary international law.[255] There is some uncertainty on when in the planning of a proposed use notification etc. must be given; ultimately notification should be made early during the planning process and in time to include views of the other riparian countries into the EIA.[256] This is however unlikely since only projects which are to be implemented, and thus have already been through the national process of acceptance, need to be notified.

The NCA should have been finalised by the end of 2003,[257] but after correspondence with the MRC it seems that the final version is not yet ready to be made public. Annex III of the preliminary procedures sets out issues that should be settled in the final procedures. These include the actual dates of wet and dry seasons, a final definition of "Mekong tributary" and final definition of "water utilization". The plan also seems to include an

[249] Birnie and Boyle, 2002, p. 320.
[250] Lac Lanoux arbitration, award of 16 Nov. 1957, 24 ILR 101, at p. 119.
[251] 1997 Convention, Article 18.
[252] Birnie and Boyle, 2002, p. 320.
[253] NCA Sections 4.6 and 5.6.
[254] 1997 Convention, Article 13(a).
[255] Birnie and Boyle, 2002, p. 320.
[256] NCA only prescribes that notification of proposed use shall be transmitted to the JC in a "timely manner prior to implementation" (section 4.5).
[257] NCA, Section 7(e).

additional requirement of notification for "any proposed use or activity having significant impact to the riparian country". Procedures related to Articles 7 and 10 which have been deleted from the present procedures are also to be included in the final version. What these are meant to imply will hopefully be clarified in the final version of the procedures.

5.6 Environmental Impact Assessment

The process of Environmental Impact assessments (EIAs) is crucial for sustainable use of the Mekong. Through a properly functioning EIA process planned projects are made subject to discussion and thorough evaluation. The EIA also works as an early warning instrument through presenting potential hazards of the project and works in line with the precautionary principle. Article 17 of the Rio Declaration, comprising part of the principle of sustainable development,[258] relates to EIA, thus making the EIA process part of the concept of sustainable development. As seen in section 3.7.1 of this thesis, the duty of notification and consultation of uses can be understood as to imply an obligation to undertake an EIA in order to determine if the threshold at which uses must be notified etc. is reached. In the case of the Mekong Agreement an EIA would thus need to be conducted to determine whether a proposed use will have a 'significant impact'. The application of the principle of equitable utilisation would also seem to need some kind of EIA, especially in relation to such factors as are mentioned in Article 6 of the 1997 Water Convention.[259]

The process of an EIA is not required, or even referred to, in the Mekong Agreement. The NCA rules require the submission of information relating to "scope, scale, site, type, quantity, capacity, and characteristic, etc" and "attached available data and information and/or documents, e.g. summary of FS or IEE",[260] but an EIA process is not explicitly required and neither does it appear that the MRC has been given the possibility to require such a process, should the IEE indicate that more evaluation is needed. The MRC is working towards a framework for Transboundary Environmental Assessments,[261] and a draft based on the Espoo convention has been prepared,[262] but not yet been made public. However, the draft has reportedly

[258] Birnie and Boyle, 2002, p. 86.
[259] E.g. (b) The social and economic needs of the watercourse States concerned;
(d) The effects of the use or uses of the watercourses in one watercourse State on other watercourse States; (e) Existing and potential uses of the watercourse; (f) Conservation, protection, development and economy of use of the water resources of the watercourse and the costs of measures taken to that effect; (g) The availability of alternatives, of comparable value, to a particular planned or existing use.
[260] NCA Annex IIA.11 and 13. The abbreviations FS, and IEE are not explained in the text, but I believe the general meaning of IEE to be 'Initial Environmental Examination' According to FOA this means "A preliminary attempt to evaluate environmental impacts in order to determine whether a full-scale environmental impact assessment is needed. Also called Initial Environmental Investigation (IEI), partial EIA or Preliminary EIA" (http://www.fao.org/documents/show_cdr.asp?url_file=/docrep/V8350E/v8350e0f.htm 2005-02-28).
[261] MRC, 2003(c), p. 18; Cessar and Bruch, 2003, pp. 215-216.
[262] Horberry, 2004, p. 5.

