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ARTICLE

Only One Mekong: Developing Transboundary EIA Procedures of Mekong River Basin

JIAN KE & QI GAO*

I. INTRODUCTION

Environmental threats are not respectful of national borders.¹ Hence, any one country may be effectively unable to protect its own environment.² The ecological integrity of river basins calls for cooperation among all riparian states. The Mekong River—also known as the Lancang River in China—“is the heart and soul of mainland Southeast Asia.”³ The Mekong River Basin (MRB), with a total land area of 795,000 square kilometers, includes parts of China, Myanmar, Vietnam, nearly one third of

* This paper is based on two presentations made by the authors at the conferences held in Chiang Mai, Thailand by the Earth Rights International (ERI) and the Mekong Legal Advocacy Institute (MLAI, it is now renamed into the Mekong Legal Network) in 2009 and 2010. It also incorporates views held in Qi Gao's Ph.D. dissertation. The authors would like to thank Mr. Marty Bergoffen and Mr. Daniel King at the MLAI (MLN) for their research suggestions and their coordinative and organizational job, and Dr. Carl Middleton at the Chulalongkorn University for kindly sharing valuable research resources and information. Also, the academic support from Professor Michael Jeffery, QC and Professor Donna Craig at the University of Western Sydney is very much appreciated. Finally, the authors appreciate the constructive views from Ivan Torres and the friends at the ERI and the MLAI (MLN).

1. U.N. Secretariat, Strengthening of Environmental and Health Aspects of Transportation, Note by the Secretariat, ¶ 5, Inland Transport Comm., U.N. Doc. ECE/TRANS/2008/4 (Dec. 10, 2007).

2. ROGER W. FINDLEY & DANIEL A. FARBER, ENVIRONMENTAL LAW IN A NUTSHELL 53 (2000).

3. *Mekong/Lancang River*, INT'L RIVERS, <http://www.internationalrivers.org/en/china/lancang-mekong-river> (last visited Apr. 15, 2013).

Thailand, and most of Cambodia and Laos.⁴ All riparian states within the MRB are developing countries and this region is densely populated—the lower MRB (Laos, Thailand, Cambodia, and Vietnam) is home to approximately sixty million people.⁵ A high percentage of the population in the Basin is still struggling under the poverty line.

China shares borders with fourteen countries and has many international rivers.⁶ In most cases, China is an upstream state. Over the past years, increasing international disputes concerning international rivers have occurred between China and other riparian states, such as China's dam construction on the upper Mekong River and the Songhua River pollution accident.⁷ In particular, with the ongoing dam construction on the upstream of Mekong in China, its potential environmental impact on the other Mekong countries is highly profiled.⁸ At the time of writing, five dams are already completed and two are in the final stage of construction or getting formal approval.⁹

4. *About the Mekong — the Land & its Resources*, MEKONG RIVER COMM'N, http://ns1.mrcmekong.org/about_mekong/about_mekong.htm (last visited Apr. 15, 2013).

5. *People*, MEKONG RIVER COMM'N, <http://www.mrcmekong.org/topics/people/> (last visited Apr. 15, 2013).

6. *See China's Borders*, CHINA BRIEFING, <http://www.china-briefing.com/news/specialreport/chinas-borders> (last visited Apr. 15, 2013).

7. A severe water pollution accident occurred on the Songhua River in mid-November 2005 due to an explosion in a petrochemical plant (belonging to PetroChina) in Jilin Province, China. PetroChina and the local government were criticized for concealing information regarding the discharge of chemicals into the river for around one week from the central government, the downstream governments, the affected public, and Russia. This accident triggered the establishment of an emergency notification system between China and Russia. *See generally* Zou Keyuan, *Transnational Cooperation for Managing the Control of Environmental Disputes in East Asia*, 16 J. ENVTL. L. 341, 347(2004); L. Waldron Davis, *Reversing the Flow: International Law and Chinese Hydropower Development on the Headwaters of the Mekong River*, 19 N.Y. INT'L L. REV. 1, 2-16 (2006); Wang Xiangwei, *Mainland's Environmental Chief Sacked Over Toxic Chemical Spill*, S. CHINA MORNING POST, Aug. 10, 2012, <http://www.scmp.com/node/527660>.

8. *See* Davis, *supra* note 7, at 2-5.

9. The first of these, the Manwan Dam, was completed in 1994, followed by Dachaoshan, Jinghong, and Nuozhadu. In March 2010, the Xiaowan Dam was completed as the highest arch dam in the world. While the Gongguoqiao Dam was scheduled to start operating by the end of 2012 and the Ganlanba Dam is in the final stage of getting formal approval, the Mengsong Dam, as the lowest of

This situation is further complicated by eleven dam proposals on the lower Mekong River.¹⁰ Most of the concern over these downstream dams is their potential impact on the passage and breeding capacities of the Mekong's many fish species.¹¹ In addition, other issues like increased navigation and industrialization also put the River's ecosystem under threat.¹² Since all riparian states located in this area are developing countries, the tension between economic development and environmental protection is fierce. The MRB is also challenged by global environmental threats like climate change. The downstream states of the Mekong River are among the most vulnerable to climate change in the world.¹³

In response to the above environmental problems, particularly the controversial issue of Mekong mainstream dam construction, this paper will take a procedural perspective and focus on developing the mechanism of transboundary environmental impact assessment (TEIA) in the MRB. Specifically, issues like the significance of establishing TEIA and

the eight dams on the cascade, was cancelled in 2007 in order to allow fish passage up a significant tributary to compensate for the obstructed passage past Jinghong (and the Ganlanba Dam in the future). See *Zhongguo zai meigonghe de shuidian kaifa jiang chengshou gengda guoji yali* [China's Dam Construction on the Upper Mekong Faces Increasing International Pressure], ZHONGGUO SHUIKEJI WANG [CHINESE WATER TECHNOLOGY], <http://www.watertech.cn/info93/Guoji.htm> (last visited Apr. 15, 2013); Philip Hirsch, *The Changing Political Dynamics of Dam Building on the Mekong*, 3 WATER ALTERNATIVES 312, 317, 319 (2010); Kunming, *Xiaowan Hydropower Station Easing Electricity Demand in YN*, INKUNMING, Mar. 16, 2010, http://en.kunming.cn/index/content/2011-03/16/content_2448960.htm.

