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# COOPERATION AND CONFLICT ON THE MEKONG RIVER WATERS

# ORTADOĞU STRATEJİK ARAŞTIRMALAR MERKEZİ Center for middle eastern strategic studies

مركز الشرق الأوسط للدراسات الاستراتيجية



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July 2011

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# STRATEGIC INFORMATION MANAGEMENT AND INDEPENTDENT THOUGHT PRODUCTION

### **CENTER FOR MIDDLE EASTERN STRATEGIC STUDIES**

#### History

In Turkey, the shortage of research on the Middle East grew more conspicuous than ever during the early 90's. Center for Middle Eastern Strategic Studies (ORSAM) was established in January 1, 2009 in order to provide relevant information to the general public and to the foreign policy community. The institute underwent an intensive structuring process, beginning to concentrate exclusively on Middle affairs.

#### **Outlook on the Middle Eastern World**

It is certain that the Middle East harbors a variety of interconnected problems. However, neither the Middle East nor its people ought to be stigmatized by images with negative connotations. Given the strength of their populations, Middle Eastern states possess the potential to activate their inner dynamics in order to begen peaceful mobilizations for development. Respect for people's willingness to live together, respect for the sovereign right of states and respect for basic human rights and individual freedoms are the prerequisities for assuring peace and tranquility, both domestically and internationally. In this context, Turkey must continue to make constructive contributions to the establishment of regional stability and prosperity in its vicinity.

#### **ORSAM's Think-Tank Research**

ORSAM, provides the general public and decision-making organizations with enlightening information about international politics in order to promote a healtier understanding of international policy issues and to help them to adopt appropriate positions. In order to present effective solutions, ORSAM supports high quality research by intellectuals and researchers that are competent in a variety of disciplines. ORSAM's strong publishing capacity türansmits meticulous analyses of regional developments and trends to the interested parties. With its web site, its books, reports, and periodicals, ORSAM supports the development of Middle Eastern literature on a national and international scale. ORSAM supports the development of Middle Eastern literature on a national and international scala. ORSAM facilitates the sharing of knowledge and ideas with the Turkish and international communities by inviting statesmen, bureaucrats, academics, strategicts, businessmen, journalists, and NGO representatives to Turkey.



#### About the Programme

Water is irreplaceable, valuable and one of the most important substances for the sustainability of the life not only for human beings, plants and animals but also for the whole ecosystem. The surface and ground waters are utilized for domestic, agricultural and industrial aims. However, there is a dual pressure over water sources due to the human activities and natural changes. Especially, in the places where water shortage is experienced, over-population, immigration from rural areas to urban, food security policies, growing socio-economic wealth, agricultural, domestic and industrial based contamination, the changes in precipitation due to the global climate changes, affects the hydrological cycle. Thus, the water sources are exposed to some changes in respect of their quantity and quality. While demand for water has been gradually growing up, in water stressed areas, the water supply stays stable. While the problems on the management of water resources are experienced, on the other hand the effects of environmental problems on water resources are gradually increasing. Turkey and its close environment, especially, the Middle East are the most influenced regions by such problems.

On the other hand, Turkey's relations with Euphrates-Tigris Basin riparian neighbours are very important when taken into consideration that Turkey has more than 40 percent of the water resources potential on the transboundary basins. In order to reach the political target which both Turkey and other riparian states pursue, of establishing regional stability, augmention of welfare and deepening the relationship among the neigbouring states, it is essential for all the parties, to have good faith and knowledge based active cooperation in the water resources utilization. In addition, during the process of Turkey's EU candidacy, the agenda of harmonization of EU Water Framework Directive with her own national legislation will along with bring the future water policies to have a new content.

In accordance with the foregoing factors, "ORSAM Water Research Programme" was established on 1st January, 2011 within ORSAM, for the aim of presentation of the enlightening findings and the observations of the current developments on water issues of Turkey's close environment and in the worldwide, to the public opinion and to the decision-makers, which have been acquired by means of analysis.

In the studies of ORSAM Water Research Programme, the Middle East engaged issues are given priority as there is a big increase in the political, economic and social problems, due to the both climate changes and inefficient utilization of water sources in the Middle East and as existing problems in the water budget.

ORSAM Water Research Programme aims to produce new ideas that offer different political alternatives on water issues, to encourage and diversify the qualified studies of competent reseachers and intellectuals from different disciplines in order to form vigorous solution offers and to support the development of water literature in Turkey.

In this scope, ORSAM Water Research Programme aims both, to facilitate the hosting of academics, the representitives of the non-governmental organizations, bureaucrats, statesmen, diplomats, strategists, journalists and businessmen, who studies on the water issues in region countries and to provide the sharing of informations and considerations of those, with the public opinion both in Turkey and in the worldwide.

### www.orsam.org.tr/tr/SuKaynaklari/

## PRESENTATION

Mekong River basin is still an unexploited river basin despite its huge potential. The Mekong basin which includes six countries, namely China, Myanmar, Lao PDR, Cambodia, Thailand and Vietnam have a cooperation tradition for more than five decades. The relations of the riparian states must be assessed especially till 1990's, in Cold War terms. The Mekong Committee which was founded by U.S.A efforts in 1957 shows the Cold War tensions explicitly.

In 1950's and 1960's, as in the whole world, the Southeast Asia was an area which big powers quarrels with each other. Thus U.S.A, which tried to build a set to the communism in the Southeast Asia region, provided its efforts to assemble the Lower Mekong basin states and thus cooperation had occurred in the region.

The Lower Mekong basin which consists of 70 million inhabitants, have direct impact on the population's survival. As the most of the basin countries are underdeveloped, the population of the basin largely dependent on the river for agriculture and fishery.

Dry and wet season flow changes are the main issue in the basin. Cascade dam building plans on the upstream of the river, namely China, causes concern in the Lover Mekong River basin, as the most of the dry season flow originates from the snow melt in Himalayas in China.

