1. Case summary

River basin: Mekong River (Figure C.1, table 1)

Dates of negotiation: Committee formed 1957

Relevant parties: Cambodia, Laos, Thailand, Vietnam (directly); China, Myanmar (indirectly)

Flashpoint: None—studies by UN-ECAFE (1952, 1957) and U.S. Bureau of Reclamation provide impetus for creation of Mekong Committee

Issues: Stated objectives: Promote, coordinate, supervise, and control the planning and investigation of water resources development projects in the Lower Mekong Basin

Additional issues: Non-water: general political relations between riparians

Excluded issues: China and Myanmar were not included since inception; Cambodia not included from 1978-1991

Criteria for water allocations: Allocations have not been an issue; "reasonable and equitable use" for the basin defined in detail since 1975

Incentives/linkage: Financial: extensive funding from international community; Political: facilitated relations between riparians, aid from both east and west despite political tensions

Breakthroughs: Studies by UN-ECAFE and U.S. Bureau of Reclamation in 1950s

Status: Mekong Committee established in 1957, became Interim Committee in 1978 with original members except for Cambodia. Early momentum dropped off, but has resurfaced with extensive programs and project proposals—extensive data networks and databases established, Committee re-ratified as Mekong Commission in 1995.

Figure 1: Map of the Mekong River Basin (TFDD, 2007).
Table 1: Features of the Mekong watershed.

<table>
<thead>
<tr>
<th>Name</th>
<th>Riparian states</th>
<th>Riparian relations (with dates of most recent agreements)</th>
<th>Average annual flow (km³/yr.)</th>
<th>Size (km²)</th>
<th>Climate</th>
<th>Special features</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mekong</td>
<td>Cambodia (Kampuchea) (0.1), China (19.3), Laos, People’s Democratic Republic of (0.8), Myanmar (Burma) (0.4), Thailand (32.1), Vietnam (2.8)</td>
<td>Cool to warm (1957 Mekong Committee ratified as 1995 Mekong Commission)</td>
<td>470</td>
<td>787,800</td>
<td>Humid to tropical</td>
<td>Good example of resilience of agreement</td>
</tr>
</tbody>
</table>

a Values for lakes under "Annual Flow" are for storage volumes.
b Source: Kulshreshtha (1993)
2. Background
The Mekong is the seventh largest river in the world in terms of discharge (tenth in length), rising in China, then flowing 4200 kilometers through Myanmar, Laos, Thailand, Cambodia, and finally through the extensive delta in Vietnam into the South China Sea. It is also both the first successful application of comprehensive approach to planning development of an international river and, at the same time, is one of the least developed major rivers in the world, in part because of difficulties inherent in implementing joint management between these the diverse riparians.

In 1947, the United Nations Economic Commission for Asia and the Far East (ECAFE) was created to help with the development of Southeast Asia. A 1952 ECAFE study, undertaken with the cooperation of the four lower riparians—Cambodia, Laos, Thailand, Vietnam—noted the Mekong’s particular potential for hydroelectric and irrigation development. These recommendations could not be acted upon until the signing of the Geneva Accords in 1954 ended hostilities in the region.

The U.S. Bureau of Reclamation performed a report on planning and development on the lower basin in 1955-56, which urged joint management in developing the river, to which the four lower riparians agreed. The study noted the almost total absence of data necessary for river basin planning; emphasized the need to get a program for data collection and analysis underway immediately; and offered suggestions for the types of programs which should be implemented.

A 1957 ECAFE report concurred with the optimistic potential noted in earlier studies. The report noted that harnessing the main stem of the river would allow hydropower production, expansion of irrigated land, a reduction of the threat of flooding in the delta region, and the extension of navigability of the river as far as northern Laos. As earlier studies had, the ECAFE report emphasized the need for comprehensive development of the river, and close cooperation between the riparians in coordinating efforts for projects and management. To facilitate coordination, the report suggested the establishment of an international body for exchanging information and development plans between the riparian states. Ultimately, the report suggested, such a body might become a permanent agency responsible for coordinating joint management of the Mekong basin. When the report was presented in the tenth-anniversary meeting of ECAFE in Bangkok in March 1957, representatives from the four lower riparian states themselves adopted resolution calling for further study.