10. Two of the dams are located in Cambodia and the rest in Laos (two of them are on the Lao-Thailand reaches of the mainstream). Among all the proposals, the furthest advanced projects are the Xayaburi Dam in north-central Laos and the Don Sahong hydropower scheme in southern Laos near the Cambodia border. INT'L CTR. FOR ENVTL. MGMT., STRATEGIC ENVIRONMENTAL ASSESSMENT OF HYDROPOWER ON THE MEKONG MAINSTREAM 8, 31, 94 (2010), available at http://www.icem.com.au/documents/envassessment/mrc_sea_hp/SEA_Final_Report_Oct_2010.pdf.

11. MILTON OSBORNE, LOWY INST. FOR INT'L POLICY, THE MEKONG: RIVER UNDER THREAT 17, 19 (2009).

12. See MILTON OSBORNE, LOWY INST. FOR INT'L POLICY, RIVER AT RISK: THE MEKONG AND THE WATER POLITICS OF CHINA AND SOUTHEAST ASIA 18, 19, 25-30 (2004).

13. *Climate*, MEKONG RIVER COMM'N, <http://www.mrcmekong.org/the-mekong-basin/climate/> (last visited Apr. 15, 2013).

how to tailor and comprehend TEIA in the MRB context will be addressed in detail.

II. TEIA: A PROCEDURAL PERSPECTIVE

A. Background Theories

Ever since environmental impact assessment (EIA) was first established in the United States via the 1969 National Environmental Policy Act, it has been emulated by many other countries.¹⁴ After decades of implementation, EIA is now functioning as a fundamental tool for protecting domestic environment. Increasingly, EIA has been applied in a transboundary context to cope with the environmental effects that spill across borders. Failure to conduct a TEIA is a key issue debated by states in the Gabčíkovo–Nagymaros Case,¹⁵ the MOX Plant Case,¹⁶ and the more recent Pulp Mills Case.¹⁷ To date, the strongest support for TEIA and strategic environmental assessment (SEA) can be found in the context of the 1991 Espoo Convention, its 2003 SEA Protocol, and the European Union's (EU) EIA and SEA Directives. It is argued that TEIA, as an effective procedure "applied to evaluate environmental effects from proposals in one territory affecting another or which physically cross borders,"¹⁸ can get the public and other Mekong countries involved and contribute to settle regional disputes.

14. FINDLEY & FARBER, *supra* note 2, at 52.

15. See Gabčíkovo-Nagymaros Project (Hung./Slovk.), 1997 I.C.J. 7, ¶¶ 33, 34, 36, 41, 45, 56, 125, 140 (Sep. 25); PATRICIA BIRNIE ET AL., *INTERNATIONAL LAW AND THE ENVIRONMENT* 170 (Oxford Univ. Press, 3d ed. 2009).

16. The MOX Plant Case (Ir. v. U.K.), Provisional Measures, No. 10 (Nov. 13, 2011), available at <http://www.itlos.org/index.php?id=102>; M. Bruce Volbeda, *The MOX Plant Case: The Question of "Supplemental Jurisdiction" for International Environmental Claims under UNCLOS*, 42 TEX. INT'L L.J. 211, 219 (2006); Simon Marsden, *MOX Plant and the Espoo Convention: Can Member State Disputes Concerning Mixed Environmental Agreements be Resolved Outside EC Law?*, 18 REV. EUR. COMMUNITY & INT'L ENVTL. L. 312, 314-15 (2009).

17. Pulp Mills on the River Uruguay (Arg. v. Uru.), 2010 I.C.J. 14, ¶ 203 (Apr. 20).

18. Simon Marsden, *China's Experience with Transboundary Environmental Impact Assessment: Internal and External Dimensions and Recommendations for Reform of Law and Policy*, Address at the 7th Colloquium of the IUCN Academy of Environmental Law (Nov. 4, 2009).

TEIA is supported by the concept of sustainable development. Although it has been generally recognized as a key concept of international environmental policy, its legal status remains highly controversial. Instead of focusing on the concept itself, it is suggested that a better interpretation of sustainability is to focus on its components.¹⁹ For lawyers, the key point to grasp is probably that sustainable development is “as much about processes as about outcomes.”²⁰ As reflected in policy formation, it is necessary to ensure the development decisions to be the outcome of a process which promotes sustainability.²¹ Considering the fact that the integration of environmental protection and economic development is highly context-specific, TEIA certainly provides a suitable mechanism that can help promote sustainability in a specific context.

With regard to transboundary rivers, the theory of integrated river basin management (IRBM) also provides a strong support for TEIA. IRBM itself is viewed as an approach to deliver sustainability in the governance of shared water resources.²² TEIA, as applied in shared water governance, can serve as a practical tool for considering the river basin as a whole, cultivating a goodwill cooperative atmosphere and achieving more sustainable use of freshwater resources.

B. The Rationale of Developing TEIA in the MRB

More specific reasons on why it is important to develop TEIA in the MRB will now be articulated. In order to address transboundary effects more efficiently, simply giving consideration to it under a domestic law is not enough, not to mention the fact that the existing domestic EIA legislation in the Mekong countries does not consider the environmental impact outside national border. While domestic EIA has offered

19. BIRNIE ET AL., *supra* note 15, at 127.

20. *Id.* at 57.