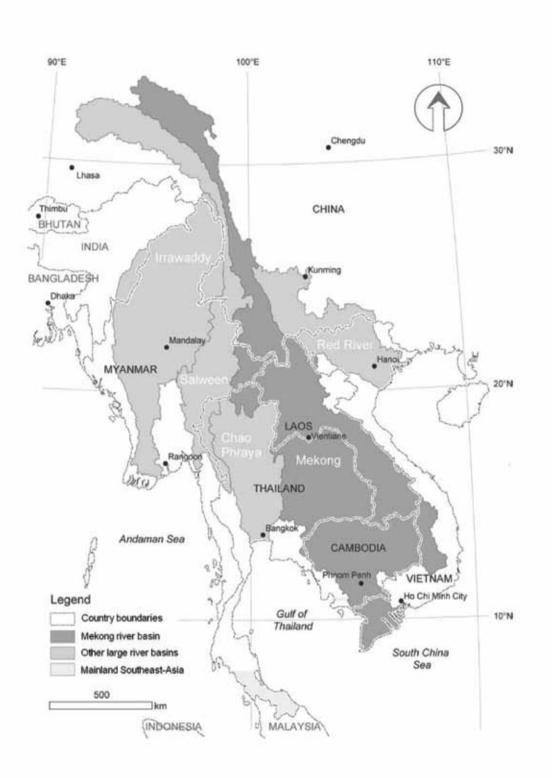
The Mekong Commission and its predecessor The Mekong Committee have tried to coordinate the hydrodevelopment in the Lover Mekong basin. However different development levels and thus different priorities of the Lover Mekong River riparian countries hinder those efforts.

In this report, Aksaray University, International Relations Department lecturer and ORSAM Water Research Programme Advisor Dr. Seyfi Kılıç evaluates the Mekong River basin countries approachs to the utilization of the Mekong River waters with the history of cooperation in the basin.

Hasan KANBOLAT ORSAM Director

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#### Mekong River Basin

Source: Kummu, M. (2008) Spatio-Temporal Scales of Hydrological Impact Assessment in Large River Basins: The Case of the Mekong, PhD thesis, Water Resources Laboratory, Helsinki University of Technology, Helsinki.

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by Dr. Seyfi Kılıç ORSAM Water Research Programme Advisor Aksaray University Department of International Relations

# **COOPERATION AND CONFLICT ON THE MEKONG RIVER WATERS**

### **Executive Summary**

The Mekong River can be characterized as a life-blood of Southeast Asia. It flows from the highlands of Tibet in China and through six countries to the South China Sea. The countries which are located in the Mekong River Basin are China, Myanmar, Thailand, Lao PDR, Cambodia and Vietnam. The Mekong River, which flows through mainland Southeast Asia towards the South China Sea, has a great importance for a large number of people and the countries which are located in the basin of the Mekong River.

China as the most upstream country in the Mekong River Basin has started to implement huge water development projects in order to generate hydroelectricity. There are assertions that those development plans can have adverse effects on the people of lower riparian countries which are dependent on the river and the tributaries for their living since the level of education, infrastructure and industrialization in the basin is very low.

Extreme hydrological cycles of the Mekong River Basin force the basin countries for joint development in the construction of storage facilities. The storage facilities would help to arrange the extreme flows that can cause damaging floods, store water for dry season irrigations and generate hydroelectric power.

The Mekong River Commission, which is founded by Lower Mekong basin countries with an agreement in 1995, is intended to develop the basin with sustainable manner. However, the riparian countries have different priorities and policies on the utilization of Mekong River waters.

#### Introduction

The Mekong River has been unexploited until now. However, the riparian countries of the Lower Mekong Basin, namely Thailand, Cambodia, Lao People's Democratic Republic (PDR) and Vietnam, have started to implement big projects which have significant economic, social and environmental impacts on the mainstream of the Mekong River. In this context, the Mekong River Commission, which is founded by Lower Mekong basin countries with an agreement in 1995, is intended to develop the basin with sustainable manner.

The Mekong River Commission has two main features. Firstly, it refers a geographical area and secondly, the members of the commission are all developing or newly industrialised countries.

The Mekong River can be characterized as a life-blood of Southeast Asia. It flows from the highlands of Tibet in China and through six countries to the South China Sea. The countries which are located in the Mekong River Basin include China, Myanmar, Thailand, Lao PDR, Cambodia and Vietnam. These countries are different in governmental systems, total area, flow contributions, gross domestic product (GDP) per capita and they also differ in terms of their goals in utilization of the Mekong River. It should be emphasized that population of the basin which typically located in rural areas, except Phnom Penh which is in Cambodia, is approximately 70 million. Therefore, it can be argued that the Mekong River, which flows through mainland Southeast Asia towards the South China Sea, has a great importance for a large number of people and the countries which are located in the basin of the Mekong River. Furthermore, the Mekong River is unique as it is a huge river that is still unexploited and proposed development is constructed before any major mainstream projects are initiated. The Mekong River Basin can be defined also as the land area which is surrounded by all the streams and rivers that flow into the Mekong River.

The water problem especially arouses from the allocation of the waters between upstream countries and downstream countries. However, in the Mekong River Basin, there is another problematic issue of allocating water in the sectoral level. China as the most upstream country in the Mekong River Basin has started to implement huge water development projects in order to generate hydroelectricity. These development plans can have adverse effects on the people of lower riparian countries which are dependent on the river and the tributaries for their living since the level of education, infrastructure and industrialization in the basin is very low. For example, people in the river basin line in rural areas and dependent on the annual flood from the river can get only one crop a year in Cambodia. Furthermore, total protein needs of the Cambodian people are from the Tonle Sap Lake which overflows in the wet season.