met with resistance from the member countries due to issues of national sovereignty in developing national resources and because of compensation implications of identifying transboundary impacts.[263] A broad regional framework has been suggested as the most effective measure, considering the differences in legal and institutional structures among the member countries. Bilateral agreements can then be made to complement the framework. [264] To comprise a register for the EIAs of different projects along the Mekong could prove beneficial for the member countries and provide useful information in relation to the requirements in the processes of prior notification and consultation.

All four Countries have implemented rules for EIAs into their national laws.[265] The process of EIA is also included in the ASEAN Agreement on the Conservation of Nature and Natural Resources (Article 14), to which all four countries are parties.[266] It has, however, been held that the countries have limited national capacity on EIAs.[267] EIAs on water projects in Lao PDR can act as an illustration of the limited capability (or will?) in regard to EIAs. In 2001 an Agreement on Commercial Navigation on the Lancang-Mekong River between Simao (Yunnan) and Luang Prabang (Lao PDR) was signed by China, Lao PDR, Thailand and Myanmar. The aim of the project, funded by the Chinese, was to blast and remove reefs and rapids and dredge the river to allow the passage of larger vessels. The EIA for this transboundary project has been heavily criticised for e.g. omitting crucial information and not complying with national rules on EIAs. Furthermore considerations of the river's biological values where found to be "seriously deficient" in the EIA.[268] This EIA was nevertheless initially considered adequate by all concerned governments.[269]

Other water project EIAs in Lao PDR have also been criticised for excluding crucial information and ignoring or underrating concerns about potential negative impacts of the projects, and of being biased because they are carried out by consultancy companies with vested interests in ensuring that the project proceeds.[270] Criticism has also been forthcoming for preparing EIAs late in the project approval process, for inadequate government capacity within the country, lack of public consultation, and for lack of monitoring and enforcement of the recommendations in the EIA.[271] A limited knowledge and understanding of river systems and how they work further lessens the positive effects of the EIA process in the region.[272]

The MRC has however commissioned consultants to work with the National Mekong Committees in order to develop guidelines and suggest potential procedures and protocols that may be adopted by the four national

[263] Horberry, 2004, p. 6.
[264] Horberry, 2004, p. 9.
[265] Pollution Control Department, 2002, pp. 18-19.
[266] Association of Southeast Asian Nations (Browder, 2000, p. 242).
[267] Horberry, 2004, p. 6; Hirsh and Cheong, 1996, chapter 5.4.3; Badenoch, 2002, p. 14.
[268] Finlayson, 2002, pp. 3 and 9. See also Cocklin and Hain, 2001, p. 2.
[269] Dore, 2003, p. 19.
[270] EIAs for the Theun-Hinboun, Nam Leuk, and Xe Pian-Xe Namnoi dams (International Rivers Network, 1999, pp. 24, 50.
[271] International Rivers Network, 1999, pp. 28, 41, 49-52.
[272] Horberry, 2004, p. 6.

governments as mechanisms to incorporate transboundary impacts into their Environmental Impact procedures.[273]

5.7 Public Participation and Access to Information

The principle of public participation has neither been included in the Agreement, nor in the subsequent rules. A policy instrument has however been developed by consultants and approved by the JC in 1999.[274] The paper outlines the concept, basic terminologies, and principal guidelines for public participation in context of the MRC. Thus, in the context of the MRC: "Public Participation is a process through which key stakeholders gain influence and take part in decision making in the planning, implementation, monitoring and evaluation of MRC programs and projects".[275] MRC appreciates that the process of public participation goes through four stages of activities, namely, information gathering, information dissemination, consultation and participation that culminate in some level of decision making power.[276] Since 2002, selected civil society representatives have been invited to attend the meetings of the Mekong committee and the council.[277] This is definitely a step in the right direction; in this position NGOs can function as 'focal points' between MRC and the public, and act towards transparency in the decision-making process. This important role of NGOs as 'middle hands' in international institutions is acknowledged by the Aarhus convention.[278]