21. *Id.* at 127.

22. This can be discerned from the definition given by Global Water Partnership. See GLOBAL WATER P'SHIP, HANDBOOK FOR INTEGRATED WATER RESOURCES MANAGEMENT IN BASINS 18 (2009), *available at* http://www.gwptoolbox.org/imagesstories/Docs/gwp_inbo%20handbook%20for%20iwrms%20in%20basins_eng.pdf.

international law “with a template for bringing environmental values to bear on policy decisions respecting activities that are likely to impact the environment,”²³ it is the international environmental law that provides a more fundamental support for the development of TEIA.²⁴ TEIA, as an international mechanism, is necessary in the sense of getting other riparian states and their public involved as an indispensable element for the purposes of preserving the integrated ecosystem of MRB and to protect local people’s lifestyles.

The values of procedure should not be neglected. Procedure can be treated as an end in itself or as a means to an end.²⁵ On the one hand, procedure is desirable as an end per se because of its valuable nature. Openness, transparency, participation, accountability, and predictability constitute important characteristics of good governance. On the other hand, it is also a means to improve the governance of shared water resources. At the international level, good governance relies on cooperation in goodwill and a more democratic atmosphere. As mentioned earlier, proper procedural requirements are an important element of sustainable development. In this respect, TEIA could

23. NEIL CRAIK, *THE INTERNATIONAL LAW OF ENVIRONMENTAL IMPACT ASSESSMENT* 52 (Cambridge Univ. Press 2008).

24. Notably, the obligation not to cause environmental harm, the obligation to cooperate (specifically with the requirement of notification and consultation), and the principle of non-discrimination are often mentioned. It is widely accepted that the obligation not to cause environmental harm can logically lead to the requirement of the assessment of potential transboundary effects of activities that might cause transboundary harm. Otherwise, if harm subsequently occurs, states may find it very difficult to argue that they acted with due diligence in controlling or preventing harm that should and could have been foreseen. Notification and consultation, on the other hand, are only meaningful if they are accompanied by sufficient information on the potential effects of a proposed project. TEIA, as a source for that information, can enable a state to fulfill these obligations in good faith. Moreover, the principle of non-discrimination entails giving equivalent treatment to the domestic and transboundary effects of polluting or environmentally harmful activities. Although controversies still exist on the relationship between these background norms and TEIA, it is argued that each of them points to a different role that TEIA may play in international environmental governance.

25. Durwood Zaelke et al., *What Reason Demands: Making Law Work for Sustainable Development*, in *MAKING LAW WORK: ENVIRONMENTAL COMPLIANCE AND SUSTAINABLE DEVELOPMENT* 29, 42 (Durwood Zaelke et al. eds., Int’l Law Publishers 2005).

help direct the riparian states in the MRB to work more cooperatively towards sustainable water governance.

The third reason is based on a practical consideration. Generally speaking, the development of cooperative regimes for the common management of international watercourses has not yet been sufficiently comprehensive or effective.²⁶ Although now it “can be asserted with some confidence that countries are no longer free to pollute or otherwise destroy the ecology of a shared watercourse to the detriment of their neighbours,” definitive conclusions are difficult to draw from a legal perspective.²⁷ Given the fact that both the Mekong River Commission (MRC) and Association of Southeast Asian Nations (ASEAN) show a strong preference for soft-law approaches and consensus building,²⁸ and China is not a formal member of the two organizations, it is very difficult for the Mekong countries to reach any agreement on substantive legally-binding obligations or to secure any effective compliance of that. Even if they could agree on some open-textured norms, TEIA is also needed to attach a degree of normative significance to these broad substantive obligations and to operationalize them. Relevant issues will be further discussed in detail in the next section.

III. DEVELOPING TEIA: A FEASIBILITY ANALYSIS

Before discussing the details of TEIA, it is necessary to do a feasibility analysis on whether there is an enabling environment for the development of TEIA and how to tailor TEIA accordingly under specific circumstances. On the one hand, the development of domestic EIA in the Mekong countries will be considered for the fact that domestic EIA legislation usually has a strong impact on the possible TEIA agreement and valuable lessons can be learned from the problems revealed during the domestic EIA practices. On the other hand, at the international level, the existing intergovernmental cooperative mechanisms will be discussed to identify issues like whether there is enough

26. BIRNIE ET AL., *supra* note 15, at 581.

27. *Id.* at 580-81.

28. *See infra* Part III.B.

momentum for countries to apply TEIA cooperatively and whether there is a suitable platform for the development of TEIA.

A. Domestic Dimensions

On the positive side, domestic EIA has been established in almost all of the Mekong countries except in Myanmar. In particular, Thailand and Vietnam incorporated provisions on EIA into their overarching environmental protection law, while China upgraded its 1998 Regulation on EIA into a specific EIA Law in 2002 and then developed more detailed interim measures of public participation in EIA.²⁹ Laos and Cambodia introduced EIA via a decree and a sub-decree, respectively.³⁰ Currently, Vietnam is in the process of reviewing the Law on Environmental Protection and its provisions on EIA. Additionally, Cambodia is drafting a new EIA law, the latest draft of which takes into account the transboundary impact.³¹ However, even if the future Cambodian EIA law did consider the transboundary impact, it is not applicable for most of the Mekong mainstream projects. It also raises issues of reciprocity: at this stage, none of the Mekong countries include the transboundary impact under their domestic EIA legislation.