The rest of the report is structured as follows; Section 2 provides information on the geographical features of the Mekong River Basin. Section 3 provides information on the socio-economic features of the Mekong River countries in terms of their population, riparian characteristics and main economic indicators. Section 4, provides and discusses the history of the Mekong River Commission and the 1995 Agreement as well as the deficiencies of the 1995 Agreement and the Mekong River Commission. Section 5 discusses the Basin states' approachments to the Mekong River in terms of their priorities and positions in the Mekong River Basin and Section 6 concludes the report.

# 1. The Geographical Features Of The Mekong River Basin

The Mekong River carries 475 cubic kilometres of water annually. It starts its journey from the Tibetan Plateau and flows the Southwest corner of China namely Yunnan Province. The Mekong River passes Lao PDR, Myanmar, Thailand, Cambodia and Vietnam before it empties its waters to the South China Sea. It is the tenth largest river in the world measured in water flow and is the largest river in Southeast Asia. The Mekong River flows 4200 kilometres from the Tibet to the Mekong Delta in Vietnam. However, the river flows in the Lower Mekong Basin 2400 kilometres. In addition, The Mekong Basin covers 795,000 square kilometres.<sup>1</sup>

The Mekong River has an average flow of 14,000 cubic meters per second. The monsoon climate of the basin causes great seasonal variability throughout the year. The wet season of the basin from May to November provides 85-90% of the total flow of the Mekong River.<sup>2</sup>



With regard to the flow length of the Mekong River, it flows as a boundary river between Lao PDR and Myanmar for 200 kilometres and between Lao PDR and Thailand for 100 kilometres. The river then passes into Lao PDR. The Mekong River flows through Lao PDR for approximately 500 kilometres and then forms again the boundary between Lao PDR and Thailand for 800 kilometres. The river then passes to Cambodia.

During the wet season in Cambodia, a very unique natural event exists and the Tonle Sap River reverses and the Tonle Sap Lake (which is also known as Great Lake) fills with the Mekong River waters. This natural storage reservoir releases its waters in the dry season and the Mekong Delta, which is in Vietnam, benefits from this release. The mainstream Mekong divides into nine rivers in the Mekong Delta, and delivers water and nutrients to the every corner of the Mekong Delta.<sup>3</sup>

The maximum flow of the Mekong River is 30,000-40,000 cubic meters per second. This flow can be observed in the wet season because of the monsoon rains. However, in the dry season, which is usually from December to May with almost no rainfall, the flow is around 2,000 cubic meters per second. Half of this dry season flow comes from snowmelt in the Himalayas where the Mekong River originates.<sup>4</sup>

Because of these characteristics of the flow mentioned above, the Mekong River forced to back up to the Tonle Sap Lake in Cambodia each year during the wet season and expands the surface area of the lake from approximately 2000 square kilometres to 10,000 kilometres<sup>5</sup> Furthermore, during the dry season the Tonle Sap Lake empties its waters back to the Mekong River mainstream. This natural cycle is important for the people of Cambodia since it provides the living directly from the natural resources.

The Mekong River also carries a huge hydroelectric potential. The technical hydropower potential is estimated as 37,000 MW installed capacity and 150,000-180,000 GWh/year. However, the only major development proj-

ect on the mainstream of the river is in China where several hydropower stations which are currently under construction or completed. These extreme hydrological cycles of the Mekong River Basin force the basin countries for joint development in the construction of storage facilities. The storage facilities would help to arrange the extreme flows that can cause damaging floods, store water for dry season irrigations and generate hydroelectric power. In the dry season, the average flow of the mainstream Mekong River is calculated as 2,000 cubic meter per second. The figure can be assessed as enough for all kind of utilizations in world standards (Euphrates 1000/ cubic meter per second). However, most of the water in the Mekong River Basin must be retained for the ecological purposes and for protection of the Mekong Delta in Vietnam against salinity intrusion.<sup>6</sup>

On the other hand, the ecological resources of the Mekong River Basin are also very high. Tropical and monsoon climate of the lower Mekong supports the productive and diverse aquatic eco-system in numerous wetlands. As an addition, this diverse eco-system also provides fisheries to the basin residents to meet their nutrition needs.<sup>7</sup>

# 2. The Socio-Economic Features Of The Mekong River Countries

China, which is located in Eastern Asia and is one of the most important upstream countries of the Mekong River Basin, has a population of 1.342 billion and it is expected to growth to 1.375 billion in 2015 since it has 0.6% of population growth rate annually. In addition to the rapid population growth, China has a rapidly expanding economy and its Gross Domestic Product (GDP) was US\$ 4,327 billion in 2008 and was US\$ 5,745 billion in 2010. Due to the rapid economic growth rate, China has a potential to face an energy problem. Therefore China, which is not a member of the Lower Mekong Commission, wants to construct dams on the Mekong River in Yunnan Province in order to meet its energy needs. Yunnan is the most south western province in China and it has an area of 394,000 square km, which constitutes 4.1% of the nation's total. Most importantly, Yunnan province is one of the China's undeveloped provinces and most of its population live below the poverty line. Therefore, China aims to improve the economic and social conditions of Yunnan province by providing cheap energy for the industry in the region.<sup>8</sup>

Myanmar, which was known as Burma as a British colony and became independent in 1948, is located in South-eastern Asia. Myanmar has a population of 49,563 million people and has essentially agricultural economy since it is rich in natural resources. Agriculture in Myanmar depends mostly on the monsoon rains. Myanmar's Gross Domestic Product (GDP) was US\$ 28,663 million in 2008 and Myanmar has a 2% of GDP growth rate. About 265 km of the Mekong River's total length is located on Myanmar border with China and Lao PDR.<sup>9</sup>