As noted above,[279] the principle of sustainable development is to govern the cooperation of the Mekong. One of the principles of sustainable development is principle 10, relating to public participation and access to information. The importance of "full public participation in water management policy-making and decision-making" including that of women, youth, indigenous people, and local communities is also stressed in Agenda 21, [280] to which Mekong Region countries are signatories.[281]

The MRC has been criticised by local river communities for not taking account of their views and not including them in dialogues and processes concerning the development of the river.[282] Following a

[273] MRC, 2002, p.10.
[274] At its 9th Meeting, held in Phnom Penh on March 30-31, 1999. The report was developed with financial support from Sweden (Sida) (MRC 1999(a), p. 1).
[275] MRC, 1999(a), p. 3. A Stakeholder is defined as 'any person, group of institution that has an interest in an activity, project or program. This includes intended beneficiaries and intermediaries, those positively affected, and those involved and/or those who are generally excluded from the decision-making process' by the MRC (MRC, 1999(a), p. 2).
[276] MRC, 1999(a), p. 4.
[277] MRC, 2004, p. 2.
[278] Aarhus Convention, Articles 3(7) and 9 (2).
[279] Section 5.2.
[280] Agenda 21, Chapter 18, 18.9(c).
[281] Dore, 2003, p. 26.
[282] Declaration by Local Communities of the River Basins in Thailand, 11/02. The declaration can be found on this web page: http://mekongriver.org/declmekrith.htm (2004-10-28). MRC and the Agreement have also been criticized in the Declaration of Fishers of

'Dialogue on River Basin Development and Civil Society in the Mekong', organised by a coalition of NGOs and universities a declaration was publicly released.[283] The declaration claims that in the work of the MRC, 'civil society' involvement has been reduced to "the groups that provide monetary assistance to support the expansion of economic growth in the Mekong River Basin." The declaration further maintains that the Mekong River agreement has "excluded local communities from making decisions about the Mekong River Basin and development" and that "local communities are being sacrificed in the name of 'development'….[which] is destroying the lives, livelihoods, cultures and natural ecosystems of the local communities of the Mekong Region" thus marginalising, dispossessing and disempowering local people. The declaration ends with a call for support to ensure that "community rights over natural resources becomes the guiding principle for development in the Mekong Region".

In response to discussions with MRC during the dialogue the MRC maintained that it cannot respond to civil society interests themselves, only to the national governments of the riparian states. Civil society involvement must thus go through national governments.[284] The riparian countries have implemented different levels of public participation into their legal framework, and there seems to be a risk of dissimilar access to information in the different countries. The second objective of the Procedures for Data and Information Exchange and Sharing require that basic data and information for public access shall be made available, upon request, as determined by the NMCs concerned.[285] This implies that it is up to each NMC to determine what information shall be made public. The procedures in NCA do not include any sharing of information on proposed uses with the public. Relevant data and information relating to uses shall however be placed into the MRC Secretariat Data and Information System,[286] the system which is governed by the procedures on data and information sharing.[287] The information subsequently falls within the range of the data and information procedures and may be shared by the NMCs in accordance with its rules. What information is shared and how the views of the public due to this information are taken into account is up to each country.

An inter-governmental organisation is to a high degree a product of the countries by which it is made up and member countries will bring their traditions and views with them into the international cooperation. Public participation is weak in the national legislations of the LMR countries although Thailand, with its relatively free press, is an exception in this regard.[288] Weak national public participation indicates that the LMR

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the Mekong River Basin, May 1, 2002, published in Watershed Vol.8 No.1 July – October 2002: Sense of Commons

[283] Dore, 2003, pp. 17-18.