Two procedural deficiencies are often mentioned in the evaluation of China's domestic EIA legislation, namely the absence of alternative considerations and the low efficiency of public participation provisions in practice. As will be further analyzed later, these two problems also widely exist, to varying

29. See Enhancement and Conservation of National Environmental Quality Act (promulgated by the Nat'l Assembly, Mar. 29, 1992) §§ 46-51 (Thai.); Law on Environmental Protection (promulgated by the Nat'l Assembly, Nov. 29, 2005) arts. 18-23 (Viet.); *Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa* [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sep. 1, 2003) (China); *Huanping gongzhong canyu zanxing banfa* [Interim Measures of Public Participation in EIA] (promulgated by the State Env'tl. Prot. Admin., Feb. 22, 2006) (China).

30. See Decree on Environmental Impact Assessment (promulgated by the Prime Minister's Office, Feb. 18, 2010) (Laos); Sub-Decree on Environmental Impact Process (promulgated by the Council of Ministers, Aug. 11, 1999) (Cambodia).

31. See Sok Phanna, Trans-boundary Aspect in the EIA Law of Cambodia, Address at the Mekong Legal Network 4th Regional Meeting (Jun. 29, 2012).

degrees, in the other Mekong countries. Combined with the often criticized domestic EIA legislation and its problematic implementation in the MRB, it will probably be less effective to rely on domestic legislation to address transboundary effects. Nevertheless, it should be recognized that the existence of domestic EIA legislation in most Mekong countries does provide a basic legal foundation and a starting point for the discussions of TEIA at the regional level.

B. Regional Dimensions

The political relationship among the Mekong countries, particularly between China and the other Mekong countries, is very complicated and cooperation is not an easy choice. In fact, whether there is enough momentum for them to cooperate on the governance of shared water resources has been seriously doubted over the years. Currently, there are some cooperative mechanisms in the region which could serve as international platforms for developing TEIA in the MRB. The following discussion will shed light on their achievements and deficiencies.

a. The Mekong River Commission (MRC)

Among the three major regional cooperative regimes in the region, the Mekong River Commission—established among four downstream states since 1995—is a unique platform for transboundary water governance. Its operation is based on the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin (the Mekong Agreement).³²

The Mekong Agreement was influenced to some extent by the work of the International Law Commission on drafting the Convention on the Law of the Non-navigational Uses of International Watercourses (the UN Watercourses Convention), which was adopted by the General Assembly of the United Nations in 1997. The Agreement embraces some important principles in transboundary water governance, namely the

32. Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin arts. 1, 5, 7, Apr. 5, 1995, 2069 U.N.T.S. 1-35844 [hereinafter Mekong Agreement].

general obligation to cooperate, the principle of equitable and reasonable utilization, and the obligation not to cause significant harm (the term used in the text is “substantial damage”).³³ It should be noted that the Convention has not yet entered into force and no Mekong country has actually signed it.³⁴

According to the Mekong Agreement, the four downstream states also aim to promote and cooperate “in the development of the *full potential* of sustainable benefits to all riparian States and the prevention of wasteful use of Mekong waters.”³⁵ Against the backdrop of this strong intention, the Mekong Agreement has faced criticism for being too “soft” to actually promote sustainability in the region.³⁶ Most parts of the document are drafted in “hortatory” language,³⁷ thus unable to be enforced due to the lack of legal teeth.³⁸ In addition, studies also show that the Mekong Agreement has not succeeded in being implemented in national legislation of member states.³⁹

The creation of the MRC was set within an eco-political circumstance.⁴⁰ The MRC consists of three permanent bodies: the Council, the Joint Committee, and the Secretariat. However, its operation has been caught in a multifaceted dilemma, which has significantly weakened and impaired its roles and functions in transboundary water governance. For one thing, there are notable tensions between the MRC as a donor-driven organization and an organization owned by riparian states.⁴¹ The

33. *Id.*

34. Fleur Johns et al., *Law and the Mekong River Basin: A Socio-Legal Research Agenda on the Role of Hard and Soft Law in Regulating Transboundary Water Resources*, 11 MELBOURNE J. INT'L L. 154, 158 (2010).

35. Mekong Agreement, *supra* note 32, art. 2 (emphasis added).

36. Johns et al., *supra* note 34.

37. For example, there is an explicit mandatory commitment “to protect the environment from pollution and other harmful effects resulting from development plans and uses of water-related resources.” Mekong Agreement, *supra* note 32, art. 3.

38. PHILIP HIRSCH ET AL., UNIV. OF SYDNEY, NATIONAL INTERESTS AND TRANSBOUNDARY WATER GOVERNANCE IN THE MEKONG 26-27 (2006), *available at* http://sydney.edu.au/mekong/documents/mekwatgov_mainreport.pdf.

39. *See id.* at 33-42.

40. Hirsch, *supra* note 9, at 313.

41. Philip Hirsch, *Water Governance Reform and Catchment Management in the Mekong Region*, 15 J. ENV'T DEV. 184, 194 (2006).

funding of the MRC now relies primarily on foreign donors,⁴² and their changing perceptions toward the role of the MRC in promoting regional development often have a significant impact on the MRC's work.⁴³ As a region where "foreign interests, experts and donors have always played an important and at times dominant role,"⁴⁴ recent years have witnessed an attempt to increase the member states' ownership of the MRC. This is represented by the attempt to riparianize all management positions in the MRC Secretariat by 2030, including the CEO position.⁴⁵ Questions remain, not only on how a CEO from four member states will be chosen, but also regarding this CEO's ability to "navigate the varied interests and drivers of mainstream hydropower development," since a Mekong national serving as CEO "could be more susceptible to various influences that would constrain the independence of the MRC Secretariat and impact its research agenda."⁴⁶ The dominance of the MRC Secretariat by the donors provides a platform for them to have more control over the use of donor funds and express their ideologies about how to promote more sustainable and integrated water governance in the MRB. However, this donor-driven pattern does create a sense of alienation of the MRC to its member states and in turn raises the risk of MRC being marginalized or bypassed in reality.