Lao PDR is surrounded by China, Vietnam, Cambodia, Thailand and Myanmar. Therefore, it can be said that Lao PDR differs from other Lower Mekong River Basin states by having boundaries with all of them. Lao PDR population in 2009 was 6,127 million and it had a 2.2% population growth rate in 2009. According to the World Bank Development Report for Lao PDR, the economy of Lao PDR has performed well in recent years as compared to other low-income countries. Its real GDP grew by 7% in 2009. Although this growth rate was slightly lower than the 7.6% in 2008, it can be seen as impressive by international standards if the recent global financial crisis is considered. However, Lao PDR is rich in natural resources which may be seen as a major contribution to the county's longterm economic development. Hydroelectric potential is one of the most important components of these resources. In this respect, several dams are being considered in the mainstream Mekong River but these dams will have major environmental effects at the local and national level.<sup>10</sup>

Vietnam, where the Mekong River empties its waters to the South China Sea, is located in South-eastern Asia. Vietnam population in 2008 was 87,096 million and it had a 1.1% population growth rate per annum for the period of 2005-2010. Vietnam is also the thirteenth most highly populated country in the world. Vietnam has changed its policy from a centrally planned economy to financial liberalization and international integration since 2001. In this context, Vietnam has implemented many structural reforms for capitalizing the economy and generating competitive export-driven industries in order to recover from war ravages and loss of economic support from the Soviet bloc. As a developing country, Vietnam's Gross Domestic Product (GDP) was US\$ 90,645 million in 2008 and its GDP growth rate was 6.2% in 2008.<sup>11</sup>

Thailand is one of the most important states of the Lower Mekong River Basin especially in terms of its economic and social power. Thailand's population was 67,386 million in 2008 and its population growth rate was 0.7% in the period of 2005-2010.12 Thailand had more than 4% per year growth rate of GDP from 2000 to 2007 as it is recovered from the Asian financial crises of 1997-1998. Exports industries of Thailand include machinery and electric components, jewellery and agricultural products and these industries account for more than half of its GDP. However, the global financial crises in 2008-2009 severely affected Thailand's experts and in 2009, the economy contracted 2.2%. In 2010, Thailand's GDP has expanded to 7.6%.13 Thailand is rich in freshwater resources and capture fisheries and aquaculture in the Thai portion of the Lower Mekong River Basin are a major component of these resources. In this context, it can be stated that the fisheries is an important element of the Thailand economy and income earned from fisheries is important for many of the inhabitants of Thailand. Most of the Mekong River Basin in northeast Thailand lies in a geographical province named the Khorat Plateau and 36% of the country's population live within the boundaries of the Mekong River Basin.<sup>14</sup>

Cambodia, also known as Kampuchea, is located in Southeast Asia and is bordered by Lao PDR, Vietnam and Thailand. The population of Cambodia was 14,562 million in 2008 and has 1.6% population growth rate for the period of 2005-2010.15 With regard to the economy profile of Cambodia it can be said that from 2004 to 2007, its Gross Domestic Product (GDP) increased about 10% per year and this economic growth was driven mainly by an expansion in the garment sector, construction, agriculture and tourism. However, in 2009, its GDP contracted about 1.5% because of the global economic crises but in 2010, its GDP again climbed more than 4% which is caused largely by renewed exports.<sup>16</sup> The Mekong River, which is the largest river in Southeast Asia, is the most important river in Cambodia. The Tonle Sap (Great Lake) Lake, which connects with the Mekong River in Phnom Pehn, is also located in western Cambodia. This lake is important for Cambodia since it is a rich resource for freshwater fish. Furthermore, the Mekong River is important for Cambodia since it is navigable for most of its flow through the country.

#### 3. The Mekong River Commision

# **3.1** The History of the Cooperation in the Lower Mekong Basin

The cooperation in the Lower Mekong River dates back to 1950's. The Committee for Coordination of Investigations of the Lower Mekong Basin, which is briefly known as the Mekong Committee, was constituted by the following countries: Thailand, Cambodia, Lao PDR and South Vietnam in 1957.<sup>17</sup>

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In order to create a Mekong facility there were three major actors: national governments of the Lower Mekong Basin, namely Lao PDR, Thailand, Cambodia and South Vietnam, the United Nations (UN) institution ECAFE (Economic Commission for Asia and the Far East) which is based in Bangkok, the Thailand capital city, and the United States of America. The American interest in the Lower Mekong Basin was to build a set to the communism after the Second World War. In the South Asia region, the U.S. contributed to the cooperation process not only with its authority but also in the United Nations system but also by its governmental institutions. In this context, the U.S. Department of Interior gave support to the mission for reconnaissance in 1955, which is called the Wheeler mission.<sup>18</sup>

It should be emphasized that the Wheeler mission constituted an important part of the history of the Mekong Committee. The mission was led by the U.S. General, the formerly chief of the United States Corps of Engineers, Raymond Wheeler. The mission has put the fundamental issues in the basin for regional cooperation.

The ECAFE has worked for the region since 1949. It was interested in those years especially in flood control and water resources development. With the contributions of all those works and the U.S. fears of communism, on 17 September 1957, four riparian countries of the Lower Mekong Basin, namely Thailand, Lao PDR, Cambodia and South Vietnam, signed the agreement of Statute of the Committee for Coordination of Investigations of the Lower Mekong Basin. Decisions in the Committee were taken unanimously and chairmanship of the Committee was rotated among the member states.

In the foundation process of the Mekong Committee, China was not invited since China was not an UN member state in 1950's. Burma (now Myanmar) did not announce any interest to the Mekong Committee due to the political and geographical reasons. In this respect, it can be said that the Mekong River has a different situation for Burma since the Mekong River is just a boundary river for Burma and contributes to the annual flow of the Mekong only 2%.

The Mekong Committee focused on some special areas of the basin management. These areas can be listed as follows: data collection, preparation of a basin plan, planning of individual projects and maintenance of the existing projects.<sup>19</sup> Furthermore, the Mekong Committee worked on both the short term tributary projects and the long term mainstream projects.