[284] Hirsch, 2003, p. 2. It should be noted that this statement has however not been confirmed by MRC.

[285] Procedures for Data and Information Exchange and Sharing, Section 2.

[286] NCA, Section 4.3.2.c.

[287] Procedures for Data and Information Exchange and Sharing,, section 3.

[288] Kværnevik, 1996.The Thai NGOs are particularly involved in protests against planned dams. In 1988 the planned Nam Choan dam, which would have submerged large parts of two nature reserves was stopped due to environmental movements. However, active

countries do not have a strong tradition of taking the views and knowledge of the public into consideration. In Laos, Vietnam and Cambodia public participation has not been high on the agenda of the centralist socialist legacy.[289] This non-involvement of the public is 'exported' to the cooperation over the Mekong. Views of what constitute public participation differ extensively among the member countries,[290] a fact that further slows the process of including the views of the public in the Mekong river management. However, the cooperation is also a platform for discussions and exchange of ideas. Including more public participation in the Mekong Agreement could prove a 'trigger' to extend this kind of participation to national legislation in the countries.

In other parts of the world, an energetic civil society has proved an important part of the regional institutional framework. In the Mekong region, differing degrees of political freedom and political space provided for non-governmental influence constrain the scope of non-governmental activities that might be undertaken regionally.[291] MRC appreciates that approaches to public participation will need to be adapted to the situation in each country. In Cambodia, for example, the issue of trust between the population and its government is an important factor and trust building would be one of the initial objectives.[292] As a single party state, dissenting voices in Laos are not tolerated and indigenous NGOs are prohibited.[293] The Lao public are also somewhat deprived of their right to locus standi (the right to sue) since, according to UNDP, there is a serious lack of trained lawyers in the country.[294] Thailand has included the principle of public participation in its Constitution and registered environmental NGOs have been given certain rights under the environmental law.[295] The main problem for the Thai civil environmental movement seems to be that information often is kept secret from the public, at least until decisions have been made.[296]

The effect of limited regional civil movements is that central government agencies still dominate priorities of environment and development in the region.[297] A number of international NGOs are however

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opposition to the government can be quite risky in Thailand too. Activists are regularly threatened and harassed in rural areas and several killings have occurred, as in a demonstration against the Pak Mun dam in 1991 (Kværnevik, 1996). See also Amnesty International, 2003.

[289] Öjendal and Torell, 1997, p. 138.

[290] Ounsted, 2003, p. 4; Hirsch, 2003, p. 2; Dore, 2003, p. 26.

[291] Badenoch, 2002, pp. 5-6.

[292] MRC 1999(a), p. 6. Cambodia has begun a massive project of decentralisation, heavily funded by international donors, but the effects of this project are still to be conceived as e.g. training requires a long period of time.

[293] Bush, 2004, p. 2

[294] UNDP, 2004, p. 2. The obligation to provide effective access to justice before national courts is referred to in principle 10 of the Rio Declaration.

[295] Sections 6-8 of the Enhancement and Conservation of National Environmental Quality Act, B.E. 2535 (1992). The rights of and financial support to NGOs is however bestowed only to registered NGOs, and registration entails high costs and increased regulation by the authorities, deterring many NGOs (Tan, 2002, section 3).

[296] Kværnevik, 1996.

[297] Badenoch, 2002, pp. 5-6. Regional NGO's include e.g. Towards Ecological Recovery and Regional Alliances (TERRA) and FOCUS on the Global South. (Ilomäki, 2000, Ch. 5)

active in the field of the Mekong environment, especially in opposition to specific dam projects.[298]

The MRC has recognised that it "has virtually no experience in this vital field" and that it must "drastically accelerate activities to promote public participation". It has further stated that "the voice of the people directly affected, and of other stakeholders such as community groups or NGOs, must be heard".[299] It remains to be seen if this is merely rhetoric discourse or if it actually implies that a change in respect to public participation might be at hand.