3. The problem
As is common in international river basins, integrated planning for efficient watershed management is hampered by the difficulties of coordinating between riparian states with diverse and often conflicting needs. The Mekong, however, is noted mostly for the exceptions as compared with other basins, rather than the similarities. The Mekong, for example, is not an exotic stream, and consequently does not have the sharp management conflicts between well-watered upstream riparians and their water-poor downstream neighbors as, for instance, the Euphrates and the Nile. Historically, the two uppermost riparians, China and Myanmar, have not been participants in basin planning, and they have had no development plans which would disrupt the downstream riparians until very recently. Also, because the region is so well-watered, allocations per se are not been a major issue. Finally, negotiations for joint management of the Mekong were not set off by a flashpoint, as were all of the other examples presented in this work, but rather by creativity and foresight on the part of an authoritative third party—the United Nations—with the willing participation of the lower riparian states.

More recently, however, the liberalization of China’s economy, population growth, demand for increased agriculture yields, growing household demand of water for consumption and sanitation, and shortages of electricity has incited Chinese officials to look to the potential of the Mekong’s Upper Basin. It is not, therefore, surprising that China would like to fully develop the Upper Mekong Basin and has proposed the building of 15 dams for hydroelectric power (Elhance, 1999, p. 197). This unilateral development project alone would have large implications for the downstream riparian states. In the absence of basin-wide consensus and cooperation, these unilateral developments have the potential to make the hydropolitics in the Mekong basin much more contentious (Elhance, p. 198). The completion of two
Major dams on the Chinese part of the Lacang-Mekong mainstream, and the prospect of six or seven more hydropower dams in that area, coupled with the recent in navigability along the Mekong (by blasting the rapids and rocks) underline the urgent need to build and appropriate legal framework and to formulate technical guidelines conducive to turning these potential conflicts into opportunities for sharing benefits.

4. Attempts at conflict management

As noted, the 1957 ECAFE study was met with enthusiasm by the lower Mekong riparians. In mid-September 1957, after ECAFE's legal experts had designed a draft charter for a "Coordination Committee," the lower riparians convened again in Bangkok as a "Preparatory Commission." The Commission studied, modified, and finally endorsed a statute, which legally established the Committee for Coordination of Investigations of the Lower Mekong (Mekong Committee), made up of representatives of the four lower riparians, with input and support from the United Nations. The statute was signed on September 17, 1957.

The Committee was composed of "plenipotentiary" representatives of the four countries, meaning that each representative had the authority to speak for their country. The Committee was authorized to "promote, coordinate, supervise, and control the planning and investigation of water resources development projects in the Lower Mekong Basin." The statute included authority to prepare and submit to participating governments plans for carrying out coordinated research, study, and investigation; make requests on behalf of the participating governments for special financial and technical assistance and receive and administer separately such financial and technical assistance as may be offered under the technical assistance program of the United Nations, the specialized agencies, and friendly governments; draw up and recommend to participating governments criteria for the use of the water of the main river for the purpose of water resources development.

It was determined that all meetings must be attended by a representative from each of the four countries, and each decision must be unanimous. Meetings would be held three to four times a year, and chairmanship would rotate annually in alphabetical order by country (Figure 2). The first Committee session was on October 31, 1957, as was the first donation from the international community—60 million francs (about US$120,000) from France. In late 1957, the Committee, recognizing that data collection was a crucial prerequisite to comprehensive watershed development, asked the UN Technical Assistance Administration to organize a high-level study of the basin. Before the year was out, a mission headed by Lt. General Raymond Wheeler, who had been the deputy commander of the Allied bases in the region during World War II, and later Chief of the U.S. Army Corps of Engineers, arrived in Bangkok.

The principal recommendation of the Wheeler Mission was that, while reaffirming the great potential of water resources development, suggesting that, properly developed, the river, "could easily rank with Southeast Asia's greatest natural resources," the absence of data required that a series of detailed hydrographic studies precede any construction. The mission recommended a five-year program of study, to cost approximately $9 million (Table 2).

5. Outcome

The early years were the most productive for the Mekong Committee. Networks of hydrologic and meteorologic stations have been established and continued to function despite hostilities in the region, as have programs for aerial mapping, surveying, and leveling. Navigation has been improved along the main stem of the river, but no major project has yet to be initiated, although dozens have been proposed.