Meanwhile, the lack of effectiveness of the donor countries on implementing IRBM in the MRB could be partly attributed to the approach donors have used to impose the concept of IRBM, which is disconnected with member states and most river basin users'

42. Australia is currently the largest donor. Other donors include, but are not limited to: the governments of Denmark, Sweden, Finland, Netherlands, Belgium, Germany, and France and the World Bank.

43. This can be discerned in the MRC's changing position on hydropower development in the region over the last two decades. *See* Hirsch, *supra* note 9, at 314-17.

44. HIRSCH ET AL., *supra* note 38, at xxi.

45. Nguyen Thai Lai, Deputy Minister of Natural Res. & Env't of Viet., The 17th Meeting of the MRC Council, Joint Meeting with the MRC Donor Consultative Group (Jan. 26, 2011), *available at* <http://www.mrcmekong.org/news-and-events/speeches/the-17th-meeting-of-the-mrc-council-joint-meeting-with-the-mrc-donor-consultative-group-2/>.

46. RICHARD P. CRONIN & TIMOTHY HAMLIN, STIMSON CTR., MEKONG TIPPING POINT: HYDROPOWER DAMS, HUMAN SECURITY AND REGIONAL STABILITY 24 (2010).

experience, and this external pressure and rationale often fails to be internalized into state's behavior. With the ongoing hydropower expansion in this region, the political struggle between donors and member states seems to become increasingly critical under the framework of the MRC.

The disconnect and tension between the MRC and national decision-making landscapes is also reflected in the problematic setting and functioning of the National Mekong Committees (NMC) at the domestic level. Although the NMC is designed to link the MRC's regional programs with sectoral ministries' development plans and policies at the national level, in reality it is not consistent with the national decision-making regimes.⁴⁷ For instance, the NMC Secretariat often found it very difficult to arrange national consultation meetings as an inter-ministerial decision-making forum since the donor's efforts on implementing IRBM through programs are often in conflict with sectoral ministries' development interests, and the bureaucratic competition among diverse water sectors remains fierce, especially between planning authorities and environment authorities.⁴⁸ In addition to the lack of power to promote real coordination between the MRC and the NMC or among participating ministries, the NMC is also suffering from shortages in human and financial resources, and not surprisingly, remains distant from civil society.⁴⁹

Another obvious structural limitation is that all the MRC formal members are downstream states, while two upstream states, China and Myanmar, merely maintain dialogue relations. So far, the only outcome from this dialogue partnership is an agreement on the provision of hydrological information on the Mekong River, under which China promises to provide water level data in the flood season.⁵⁰ Talks are under way to expand

47. Diana Suhardiman et al., *Scalar Disconnect: The Logic of Transboundary Water Governance in the Mekong*, 25 *SOC'Y & NAT. RESOURCES* 1, 4 (2011).

48. *Id.* at 4, 6, 9.

49. NATHAN BADENOCH, *WORLD RES. INST., TRANSBOUNDARY ENVIRONMENTAL GOVERNANCE: PRINCIPLES AND PRACTICE IN MAINLAND SOUTHEAST ASIA* 17 (2002), available at http://pdf.usaid.gov/pdf_docs/PNACS660.pdf; HIRSCH ET AL., *supra* note 38, at 54, 121.

50. *Upstream Partners*, MEKONG RIVER COMM'N, <http://www.mrcmekong.org/about-the-mrc/upstream-partners-2> (last visited Apr. 15, 2013).

this data sharing agreement to include dry season levels. During the severe drought in 2010, China “agreed to provide water level data from two dams in Yunnan province” until the end of the drought.⁵¹ Despite the increasing engagement of China as a dialogue partner, it seems unlikely for China to fully accept the Mekong Agreement, which only reflects the consensus among downstream states under external influences with respect to the highly controversial nature of the governance of shared water resources, not to mention China’s negative position on the UN Watercourses Convention. Moreover, combined with the existing tension over control of the MRC between donors and riparian states, China seems to be much less motivated to join the organization that is maybe more donor-driven than state-owned.

Other than the innate problems of the MRC itself, its regional influence is also increasingly threatened by the rapid development of the Greater Mekong Subregion Program (GMS), ASEAN, and its dialogue relationship with China, which will be further discussed later. In addition, a growing risk of marginalization of the MRC in decision-making processes can be attributed to the increasing involvement of foreign and domestic business sector as well.

Nevertheless, the existence and the struggle of the MRC does provide more political opportunities for downstream states and the civil society in the region to raise their voices on the utilization of Mekong water resources. This is represented by the decision to carry out a SEA on all lower Mekong mainstream dam proposals and the prior notification and consultation process on the Xayaburi Dam.⁵² In addition, several procedural documents

51. Apinya Wipatayotin & Theeraporn Saiwirat, *China to Provide Water Data on Dams*, BANGKOK POST, Mar. 25, 2010, <http://bangkokpost.newspaperdirect.com/epaper/viewer.aspx>.