In the project on blasting rapids in the Mekong formal participation by local communities, or others liable to have alternative view, was considered unneeded. The EIA was eventually made public but at a stage of the decision making process where civil arguments could not be properly accounted for.[300]

5.8 Bilateral Agreements, China and Myanmar

Although China and Myanmar participate to some extent in the work of MRC, through annual dialogue meetings,[301] and have formal observer status in the commission,[302] they are not parties to the Agreement, and thus have no obligations to MRC other than special Agreements such as the Monitoring Agreement between China and MRC. During the negotiations leading up to the Agreement the lower Mekong states had the possible future inclusion of the upper states in mind and the Mekong Agreement contains provisions to let other riparian states (i.e., China and/or Myanmar) become parties to the Agreement.[303] This requires both the consent of the four existing parties and that new parties accept the rights and obligations under the Agreement.[304] The lack of obligations that arises from remaining outside the Agreement is of course a strong reason for the upstream states to not join the Agreement. As upstream states they are little affected by other riparian states' activities and signing the Agreement would bring many restrictions but few benefits,[305] and under the present Agreement it does not seem likely that they will sign within any foreseeable future.[306] The standpoint taken by China in voting over the 1997 Water Convention goes some way towards illustrating their view in transboundary water issues.

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[298] E.g. Oxfam, International River Network, Probe International, Community Aid Abroad, World Vision, Care International (CARE), Mennonite Central Committee (MCC) Water for People Australian Catholic Relief (ACR), Cooperation Internationale pour le Development et la Solidarite (CIDSE) (Ilomäki, 2000, Ch. 5).
[299] MRC cited in Dore, 2003, p. 16.
[300] Dore, 2003, pp. 18-20.
[301] Over matters concerning tourism, water use, power development, data exchange. etc. (http://www.thewaterpage.com/mrc_notes.htm 2005-03-23).
[302] UNEP, 2001, p. 2.
[303] Browder, 2000, p. 248.
[304] Mekong Agreement, Article 39.
[305] The Economist, Jan 3, 2004.
[306] http://www.thewaterpage.com/mekong_comments.htm 2005-03-21

China was among the three countries that voted against the convention,[307] maintaining that there were obvious drawbacks in it. Although the basin approach was rejected and a somewhat weaker formulation was chosen, China did not feel that the principle of territorial sovereignty of a watercourse State was sufficiently reflected in the text. In the Chinese view, a watercourse State has indisputable sovereignty over a watercourse which flows through its territory. It was furthermore considered that there was an imbalance between the rights and obligations of the upstream and downstream States in the Convention.[308]

Only a small part of the Mekong passes through Myanmar,[309] which, excluding the symbolically important aspect of breaking its political isolation makes the 'non-commitment' of Myanmar rather insignificant at present. China, on the other hand controls 21 percent of the basin and produces 16 percent of the discharge,[310] thus contributing to a large part of the Mekong catchment with potentially high impacts on downstream countries. In addition to this, China is comparatively wealthy, and a donor country to the lower Mekong region.[311] This makes it difficult for MRC to apply political pressure on China to consider the downstream countries in its actions.

The legal implication of China's and Myanmar's choosing to stay out of the Agreement is of course that they are not bound by its provisions. As has been shown in this thesis the Mekong Agreement however reflects, to a certain extent, customary international law on transboundary waters, which means that the two upstream countries are still bound by such principles. Thus, the principles of equitable utilisation, the no harm rule, the duty to exchange relevant data and the duty to cooperate through prior notification and consultation still apply to China and Myanmar. The recent agreement by China to provide data to the MRC should consequently be seen as a step towards carrying out its duty under international law.[312] It should however be noted that the application of equitable utilisation is difficult in absence of common river management and international Agreements,[313] especially as, apart from the agreement on wet season flows, there is no effective mechanism established for information exchange and data sharing with China.[314]

The Agreement allows member states to enter into bi- or multilateral agreements with each other and other states. Such agreements can be valuable in relation to smaller projects that only concern two states. They can, however also be used to sidestep the MRC on important projects. An example of how the MRC has been left out of dialogues is the negotiations between China, Myanmar, Lao PDR and Thailand over the Chinese funding of river blasting and dredging to allow the passage of larger vessels in 2001.