The work of the Committee has also helped overcome political suspicion through increased integration. In 1965, Thailand and Laos signed an agreement on developing the power potential of the Nam Ngum River, a Mekong tributary inside Laos. Since most of the power demand was in Thailand, which was willing to buy power at a price based on savings in fuel costs, and since Laos did not have the
resources to finance the project, an international effort was mobilized through the Committee to help develop the project. As a sign of the Committee’s viability, the mutual flow of electricity for foreign capital between Laos and Thailand was never interrupted, despite hostilities between the two countries.

By the 1970s, the early momentum of the Mekong Committee began to subside, for several reasons. First, the political and financial obstacles necessary to move from data gathering and feasibility studies to concrete development projects have often been too great to overcome. A 1970 Indicative Basin Plan marked the potential shift between planning and large-scale implementation, including immense power, flood control, irrigation, and navigation projects, and setting out a basin development framework for the following thirty years. In 1975, the riparians set out to refine the Committee's objectives and principles for development in support of the Plan in a "Joint Declaration on Principles," including the first (and so far only) precise definition of "reasonable and equitable use" based on the 1966 Helsinki Rules ever used in an international agreement (International Law Association, 1966). The plan, which included three of the largest hydroelectric power projects in the world as part of a series of seven cascading dams, was received with skepticism by some in the international community (Kirmani 1990, p. 203). At the current time, while many projects have been built along the tributaries of the Mekong within single countries, and despite the update of the Indicative Plan in 1987 and a subsequent "Action Plan" which includes only two low dams, no single structure has been built across the main stem.

Second, while the Committee continued to meet despite political tensions, and even despite outright hostilities, political obstacles did take their toll on the their work. Notably, the Committee became a three-member "Interim Committee" in 1978 with the lack of a representative government in Cambodia. Cambodia rejoined the committee as a full participant in 1991, although the Committee still retains "interim" status. Likewise, funding and involvement from the United States, which had been about 12% of total aid to the Committee, was cut off in June 1975, and has not been restored to significant levels.
At its second session, from 10-12 February 1958, the Mekong Committee adopted Wheeler’s program as its own five-year plan. It also accepted another suggestion of the Wheeler Mission, that a permanent advisory board of professional engineers "of worldwide reputation" be established. It likewise noted the desirability of having a full-time director with ancillary staff. ECAFE responded and appointed members to the advisory board, secured Committee approval for the appointment of Dr. C. Hart Schaaf as Executive Agent, who assumed office in mid-1959, and established the Committee Secretariat as an ECAFE adjunct body to which UN staff members could be assigned.

With rapid agreement between the riparians came extensive international support for the work of the Committee—by 1961, the Committee's resources came to $14 million, more than enough to fund field surveys which had been agreed to as priority projects. By the end of 1965, twenty countries, eleven international agencies, and several private organizations had pledged a total of more than $100 million. The Secretariat itself was funded by a special $2.5 million grant made by UNDP. This group of international participants has been dubbed "the Mekong club," which has infused the international community with "the Mekong spirit" (Table 3).

Along with the collection of physical data and the establishment of hydrographic networks, the Mekong Committee early encouraged the undertaking of economic and social studies and the initiation of training programs. In 1961, Prof. Gilbert White headed a mission, sponsored by the Ford Foundation, which found that, while existing and planned projects would provide water for irrigation and power for industry, these resources could be used to their maximum benefit only with extensive training of the local population. In an important shift from a strictly engineering approach, many of the mission's recommendations have been adopted.

Table 2: Recommendations of the Wheeler mission, 1958

<table>
<thead>
<tr>
<th>Study or action</th>
<th>Countries/agencies participating</th>
<th>Begun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preliminary reconnaissance of major tributaries</td>
<td>Japan</td>
<td>1959</td>
</tr>
<tr>
<td>Hydrologic and meteorologic observations</td>
<td>US, France, Great Britain, India</td>
<td>1959</td>
</tr>
<tr>
<td>Aerial mapping and leveling</td>
<td>Canada, Philippines</td>
<td>1959</td>
</tr>
<tr>
<td>Soil surveys</td>
<td>France</td>
<td>1959</td>
</tr>
<tr>
<td>Geological investigations</td>
<td>Australia</td>
<td>1961</td>
</tr>
<tr>
<td>Hydrographic survey</td>
<td>UN, Belgium, US, Great Britain, New Zealand, Netherlands</td>
<td>1961</td>
</tr>
<tr>
<td>Related and special studies¹</td>
<td>UN, US, France, Private agencies, Nordic countries</td>
<td>1962</td>
</tr>
<tr>
<td>Preliminary planning of projects on main stem</td>
<td>US, Japan, India, Australia, France</td>
<td>1959</td>
</tr>
<tr>
<td>Preparation of basin-wide plan</td>
<td>Mekong Committee, aided by ECAFE Secretariat</td>
<td>1959</td>
</tr>
<tr>
<td>Appointment of advisory board</td>
<td></td>
<td>1958</td>
</tr>
</tbody>
</table>