52. The SEA process took sixteen months to finish since May 2009. The SEA report later recommended a 10-year deferral for mainstream hydropower development due to many of its remaining uncertainties and serious risks. In addition, according to the Mekong Agreement, all lower Mekong mainstream dam proposals must go through the prior notification and consultation process. The Xayaburi Dam is the first project that triggered this process. Detailed discussion on the SEA process and the Xayaburi consultation process is available. See Qi Gao, *A Procedural Framework for Cooperative Sustainable Governance of Water Resources in the Mekong River Basin* chs. 4(I)(B)(2),

were approved by member states of MRC, which include procedures for data and information exchange and sharing, procedures for water use monitoring, and procedures for notification, prior to consultation.⁵³ Although they are non-binding in nature, this form of consensus is a possible option for future TEIA documents.

b. ASEAN and ASEAN-China Dialogue Relations

ASEAN is also involved in the Mekong issues. In June 1996, a Basic Framework of ASEAN-Mekong Basin Development Cooperation was adopted by the ASEAN countries and China to strengthen economic linkages among relevant countries and to encourage dialogue on and identification of economic projects in the region.⁵⁴ ASEAN has played an important role in energy development in the MRB.⁵⁵ Considering the increasing economic cooperation under ASEAN and its important role in political and social regional stability, this broader regional economic and political cooperation regime can have a notable impact on the MRB.

Understandably, environmental management was not expressly recognized as a concern when ASEAN was established in 1967.⁵⁶ However, increased population, rapid economic

6(III)(B) (Oct. 2012) (unpublished Ph.D. dissertation, University of Western Sydney) (on file with author).

53. *Policies, Procedures and Guidelines*, MEKONG RIVER COMM'N, <http://www.mrcmekong.org/publications/policies-procedures-and-guidelines> (last visited Apr. 15, 2013).

54. ASEAN, BASIC FRAMEWORK OF ASEAN-MEKONG BASIN DEVELOPMENT COOPERATION (June 17, 1996), *available at* <http://www.aseansec.org/6353.htm>.

55. The ASEAN Power Grid Program consists of sixteen bilateral and multilateral electricity interconnection projects that cover many areas in the MRB and could pave the way to enhance intra-regional electricity trade in the region. Xiaojiang Yu, *Regional Cooperation and Energy Development in the Greater Mekong Sub-region*, 31 ENERGY POL'Y 1221, 1228 (2003). The number of projects listed in this paper is fourteen, while according to the more recent data, two more projects have been proposed. See BAMBANG HERMAWANTO, APGCC, REPORT OF THE 8TH MEKONG OF APGCC (June 23, 2011), *available at* http://www.hapuasecretariat.org/doc2011/Report%208_APGCC.pdf.

56. Kon Kheng-Lian & Nicholas A. Robinson, *Regional Environmental Governance: Examining the Association of Southeast Asian Nations (ASEAN) Model*, in GLOBAL ENVIRONMENTAL GOVERNANCE: OPTIONS AND OPPORTUNITIES 1, 4 (Daniel C. Esty & Maria H. Ivanova eds., 2002).

growth, and existing and region-wide social inequities among the ASEAN countries has put increasing pressures on their natural resources and brought to light various common or transboundary environmental issues.⁵⁷ Environmental cooperation among the ASEAN countries can be traced to 1977, and the years since have witnessed the development of an “increasingly complex but for the most part non-formal web of soft-law declarations, resolutions, plans of action and issue-specific programs that together define the administrative, institutional and normative contours of regional environmental governance.”⁵⁸

Meanwhile, environmental cooperation has also been gradually developed under the ASEAN-China Dialogue Relations. Currently, the environmental cooperation is guided by the ASEAN-China Environmental Protection Strategy 2009-2015, which specified six priority areas, including: raising public awareness on environmental protection and enhancing environmental education, promoting environmentally sound technology and eco-label program, biodiversity conservation, environmental management capacity building, global environmental concerns, and environmental protection industry and relevant programs.⁵⁹ The ASEAN-China Environmental Cooperation Center was established by the Chinese government in 2010 to implement this strategy.⁶⁰ Other than the priority areas, ASEAN and China are also seeking cooperation on transboundary water issues.⁶¹

One latest development of the relationship between ASEAN and China is the establishment of the ASEAN-China Free Trade Area (ACFTA) in 2010. The ACFTA currently covers six ASEAN

57. *An Overview on ASEAN Environmental Cooperation*, ASEAN, <http://environment.asean.org/index.php?page=overview> (last visited Apr. 15, 2013).

58. Lorraine Elliott, *ASEAN and Environmental Cooperation: Norms, Interests and Identity*, 16 PAC. REV. 29, 36 (2003).

59. Zhongguo-Dongmeng zhuzhong Yunnan shengtai, dajian huanbao hezuo pingtai [*China and ASEAN Set up Platform for Environmental Cooperation: Attention Paid to the Ecosystem in Yunnan Province*], PEOPLE'S DAILY, June 11, 2010, http://www.yn.xinhuanet.com/newscenter/2010-06/11/content_20043796.htm.

60. Zhongguo-Dongmeng huanbao hezuo zhongxin zujian [*The Establishment of the ASEAN-China Environmental Cooperation Center*], PEOPLE'S DAILY, Mar. 19, 2010, http://www.zhb.gov.cn/zhxx/hjyw/201003/t20100319_187059.htm.

61. *Id.*

countries⁶² and China, and will be further extended to the other ASEAN Member States by 2015.⁶³ The ACFTA creates an economic region with 1.7 billion consumers, a regional Gross Domestic Product (GDP) of about U.S. \$2 trillion, and total trade estimated at U.S. \$1.23 trillion. This makes it the biggest free trade area in the world in terms of population size.⁶⁴

Guided by the concept of sustainable development, many free trade areas are under the process of combining environmental concerns with regional economic development. In particular, the North American Free Trade Agreement (NAFTA) represents this trend. As will be discussed later, the NAFTA region has also taken the initiative in developing TEIA in the region. Along with the future development of ACFTA, member states should further deepen their environmental cooperation.