The projects on tributaries had primary concern in the Committee's plans. The reason of primary concern to the tributaries is an understandable attitude. Such projects could be initiated easily, required less investment and those tributaries located within the territory of the basin states. On the other hand, mainstream projects that require extensive studies, large investments and political conciliation among the basin states were seen in the long term plans. The cost of these planning activities was between 10-20 million U.S. dollars between the years 1958-1975.<sup>20</sup>

In these years, a number of small and medium sized projects, which are located in the tributaries of the Mekong River, were constituted by national governments. However, the project of cascade of dams in the mainstream of the Mekong River could not be realized due to the lack of financial resources and uncertain political position of Southeast Asia.

It is also worth to mention the political turmoil in the Southeast Asia during the period of 1958-1975. In 1954, the Indochinese states, Cambodia, Laos and Vietnam gained their

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independence from France with the Paris Agreement as Thailand, Laos and South Vietnam were supported by the United States. However, in Laos and Vietnam, communist insurgents gained power against the regimes throughout the 1960's. As an answer to the communist uprising, the USA led ASEAN (Association of Southeast Asian Nations), which consists of Thailand, Malaysia, Indonesia, Singapore, the Philippines and Brunei, was created in 1967. While this association can be seen as an economic and cultural cooperation, its primary role was to build a set against communism in both national and international aspects.<sup>21</sup>

After the victory of North Vietnam to the USA in Vietnam War and communist victory in Cambodia in 1975, the Cold War politics arose in Southeast Asia and cooperation in the Lower Mekong Basin was hindered because, Thailand and Vietnam, the two major powers in the Lower Mekong Basin, were on different blocks.

However, there were some efforts to cooperate in the Lower Mekong Basin before the Cold War tensions arose. In 1965, there was an endeavour to change the 1957 statute by changing the name of the Committee to the "Committee for Coordination of Comprehensive Development of the Lower Mekong Basin". Changing the name of the Committee can be evaluated as an important step. By this change, it was aimed to expand the mandate of the Committee to include construction of the development projects. However, this amendment was ratified by only three out of four members and did not come into effect. In 1971, a new amendment on the Mekong Committee was presented but it could not obtain an acceptance from all member states.<sup>22</sup>

In 1975, the "Joint Declaration of Principles for Utilization of the Waters of the Lower Mekong Basin", which allowed to the Mekong Committee to establish "Project Agencies" in order to implement mainstream projects, was accepted by the member states. Signing of the Joint Declaration in March 1975 made the Mekong Committee as a comprehensive river basin development agency. However, this achievement did not continue for a long time. In the mid 1975, government changes in Laos, Cambodia and Vietnam hindered the Committee's studies. In Cambodia Khmer Rouge took the control of the country and followed an isolationist policy. Despite to the Cold War tensions, Thailand and communist Vietnam and Laos decided to continue corporation in the Lower Mekong Basin. These three states agreed on the "Declaration Concerning the Interim Mekong Committee" which facilities at least low profile cooperation.<sup>23</sup>

The Interim Mekong Committee worked on cooperation till 1991 to the end of the civil war in Cambodia. After the Paris Peace Accords in 1991, which ends the Cambodian conflict, political obstacles have been removed that hinders the cooperation in the Lower Mekong Basin.24 In October 1991, Cambodia requested to re-admission to the Committee and the Mekong Committee resumed to work. However, in the year 1991 many things have changed with respect to 1975. Before 1975, the basin countries were closely allied to each other but in those years basin countries were situated in the different blocs and bloc politics of the Cold War disrupted the relations among them. Furthermore, in the 1980's and 1990's big dams that were planned to be build in mainstream Mekong were started to criticised because of their adverse social and environmental impacts.

China, which is the most upstream country in the Mekong River, started to plan large scale hydropower projects that can change the flow regime of the Mekong River. All these factors,



mentioned throughout this section, related to the Mekong River made the lower basin states to find a solution to the Mekong Committee. Thus, this new era paved the way for 1995 Agreement, which is explained in detail in the next section, for the Lower Mekong Basin.

#### 3.2 1995 Agreement

Four lower riparian countries of the Mekong River, Thailand, Lao PDR, Cambodia and Vietnam, gathered in Kuala Lumpur, Malaysia to discuss the new cooperation framework for the Lower Mekong River Basin in December 1992. This gathering was made under the auspices of UNDP (United Nations Development Programme) due to a stand-still in negotiations in early 1992.

Four parties held negotiations in order to amend the existing statute of the Mekong Committee. There were three options for the basin states: firstly, to amend the existing fundamental documents, which are the 1957 Statute and 1975 Declaration, secondly, to realize a new framework agreement on the basin development and at the last, to cooperate in good faith but not a frame of an agreement or statute. After a long negotiation process, four parties of the Lower Mekong River Basin agreed to negotiate a new framework of cooperation.<sup>25</sup>

Although all the relevant actors of the Lower Mekong River Basin agreed to reach a new framework agreement, the issues among the riparian countries about the river basin management, halted them to reach a solution. At this moment, UNDP again offered to provide help for the negotiations by attending an advisor with financial support.

Negotiations came to an end after 21 months and a draft was completed on 27 November 1994 by the Mekong Working Group. In April 1995, Lower Mekong River Basin countries signed the "Mekong Agreement for Cooperation for the Sustainable Development of the Mekong River Basin". It took only three months to ratify the Mekong Agreement by the relevant parties. China and Myanmar (Burma) held observer status to the Mekong River Commission which superseded the Mekong River Committee.<sup>26</sup>

The signatories of the 1995 Agreement aim to "cooperate on the basis of sovereign equality and territorial integrity in the utilization and protection of the water resources of the Mekong River Basin."<sup>27</sup> However, it should be mentioned here that the Mekong Commission has no mandate to act in its own to the contrary of the member states.<sup>28</sup>

The Mekong River Commission Secretariat, which is located in Vientiane, hosts many of the sector programs that feed the Basin Development Plan. These sector programs can be listed as follows: Environment Programme and the Agriculture, Irrigation and Forestry Programme. The water quantity rather than quality in the Mekong River is the main issue. This can be understandable in the Mekong River Basin. As mentioned above, the Mekong Basin is one of the least developed regions in the world. This means that the industrial contamination is very low in the basin. Furthermore, low flow rates can also increase the contamination.