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[307] Lao PDR, Thailand, Cambodia and Vietnam voted in favour of the Convention, while Myanmar was absent (UN, 1997).
[308] UN, 1997.
[309] 3 percent of the basin (MRC, 2003(a) p. 16.
[310] World Bank, 2003, p. 23; MRC, 2003(a) p. 16.
[311] McKinney, 2003.
[312] Wouters et al, 2003, p.182.
[313] Birnie and Boyle, 2002, p. 310.
[314] Wouters et al, 2003, p. 182.

This Agreement was signed by transport officials from China, Lao PDR, Thailand and Myanmar. The planned project would obviously have a significant impact on the river ecology and local communities. MRC was however not included in the negotiations. Only in the final phase has it been involved, in commissioning evaluations of the existing EIA (which, as seen in section 5.6 of this thesis have been extremely critical) and offering to conduct an independent EIA of the project, an offer not taken up.[315]

5.9 Conflict Management

Since the implementation of the Mekong Agreement few conflicts over water use have arisen. The conflicts that have occurred have been related to poor people's experience of negative impacts from water development projects which they feel threaten their livelihoods.[316] This again emphasises the need to involve civil society in the development process in order to prevent this type of conflict in the future. The World Commission on Dams Report (London, November 2000) determined that the most efficient way to "resolve the complex issues surrounding water, dams and development" involved e.g. instituting "decision-making processes based on the pursuit of negotiated outcomes, conducted in an open and transparent manner and inclusive of all legitimate actors involved in the issue."[317]

The Council is the principal conflict solving body of the MRC. Differences or disputes over matters covered by the Agreement and actions taken by the implementing organisation through its various bodies, especially regarding the interpretations of the Agreement and the legal rights of the parties, shall thus primarily be resolved by the Council, or in its absence, by the JC.[318]

If this is not conducive, the matter will be passed on to the governments for resolution by negotiation through diplomatic channels. In the last instance, disputes can be handled with assistance of mediation through an entity or party mutually agreed upon, according to the principles of international law.[319] The member states already have experience of the latter procedure; during the negotiations over the Agreement, in 1992, when the countries reached a deadlock in negotiations, mediation of assistance was provided by the UNDP to continue the work on the Agreement.[320]

[315] Dore, 2003, pp. 18-20; Cocklin and Hain, 2001, p. 2; Finlayson, 2002, p. 2
[316] Lauridsen, 2004, p. 47.
[317] Wouters, 2001, p. 5.
[318] Mekong Agreement Articles 34, 18.C, 24.F.
[319] Mekong Agreement Article 35.
[320] MRC, 2004, p. 7; Browder, 2000, pp. 239, 245, 248. Especially Thailand and Vietnam had difficulties to overcome the question of water allocation where the Vietnamese wanted to secure water flows to limit saltwater intrusion in the Delta and the Thai wanted to continue water developments and diversions on its territory (Browder, 2000, pp. 242-246).