In the face of increasing regional environmental challenges and transboundary disputes, environmental cooperation under ASEAN is “[s]andwiched between and influenced by both the global” best practices and the regional political traditions.⁶⁵ The latter is often referred to as the “ASEAN Way.” As a collaborative approach, it is “derived from global principles and the local, social-cultural and political milieu in Southeast Asia.”⁶⁶ It relies on “consensus building and cooperative programs rather than legally binding treaties” and shows a “preference to national implementation of programs rather than reliance on a strong region-wide bureaucracy.”⁶⁷ The prevailing “ASEAN Way” has been criticized for being too weak to actually resolve difficult regional issues or to secure a coordinated and effective

62. They are Brunei Darussalam, Indonesia, Malaysia, Philippines, Singapore, and Thailand. Raul L. Cordenillo, *The Economic Benefits to ASEAN of the ASEAN-China Free Trade Area (ACFTA)*, ASEAN, <http://www.asean.org/resources/item/the-economic-benefits-to-asean-of-the-asean-china-free-trade-area-acfta-by-raul-l-cordenillo> (last updated Jan. 18, 2005).

63. ASEAN, FRAMEWORK AGREEMENT ON COMPREHENSIVE ECONOMIC CO-OPERATION BETWEEN ASEAN AND THE PEOPLE'S REPUBLIC OF CHINA (2002).

64. Cordenillo, *supra* note 62.

65. Elliott, *supra* note 58, at 38.

66. PARUEDEE NGUITRAGOOL, ENVIRONMENTAL COOPERATION IN SOUTHEAST ASIA: ASEAN'S REGIME FOR TRANSBOUNDARY HAZE POLLUTION 28-29 (Routledge 2011).

67. Kheng-Lian & Robinson, *supra* note 56.

compliance of regional consensus. Although there are some recent attempts to shift ASEAN towards “a rules-based and people-oriented organization with its own legal personality,”⁶⁸ the entrenched “ASEAN Way” still has a profound impact on regional cooperation. In fact, rule-based legal reforms at the domestic and regional levels in the MRB are also stagnant in many cases.⁶⁹ Even if more stringent requirements were put in place, their implementation in reality is often unsatisfactory. Without a rule-based society and culture, even the most stringent legislation may not be able to deliver an effective outcome. The attempt to interpret and evaluate the “ASEAN Way” from a legal perspective using western concepts can be oversimplified and risks overlooking some of its pragmatic merits in the context of societies where the rule of law is generally weak.⁷⁰

c. The Greater Mekong Subregion Program (GMS)

In 1992, with assistance from the Asian Development Bank (ADB), all riparian states of Mekong entered into a program of subregional economic cooperation, which set a path towards regional economic integration. The GMS does not have a formal organization. Instead, it holds “a cycle of ministerial meetings and a biennial prime ministerial summit, which they all attend (at the most senior political level and in large numbers) and use to mark their ‘ownership’ of this emerging regional institution.”⁷¹ Functioning as a loosely structured forum, it adopts “a flexible, results-oriented and activity-based approach,”⁷² which again in some parts reflects the political culture of the “ASEAN Way.” Nine areas of cooperation have been highlighted under the GMS, including “agriculture, energy, environment, human resource

68. *ASEAN Charter Enters into Force Next Month*, ASEAN, <http://www.asean.org/asean/asean-charter/media-releases-on-the-asean-charter/item/asean-charter-enters-into-force-next-month-bangkok-15-november-2008> (last visited Apr. 15, 2013).

69. See generally Gao, *supra* note 52, ch. 2.

70. See *id.* at ch. 7(II).

71. HIRSCH ET AL., *supra* note 38, at 53.

72. ASIAN DEV. BANK, MIDTERM REVIEW OF THE GREATER MEKONG SUBREGION STRATEGIC FRAMEWORK (2002-2012) 2 (2007), available at <http://www.adb.org/sites/default/files/gms-sf-midterm-review.pdf>.

development (HRD), telecommunications, transport, tourism, trade, and investment.”⁷³

To date, most of the GMS activities have targeted improving physical interconnectivity of the region, and around ten billion (U.S.) dollars worth of priority infrastructure projects have either been completed or are being implemented.⁷⁴ In particular, through the GMS, the ADB has either co-financed⁷⁵ or been involved in the construction of some hydropower dams in the MRB.⁷⁶ In addition, with a goal of establishing a power grid, more than twenty hydro energy-related projects in the GMS involve the construction of transmission lines to transfer power from dams in China, Myanmar, Laos, and Cambodia to Thailand and Vietnam.⁷⁷ As pointed out by Both ENDS: “[i]f the ADB does not build the high-voltage transmission lines, then certainly some of the dams will not be built at all. At the same time, in order for transmission lines to be financially viable, dams must be constructed.”⁷⁸ The MRC has little impact on their decision-

73. *Id.*

74. *Greater Mekong Subregion: Overview*, ASIAN DEV. BANK, <http://beta.adb.org/countries/gms/overview> (last visited Apr. 15, 2013).

75. For example, the controversial Theum-Hinboun Dam and the Nam Theun 2 Dam in Laos. *See generally* Philip Hirsch, *Globalisation, Regionalisation and Local Voices: The Asian Development Bank and Re-scaled Politics of Environment in the Mekong Region*, 22 SINGAPORE J. TROP. GEO. 237, 242-44 (2001).

76. For example, the Song Bung 4 in Vietnam and the Nam Ngum 3 in Laos. *See generally* Carl Middleton et al., *Old and New Hydropower Players in the Mekong Region: Agendas and Strategies*, in *CONTESTED WATERSCAPES IN THE MEKONG REGION: HYDROPOWER, LIVELIHOODS AND GOVERNANCE* 23, 32, 38 (François Molle et al. eds., 2009); Shannon Lawrence, *The Nam Theun 2 Controversy and Its Lessons for Laos*, in *CONTESTED WATERSCAPES IN THE MEKONG REGION: HYDROPOWER, LIVELIHOODS AND GOVERNANCE* 81-112 (François Molle et al. eds., 2009); BOTH ENDS, *THE ADB-GMS SUPPORT FOR HYDROPOWER DAMS AND POWER GRID: ADB AND THE GREATER MEKONG SUBREGION PROGRAM* (2011); *Project Database*, ASIAN DEV. BANK, <http://www.adb.org/Projects/summaries.asp?query=&browse=1&mode=1&ctry=LAO&sctr=3200&sctr=3800&year=ALL> (last visited Apr. 15, 2013).