The controversial issue among the riparian countries is the withdrawals of water from the river through inter basin transfer plans and storing water for irrigation and hydroelectric generation behind the big dams. These two issues are crucial in particular during the dry season since low water levels would have adverse effects for the furthest downstream, namely Cambodia and Vietnam.

The Mekong River Commission is using a limited definition of tributary. By this narrow definition, Mekong River Commission has no mandate on the tributaries of the Mekong

River which cause a "tributary development" issue funding by Asian Development Bank and Chinese private sector. Development of water resources in tributaries needs only notification to other riparian countries of the basin but does not need an approval process.<sup>29</sup>

The Mekong River Commission is focusing just on water sharing and not the sharing of the benefits. In fact, this makes the Commission not far away from the Committee's works.

The procedures of reasonable and equitable utilization are regulated in the Articles from 5 to 8 and in 26 in the 1995 Agreement. The Article 5 establishes the general principles of reasonable and equitable utilization whereas the Article 6 is for maintenance of flows in mainstream of the Mekong River. The harmful effects and basin states' responsibility is handled in the Article 7 and 8, respectively. In the Article 26, the basin states give mandate to establish rules for the Article 5 and 6 provisions.

The Article 5 regulates the mainstream and tributaries. This distinction based on two assumptions. First, most of the tributaries flow in one country's territory and the agreement gives priority to the state which the tributary flows in to the utilization of the tributary waters. Second, the flows of the tributaries are much lower than the mainstream and the potential effects of the utilizations are limited than the mainstream utilizations. However, the cumulative effects of those utilizations must be reconsidered especially in the dry season.

There is also a distinction on mainstream Mekong between dry and wet seasons and interbasin and intra-basin uses. In the agreement, inter-basin use is considered more harmful to the other riparian countries' utilizations than the intra-basin uses since intra-basin uses can flow to the basin but inter-basin cannot. Thus, parties agreed on that inter basin diversions from the mainstream of the Mekong River is subject to prior consultation among riparian states.

According to the Article 5, wet season intrabasin diversions are subject only to notification. However, wet season inter-basin utilizations need prior consultation. Dry season utilizations are more strict. In the intra-basin utilizations, there must be a prior consultation which aims to reach an agreement. However, inter-basin utilizations require a specific agreement among the interested parties.

Paragraph a. of the Article 6 decides to share the excess water of the minimum flow among the four riparian states. The former Mekong Committee gathered the data for years and the minimum flow rates can be determined by using this data. In this context, more mainstream dams can be assessed as they may lead to increase flow facilities especially in the dry season on upstream.

#### 3.3 The Mekong River Commission

The 1995 Mekong River Agreement established a new Mekong River Commission which is different in many ways from its predecessor, Mekong Committee. First, the Mekong River Commission is not an UN body and this feature is different from the Mekong Committee. Therefore, it can be argued that the Mekong River Commission is an independent institution. Second, the Mekong Commission is interested in not only technical issues but also policy issues. Third, different from the Mekong Committee, the Mekong Commission have three permanent bodies. These are Council, which is composed of one member from each state at the Ministerial level in order to take decisions on behalf of their respective states, the Joint Committee, which is composed of one member from each state at the Head of Department level to represent their government at the technical decision making body of the Mekong River Commission, and the Secretariat, which acts as an administrative unit for the Council and the Joint Committee. Forth, the difference of the Mekong Commission from the Mekong Committee is that the Executive officer of the secretariat is not form the UN system. The fifth and the last difference is that the Mekong Agreement is open to upstream riparian countries, China and Myanmar.<sup>30</sup>

In the new era in the Mekong Basin, each Mekong River Commission member state has a National Mekong Committee. The National Committee's duty is to formulate national policies according to the Mekong River Commission.

#### **3.4 The Deficiencies of the 1995 Agreement** and the Mekong River Commission

Despite the experience of more than 50 years, the Mekong River riparian countries cannot reach a holistic approach to the basin. Due to non-existence of holistic approach, the Mekong Commission cannot access data from the outside areas of its range. Furthermore, absence of China and Myanmar in the Mekong Commission pave the way especially for China to develop water resources unilaterally in its own territory. As a result of this unilateral action, the Lower Mekong River riparian countries have to adjust their utilizations to the new flow features of the Mekong River.

Another deficiency of the existing Mekong Basin management is the lack of decision on the length of the dry and wet season. Despite big variety of data of the Mekong Basin, the wet and dry seasons still remain undecided among the riparian countries. This situation indicates that the member states still lack the will to commit themselves to a strict regime. Another indicator of abstain from a strict regime is that the states were not reflected in the 1995 Agreement in their respective water laws. In order to work such a strong body, the Mekong River Commission must be funded by the member states. However, the Commission is still bounded to external funding.<sup>31</sup>

### 4. Basin States' Approachs To The Mekong River

Although there is an amendment for the utilization of the Mekong River, 1995 Agreement, riparian states pursues national policies in the Mekong River. In this section, the riparian states' national policies to the Mekong River will be examined.