5.10 Budget and Funding

The budget of the MRC consists of contributions from its member countries and external donors,[321] while NMCs are funded by their respective governments. Lack of sufficient financial resources is thought to have negatively affected the effectiveness of the NMCs, especially in Cambodia, Laos and Vietnam. In view of this situation the MRC has made modest budgetary contributions of ca. $20,000-30,000 annually to the NMCs of these three countries.[322] However, MRC itself is heavily dependent on resources from international donors, which have constituted the largest part of the operational and program budget.[323] MRC Program activities, such as WUP is also heavily dependent on donor contributions.[324] It is hoped that the member countries shall be able to mantle more and more of the costs,[325] which would increase the stability and sustainability of the cooperation and thus the aim of the Agreement. The member countries have agreed to gradually increase funding to ensure self-financing of MRC administrative costs by the year 2012.[326] In the short and medium term external donors will however continue to contribute the largest amounts.[327]

In addition to day-to-day costs of the MRC and its programs, the rules that have been agreed upon or are planned will also need funding. The procedures of monitoring and data and information exchange will most likely be costly for the member countries. Even so, the Agreement does not contain any provisions as to how monitoring and data and information exchange is to be financed, except what is included in the Data and Information Exchange and Sharing Procedures on excess data. In Laos and Cambodia data collection under the water monitoring program is funded by donors, through the MRC. Data collection in Thailand and Vietnam is financed by national governments.[328]

5.11 Implementation, Enforcement and the Role of NMCs

There is little information and discussion in the context of how the new water rules will be enforced, or other provisions in the agreement. The MRC itself does not hold any really effective means of enforcing the Agreement,

[321] Mekong Agreement, Article 14. Foreign donors include: Development Bank, World Bank, JICA/OECF (Japan), AusAID/ACIAR (Australia), Asian USAID (U.S.A), The European Union, ODA (UK), GTZ (Germany), DANCED/DANIDA (Denmark), SIDA/SAREC (Sweden), DIDC (Finland) (http://www.mrcmekong.org/Donors/Donors.htm 2005-03-29).
[322] http://www.thewaterpage.com/mrc_notes.htm 2005-03-29
[323] Pech, 2002, pp. 7-8.
[324] WUP is supported by the Global Environmental Facility through the World Bank over a seven-year period, to end in the year 2006 (http://www.mrcmekong.org/news_events/press_release/2003/press16.htm 2005-03-29).
[325] Pech, 2002, pp. 7-8.
[326] MRC, 2003(b), p. 24.
[327] Pech, 2002, p. 8.
[328] www.thewaterpage.com/mrc_notes.htm 2005-03-29

which leaves this to other institutions of national and international law. As long as the country in question is willing to implement the rules set out by the Agreement, it can put pressure upon its departments to take measures of implementation. However, in some countries, e.g. Cambodia, even enforcement of national environmental laws is weak, and although the Mekong rules might get implemented into national law, it is not certain that the national governments will have the means to enforce them.

As with all international bodies, MRC is a product of its member countries and the political will which these place in the cooperation. MRC has admirable plans for the Mekong, but implementation is left to the member states, and it is up to the national departments to, through the NMCs, implement the plans and take appropriate action to fulfil MRC's visions. Through their implementing role the NMCs play very prominent roles in MRC activities. However, they have not been included in the legal and institutional arrangements provided for in the Agreement. To clarify the role of the NMCs in the Agreement and give them a legal base might strengthen their position in relation to national departments, thus increasing the possibility of implementation. As seen in the previous section, the NMCs are characterised by shortages in financial resources. Lack of human resources reportedly also limits their effectiveness. In some cases they are also largely isolated from the main decision-making process at the national level.[329]

Lack of expertise and funding, along with overlapping responsibilities is also a problem on the national level. This presents obstacles to the effectiveness of national and regional water management. Hence there is a need to strengthen national capacity to deal with present and future responsibilities under the Agreement.[330]

[329] MRC, 2004, p. 8.
[330] MRC, 2003(b), p. 27.

6 Conclusion

"The Journey of a thousand miles begins with a single step".
Confucius

The great challenge for the region, and for the MRC, is to find a path between development, highly needed to improve the livelihood of the poor population along the Mekong, and protection of the environment whilst accommodating their different needs and wishes of the four member countries. In doing so the different levels of development and economical possibilities, as well as the different political structures and varying development levels of environmental laws will also need to be taken into consideration.