¹ Including studies of fisheries, agriculture, forestry, minerals, transportation, and power markets.
Finally, some regional politics between the riparians have been played out through the Mekong Committee. Thailand, with the strongest economy and greatest resource needs, has been pushing in recent years for revisions in the Committee's rules which currently allow an effective veto of Thai projects by downstream riparians. Thailand has found its own funding for four Mekong projects within its own territory, and has plans for several more, some of which would probably be opposed by downstream riparians if they were brought before the Mekong Committee. In 1992, Thailand canceled a plenary meeting two days before it was scheduled, and later asked the UNDP to remove the Executive Agent, a request to which the UNDP complied.

Renewed activity came with the signing of the Paris Peace Agreement in 1991, after which Cambodia requested the reactivation of the Mekong Committee. The four lower riparians took up the call and spent the next four years determining a future direction for Mekong activities. The results of these meetings culminated finally in a new agreement, was signed in April 1995, and in which the Mekong Committee became the Mekong Commission. While it is too early yet to evaluate this renewed body, the fact that the riparians have made a new commitment to jointly manage the lower basin speaks well at least for the resiliency of agreements put into place in advance of hot conflict. It should also be noted that Myanmar and China are still not party to the agreement, effectively precluding integrated basin management.

While the establishment of the Mekong Committee and its work provide an impressive example of the potential of integrated watershed management on an international scale, its actual accomplishments have not kept pace with its early momentum, likewise providing lessons for the international arena. The 1995, Agreement Towards Sustainable Development under the Mekong River Commission lacks the political power and support from China and Myanmar needed to successfully implement all of the goals of the Commission and may mirror past momentum if these two countries are not brought on board.

Since its inception in 1995, the Mekong River Commission has been implementing many programs under its jurisdiction. The following are the programs already underway (Mekong River Commission): Basin Development Plan; Water Utilization Program; Environment Program; Flood Management Program; Capacity-Building Program; Agriculture, Irrigation and Forestry Program; Fisheries Program; Navigation Program; and Water Resources and Hydrology.

Of the few projects that have been implemented within the Mekong River Commission, none have been constructed on the main stem of the river. Two major dams can be found on tributaries of the Mekong: the Pak Moon dam in Thailand, which is found on the Pak Moon River, and the Theun-Hinboun dam on the Theun River in Laos.

6. Lessons learned

- Establishing an international framework for integrated watershed management well before a flashpoint makes the task easier and more likely to succeed during later times of stress.
  Both the riparians of the Lower Mekong and the international community saw the potential of a well-managed river well before "water stress" led to a crisis. By establishing and utilizing the necessary management infrastructure before respective senses of urgency had the chance to hamper political decisionmaking, the Mekong Committee had already developed a routine of cooperation which proceeded despite later political tensions.

- Emphasizing data collection in advance of any construction projects, one both sets the hydrographic stage for more efficient planning, and also may establish a pattern of cooperation through relatively emotion-free issues.
  The insistence of the Wheeler Mission that extensive data-gathering precede any construction made both management and political sense.

- Solving water-related issues involves both technical and social aspects of development.
  The importance of the White Mission was a conceptual shift in the basin from a strictly engineering perspective of the challenges of the river to a social view which sought also to address the needs of the riparian population.
Table 3: Studies recommended by the Ford mission, 1961.