#### 4.1 China

As stated above, China is the most important upstream country in the Mekong River Basin. China is a giant not only in Southeast Asia but also for the whole world. Furthermore, the Mekong River is one of the 15 transboundary rivers of China. The Mekong River Basin in China constitutes just 3% of the total territory. However, the Mekong River flows in narrow valleys and gorges in China. This means a huge hydroelectric potential. As China is aware of this potential, it built hydroelectric stations on the Mekong River and plans to build more in the future. The Chinese stretches of the Mekong River has a potential of 25,000 MW installed capacity. Despite to the fears, the dams could decrease the flow of the river especially in the dry season and the cascade dams have a positive impact that regulating the flow of the river.<sup>32</sup>

It should also be stated that China has several reasons not to be a member state of the Mekong River Commission. The first reason is that China has several transboundary and boundary rivers, 15 mainstream and more than 40 with the tributaries.<sup>33</sup> If China bounds itself with the 1995 Agreement, other downstream countries on transboundary rivers,

can claim such demands. The second reason is that China evaluates the 1995 Agreement as being very strict and it prefers lax agreements in transboundary rivers. Thirdly, if China accepts the 1995 Agreement, it must accept the existing agreement. However, China cannot accept the 1995 Agreement since it does not give priority to the upstream utilizations and does not recognize the regulating aspects of the dams. Fourthly, donor agencies and some of the Mekong River Commission countries do not want China to join the Commission. Finally, it should be remembered that China is one of the three nations that against to the 1997 Convention on the Law of Non-Navigational Uses of International Watercourses, with Turkey and Burundi.

#### 4.2 Myanmar

The other non member of the Mekong River Commission is Myanmar, formerly known as Burma. Myanmar has only 4% of its total territory in the Mekong River Basin and contributes to just 2% of the total flow.<sup>34</sup> For Myanmar, the Mekong River is just a boundary river and has been active only a limited extend in the Mekong River Commission.

#### 4.3 Thailand

Thailand's territory is at the 36% lies in the Mekong River Basin.<sup>35</sup> Thailand as the regional economic power and relatively an upstream country prefers a lax framework for cooperation. It was accused of delaying the establishment of the flow regime regulations in the negotiation process of the 1995 Agreement. Thailand is concerned that strict regulations on the river flow could hinder its freedom of utilization of the Mekong River waters.<sup>36</sup>

As being a relatively developed country, it can be argued that Thailand does not need the Mekong River Commission's capacity as much as the other members. Furthermore, Thailand evaluates the downstream demands on the Mekong River management too strict. Thailand would rather to see the Mekong River Commission as a facilitator than as a supranational body due to sovereignty reasons. Therefore, it can be said that Thailand's policy relevant to the Mekong River is close to China's policy.<sup>37</sup>

#### 4.4 Lao PDR

97% of the territory of the Lao PDR is in the Mekong River Basin. Lao PDR has unexploited water resources in the Mekong River tributaries. Due to this central position, Lao PDR prefers to develop water resources unilaterally. There are some suggestions that public participation issues in the Mekong River Commission policy recommendations are unacceptable for the Lao PDR government since the government evaluates those policies as a waste of time and resources which is very valuable for an underdeveloped country.<sup>38</sup>

#### 4.5 Cambodia

Cambodia's territory of 86% lies within the Mekong River Basin. As Cambodia suffers from decades of the civil war and Khmer Rouge regime, Cambodian people still depend on the resources especially fisheries that are provided by the Mekong River.

Cambodia's fisheries can be adversely affected by the upstream utilizations especially diversions from the river in the wet season. Cambodia guaranteed the wet season flow in the 1995 Agreement. Despite to the success in 1995 Agreement, as an underdeveloped country, Cambodian government concerned with the other issues like logging in the river and security.<sup>39</sup>

#### 4.6 Vietnam

20% of Vietnam's territory is in the Mekong River Basin. The Mekong Delta where the river empties its waters to the South China Sea is located in Vietnam. The Mekong Delta produces 90% of rice and 53% of shrimp in Vietnam.<sup>40</sup> Because of this producing level of the delta called as "rice bowl". The area accounts for 27% of Vietnam's total Gross Domestic Product (GDP). The delta consists of 39,000 square kilometres and 19,000 square kilometres of the delta face salt water intrusion during the dry season.<sup>41</sup> Due to the big significance of the delta for the Vietnamese, Vietnam government prefers a strict flow regime.

Furthermore, despite of being the downstream country, Vietnam is, in some tributaries such as Yali River, also an upstream country. This complexity makes Vietnam to prefer a predictable flow regime.

As explained above, all the Mekong River Basin states have different priorities and the importance of the Mekong River changes for each state. China, which is located in the upstream, enjoys of being the most powerful state in the Mekong River Basin and Myanmar is negligible in Mekong politics. On the other hand, the members of the Mekong River Commission have different needs on the waters of the river.

#### Conclusion

Although more than fifty years of cooperation tradition, as some call as "Mekong Spirit", the Mekong Basin states still pursue national policies in the utilization of the Mekong waters. This is an understandable manner since the different countries have different development levels and thus have different priorities.

China, as an upstream country, evaluates the Mekong River (in China Latang), particularly for the production of hydroelectric. The Yunnan province of China, where the Mekong River originates and flows in narrow valleys, is guite suitable to build dams and hydroelectric power stations. Therefore, China does not want to constraint itself with the Lower Mekong Basin needs in terms of flow regime. Myanmar is negligible in the Mekong politics because the Mekong River constitutes just a boundary river in Myanmar. Furthermore, the Lower Mekong River states have different priorities on the utilization of the Mekong waters. Thailand, which is relatively a major economic power and an upstream country in the Lower Mekong Basin, has plans to build dams on tributaries which can affect the flow regime. In this context, it can be stated that Thailand does not want strict arrangements on the utilization of the Mekong River.

Vietnam, which is located at the end of the Mekong River, is the most downstream country. The Mekong Delta is under threat due to the intrusion of salt water. A strict flow regime, which hinders water diversions, seems beneficial for Vietnam. Lao PDR has a big hydroelectric potential that can be compared with China in the Mekong Basin. However, as an underdeveloped country, Lao PDR has not adequate funds and technical power to build such dams. At this point, Chinese private investors participate in this process and serve their abilities. In order to obtain foreign investment and currency, Lao PDR has no choice but to accept the existing conditions. On the other hand, Cambodia is also a relatively weak state in terms of its economic and human power and it needs a strict flow regime. The Tonle Sap Lake, which contributes an important portion of Cambodian nutrition, is primary concern of Cambodia.

As a consequence, despite the cooperation efforts which date back to 1950's, different interests of the Mekong Basin states cause obstacles on hydrodevelopment plans in the basin.