International principles steer and restrict the discretion of states in relation to international waters. An emerging approach where the environment is more in focus works towards reaching sustainability in uses of international waters, as does the inclusion of sustainability in the concept of equitable utilisation. The Lower Mekong countries have followed this line of development through placing the principle of sustainable development at the core of their cooperation. Other principles, promoting sustainable use of international waters have been included to a varying degree in the Agreement. The principle of equitable utilisation and the 'no harm' rule have been incorporated but will need further development through rules to become fully effective. As is the norm in similar international instruments, the preference of prevention over compensation in transboundary harm is apparent in the Mekong Agreement. The geographical and hydrological approaches employed by the Agreement are somewhat vague and do not concur with the basin approach, but this is not necessarily in violation of international law. However, the limited extent to which plans and projects on the tributaries are subject to common management in the Agreement is not satisfactory in view of sustainable use. Tributaries should be treated in consistency with the mainstream. There is some ambiguity over projects which have the potential to reduce the quality of water and to what extent the water quality considerations of projects are subject to rules of notification and consultation. Even though projects on the tributaries affecting water quantity are not subject to common discussions they will still need to be considered indirectly in relation to rules of maintaining minimum flows on the mainstream. The important precautionary principle is not directly referred to in the Agreement; neither have important procedures for its application, such as the concept of EIAs been included. The concept of public participation has also been left out of the Agreement, although attempts to bring the notion of it into the cooperation have begun. Efforts to include the process of EIAs have also been made, and it seems that an instrument on transboundary EIAs is in progress, although the extent of its effect is difficult to predict at present. It should however be noted that principles and components of international

customary law are binding upon the parties, as well as upon the two upper riparians, regardless of whether they have been included in the Mekong Agreement or not. The result of not including certain principles is rather that their stringency in the cooperation is weakened.

Merely including principles in a framework instrument is not enough to promote sustainable use. However efforts to implement the Agreement are in progress. The programs of the MRC are strongly focused on environmental issues and sustainable use, and efforts to convert the pretty wording of the Agreement into actual usable rules have been made or are under way. Nonetheless, an effective management scheme towards sustainable use of a transboundary watercourse requires the commitment of all concerned parties. In the Mekong the exclusion of the two upper riparian states and the limited participation of the public are thus an impediment to reaching the goal of sustainability. Within the cooperation, sustainability must be considered in all uses of the whole river basin. Here again the non-commitment of the two upper riparian states is a barrier to sustainable use, as is the very limited extent in which the tributaries are included in the MRC management and the ambiguity in to what extent water quality is included in the duty to consult etc. Hopefully the latter predicament will be settled through the upcoming rules on water quality. The vagueness and lack of clearness of important terms in the Agreement and some of its rules is unsatisfactory because it has the potential of hollowing the aim of sustainability in the Agreement and may well cause conflict. Unclear wordings in the Agreement itself can be further explained through subsequent rules, but vagueness in already developed rules will need clarification through revisions.

Even though the scheme of cooperation over the Mekong is somewhat fragmented and the legal instruments are not perfect in their present form, they are nevertheless very important steps in the direction of sustainable use. The MRC is still in its first stages and the achievements that have been made have mainly had the effect of laying the foundation for further cooperation. It was no easy task to bring the parties to an agreement on the cooperation over the Mekong, but once the cooperation is in place it can be revised and improved towards more rigidity and hence it provides a base upon which to build further efforts towards a fully integrated and active basin-wide system. The cooperation on the Mekong also works on another level; even though it is somewhat weak in its present form, it is likely to promote trust and cooperation between the countries. This is a very important feature, considering the history of political unrest that has shaped the region. However, the potential benefits and possibilities of the MRC do not seem to be fully appreciated (or trusted?) by the member countries yet. As shown e.g. in the case of the Agreement between China, Thailand, Laos and Myanmar on the blasting of rapids in the river, the MRC still appears marginalised in regard to the national decision making processes of its members.

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