<table>
<thead>
<tr>
<th>Study or action</th>
<th>Countries/agencies participating</th>
<th>Begun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Addition of skilled personnel to deal with economic and social studies</td>
<td>Mekong Committee, riparians, ECAFE</td>
<td>1962</td>
</tr>
<tr>
<td>Development of programs to train personnel for economic and social studies, and to use products of river development</td>
<td>Mekong Committee, riparians</td>
<td>1963</td>
</tr>
<tr>
<td>Manpower studies</td>
<td>ILO</td>
<td>1966</td>
</tr>
<tr>
<td>Fisheries studies</td>
<td>France</td>
<td>1960</td>
</tr>
<tr>
<td>Minerals studies</td>
<td>France</td>
<td>1962</td>
</tr>
<tr>
<td>Agricultural surveys</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Studies of patterns and levels of living</td>
<td>n/a</td>
<td></td>
</tr>
<tr>
<td>Estimates of demands for electric power</td>
<td>France, Resources for the Future, Mekong Committee</td>
<td>1962</td>
</tr>
<tr>
<td>Studies of adjustments to floods</td>
<td>UN/TAB, France</td>
<td>1961</td>
</tr>
<tr>
<td>Development of agriculture demonstration projects</td>
<td>UN, France, Israel</td>
<td>1962</td>
</tr>
<tr>
<td>Establishment of experimental forest</td>
<td>n/a</td>
<td></td>
</tr>
</tbody>
</table>

- The greater the international involvement in conflict resolution, the greater the political and financial incentives to cooperate.
  The pace of development and cooperation in the Mekong River watershed over the years has been commensurate with the level of involvement of the international community. Early accomplishments were impressive, impelled in part by strong UN support and a "Mekong Spirit" on the part of the "Mekong Club" of donors. By the 1970s, the pace of cooperative development began to slacken, partly the result of decreasing involvement by an international community daunted by political obstacles and the size of planned projects.

- For an environmentally feasible and sustainable sound management to occur, all riparian states must be present.
  The two upper-stream countries—Myanmar and China—need to be involved in international cooperation over the transboundary river basin.

7. Creative outcomes resulting from resolution process
The early accomplishments of the Mekong Committee, and the particularly ordered approach to the basin—establishment of joint management, data collection, feasibility studies of both technical and social aspects of development, implementation—provide a useful model for any international basin.

  The legally intricate question of "reasonable and equitable" use of the basin was defined in detail, the first (and so far only) explicit use of the principles of the 1966 Helsinki Rules in any international
8. Timeline

- 1947 United Nations Economic Commission for Asia and the Far East (ECAFE) is created to help with the development of Southeast Asia.
- 1952 ECAFE study notes Mekong's potential for hydroelectric and irrigation development.
- 1954 Geneva Accords signed, ending hostilities in the region.
- 1957 ECAFE report concurs with earlier findings. When the report is presented to an ECAFE meeting in March, the riparians themselves call for further study.
- Sep 1957 Riparians negotiate a draft charter for the "Committee for Coordination of Investigations of the Lower Mekong." Statute signed on 17 September 1957, bringing Mekong Committee into legal existence.
- Late 1957 Wheeler Mission suggests that first priority be data gathering throughout the basin, in advance of any construction. Wheeler's program adopted as Mekong Committee's first five-year plan.
- 1961 White Mission urges social aspects of development be investigated commensurate with technical aspects. Many of Mission's recommendations for training programs are adopted.
- 1965 Laos and Thailand sign agreement on power generation project on Nam Ngum River, a Mekong tributary within Laos, by which Thailand agrees to buy surplus power. Exchange of power for foreign capital never discontinued, despite tensions between the two countries.
- 1970 Indicative Basin Plan describes proposed large-scale development of Mekong basin.
- 1975 Joint Declaration on Principles signed, including the first precise definition of "reasonable and equitable use," as described in Helsinki Rules, ever used in international agreement.
- 1978 Mekong Committee becomes a three-member "Interim Mekong Committee," with the lack of a representative government in Cambodia.
- 1987 Indicative Plan revised and updated.
- 1991 Cambodia rejoins as full participant, but Committee remains legally "interim."
- 1992 Thailand asks UNDP to remove Executive Agent; UNDP complies.
- 1995 Mekong Committee re-ratified as Mekong Commission. Cooperation for the Sustainable Development of the Mekong River Basin signed by Cambodia, Laos, Thailand and Vietnam for sustainable development, utilization, conservation and management of the Basin while attempting to bring the two upstream countries, Myanmar and China into the cooperation.
References