#### **ENDNOTES**

- 1 Ojendal, J., Mainland Southeast Asia: Co-operation or Conflict over Water?, in *Hydropolitics*, Leif Ohlsson (ed), 1995, Zed Books, London. p. 153.
- 2 Dore, John "The governance of increasing Mekong regionalism", in: *Social Challenges for the Mekong Region*, J. Dore and M. Kaosa-ard(eds), Bangkok: White Lotus, 2003. p. 423.
- 3 . Radosevich G. E. &. Douglas C. Olson, Existing and Emerging Basin Arragements in Asia, Third Workshop on River Basin Institution Development, The World Bank, Washington, DC, 1999. p. 4.
- 4 Ibid.
- 5 Browder, Greg (1998), *Negotiating an International Regime for Water Allocation in the Mekong River Basin*, The Department of Civil and Environmental Engineering, Ann Arbor: Stanford University, 1998, p. 36.
- 6 Radosevich G. E. &. Douglas C. Olson, p. 5.
- 7 Friend, R., Robert Arthur and Marko Keskinen, Songs of the Doomed: The Continuing Neglect of Capture Fisheries in Hydropower Development in the Mekong, in *Contested Waterscapes in the Mekong Region* Francois Molle, Tira Foran, Mira Kakonen (eds), 2009, Earthscan, London, p.309.
- 8 http://www.china.org.cn/english/features/67796.htm; http://data.un.org/CountryProfile.aspx?crName=CHINA
  9 http://data.un.org/CountryProfile.aspx?crName=MYANMAR
- http://www.nsc.gov.la/; http://siteresources.worldbank.org/LAOPRDEXTN/Resources/293683-1301084874098/ LDR2010\_Full\_Report.pdf; Lao PDR Development Report 2010, Natural Resource Management for Sustainable Development: Hydropower and Mining, The World Bank.
- 10 http://www.economywatch.com/world\_economy/vietnam/,
- 11 http://data.un.org/CountryProfile.aspx?crName=Viet%20Nam
- 12 http://data.un.org/CountryProfile.aspx?crName=THAILAND
- 13 https://www.cia.gov/library/publications/the-world-factbook/geos/th.html
- 14 http://www.mrcmekong.org/download/free\_download/Mekong-Fisheries-of-Thailand-Eng.pdf
- 15 http://data.un.org/CountryProfile.aspx?crName=Cambodia
- 16 http://www.indexmundi.com/cambodia/economy\_profile.html
- 17 Backer, Ellen Bruzelius, The Mekong River Commission: Does It Work, and How Does the Mekong Basin's Geography Influence Its Effectiveness?, *Südostasien Aktuell*, v. 4, 2007, p. 36.
- 18 Ojendal, p. 155.; Sneddon C, Coleen Fox, Rethinking Transboundary Waters: A Critical Hydropolitics of the Mekong Basin, *Political Geography*, Vol: 25, 2006, p. 185.
- 19 Mekong Secretariat, The Mekong Committee: A Historical Account (1957-1989), Bangkok, 1989, p. 14.
- 20 Radosevich G. E. &. Douglas C. Olson, p. 6.
- 21 Ojendal, p. 158.
- 22 Radosevich G. E, Agreement on the Cooperation for the sustainable Development of the Mekong River Basin: Commentary and History of the Agreement, UNDP, 1996.
- 23 Jacobs, Jeffrey W., Mekong Committee History and Lessons for the River Basin Development, *The Geographical Journal*, Vol: 161, No: 2, 1995, p. 143.
- 24 Bakker, K., The Politics of Hydropower: Developing the Mekong, Political Geography, Vol: 18, 1999, p. 213.
- 25 Radosevich G. E. &. Douglas C. Olson, p. 9.
- 26 Radosevich G. E. &. Douglas C. Olson, p. 12.
- 27 The Mekong Agreement, Article 4, available in http://www.mrcmekong.org/agreement\_95/agreement\_95. htm#chap2
- 28 Osborne, Milton, *River at risk. The Mekong and the water politics of China and Southeast Asia*, Lowy Institute for International Policy, 2004. p. 9.
- 29 The Mekong Agreement, Article 5.
- 30 Radosevich G. E. &. Douglas C. Olson, p. 17.
- 31 Backer, 2007, p. 45.
- 32 Lu Xi Xi, Wang Jian-Jun & Carl Grundy-Warr, Are the Chinese Dams to be Blamed for the Lower Water Levels in the Lower Mekong?, in *Modern Myths of the Mekong*, Kummu, M., Keskinen, M. and Varis O. (eds), Water and Development Publications, Helsinki University of Technology, 2008., p. 39.
- 33 He, Daming & Kung, Hsiange-te "Southwest China and Southeast Asia: towards sustainability through cooperative development and management of international rivers", in: *The Journal of Chinese Geography*, 1995, v.8 (3), p. 301.
- 34 Backer, 2007, p. 44.
- 35 Dore, John., 2003, p. 423.
- 36 Browder, Greg & Ortolano, Leonard, The Evolution of an International Water Resources Management Regime in the Mekong River Basin, in: *Natural Resources Journal* v. 40, 2000, p.257.
- 37 Backer, 2007, p. 40.
- 38 Backer, 2007, p. 40.
- 39 Osborne, 2004, p. 43.; De Lopez, Thanakvaro Thyl, Natural Resource Exploitation in Cambodia: An Examination of Use, Appropriation, and Exclusion, in: *Journal of Environment & Development* v. 11 (4), 2002, p. 362.
- 40 Quang, Nguyen Nhan, Vietnam and the sustainable development of the Mekong river basis, in: *Water Science and Technology* v. 45 (11),2002, p. 263.
- 41 Jacobs, Jeffrey W. (2002), "TheMekong River Commission: transboundary water resources planning and regional security", in: *The Geographical Journal* v. 168/4, 2002, p. 356.

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