77. For example, the transmission lines to connect Thailand to the Jinghong and Nuozhadu dams on the Lancang River and dams on the Salween River in Myanmar; and the transmission lines to connect Thailand and Vietnam to the controversial Nam Theun 2 dam in Laos. *See* HIRSCH ET AL., *supra* note 38, at 155; Yu, *supra* note 55, at 1227.

78. BOTH ENDS, *supra* note 76.

making processes, especially considering the increasing of private investments in GMS projects.

The GMS itself does not have any regulatory functions regarding the Mekong River water management.⁷⁹ However, as a program of subregional economic integration, recent years have also witnessed a gradual awareness of the need to incorporate environment considerations into the decision-making process.⁸⁰ While the existing environmental initiative focuses mainly on land ecosystems, a corridor for the Mekong Headwaters and one for the Tonle Sap Inundation Zone are included, which raises another concern of functional demarcation between the MRC and the GMS.⁸¹ In addition, the progress in the area of environmental protection under the GMS is still scattered to a large extent and falls short of more specific arrangements to pursue the achievement of environmental goals. Along with the burgeoning economic growth in this region, whether the environmental cooperation under the GMS can shift from rhetoric to reality remains to be seen.

The GMS is perceived by some as a competitor to the MRC due to the fact that the GMS is the only regional mechanism that includes all six riparian states, it is rapidly developing a much higher profile, and is stronger than the MRC in terms of power, influence, ownership, and funding.⁸² Currently, the GMS is "becoming increasingly Asian and less 'ADB-driven,'" with strong

79. OSBORNE, *supra* note 12, at 6.

80. A Working Group on Environment was established in 1995 that initially focused on capacity building and establishing environmental information systems. Since 2005, the Meeting of the GMS Environment Ministers has been held every three years and the Core Environment Program was endorsed at the first meeting to promote a poverty-free and ecologically rich GMS, with the Biodiversity Conservation Corridors Initiative set as a key component of the program. It is notable that China has committed significant funding (U.S. \$20 million at least) to environmental cooperation under the GMS. GREATER MEKONG SUBREGION, MEETING OF THE GMS ENVIRONMENT MINISTERS: JOINT MINISTERIAL STATEMENT (May 25, 2005), *available at* <http://www.wwfchina.org/english/downloads/GMSstatement.pdf>; *see also* HIRSCH ET AL., *supra* note 38, at 64.

81. HIRSCH ET AL., *supra* note 38, at 69.

82. *Id.*

ownership by the Mekong countries, particularly China.⁸³ The GMS is also viewed to be “strongly aligned with the prevailing regional sentiment that is driving ASEAN-China relations and regional integration.”⁸⁴

In fact, despite the competitiveness between the MRC and the GMS in terms of regional influence, they do not have much direct contradiction in the area of water governance.⁸⁵ Even if they both deal with somewhat similar issues, the GMS and MRC play their roles in very different approaches. While the MRC’s perspective is to view the Mekong River chiefly as a natural resource to govern, the GMS program seems to “consider the river more as a symbol that defines the region in which they are promoting economic growth and cooperation.”⁸⁶ The latter perspective is at least partly responsible for the ignorance of the Mekong River and aquatic biodiversity aspects during the ongoing environmental cooperation under GMS. However, as a regional economic cooperation mechanism, the GMS could approach environmental problems in a way that is more directly linked to power trade and the decision-making process of specific development projects and has the potential to serve as a regional environmental platform which could better incorporate and comprehend the roles of non-state factors such as financiers and investors. Although it can also open the door for considering environmental effects during the process of promoting integrative economic links among the riparian states, promoting TEIA arrangements under the GMS can be even more challenging than relevant developments under the MRC due to the loose structure of the GMS itself and its strong economic orientation.

83. *Id.* at 106; Evelyn Goh, *China in the Mekong River Basin: The Regional Security Implications of Resource Development on the Lancang Jiang* 8 (Inst. of Def. & Strategic Studies, Working Paper No. 69, 2004).

84. HIRSCH ET AL., *supra* note 38, at 70.

85. *Id.* at 69.

86. MARKO KESKINEN, BRINGING BACK THE COMMON SENSE? INTEGRATED APPROACHES IN WATER MANAGEMENT: LESSONS LEARNT FROM THE MEKONG 86 (2010), available at <http://users.tkk.fi/u/mkeskine/Thesis.pdf>.

IV. TEIA: REGIONAL EXPERIENCES

Outside the Espoo and EU regimes,⁸⁷ efforts have been made to promote other multilateral cooperation that may vary from one region to another, such as the 1997 Draft North American Transboundary EIA Agreement.⁸⁸ The draft agreement is only a partly finished document with several provisions still pending further negotiation.⁸⁹ However, the draft agreement does provide detailed requirements on issues like notification and information exchange, screening, scoping, and public participation. Unfortunately, the effort towards formally adopting this agreement has stagnated ever since. A major divergence is that while the United States and Canada argue that it should only be applicable to the federal governments of the signatories, Mexico insists that any final treaty should cover the actions of state governments as well.⁹⁰

87. EU's EIA Directive and the Espoo Convention, together with other relevant agreements, including the Aarhus Convention and the UNECE Water Convention, represent the two most institutionalized TEIA regimes in the world. Discussion concerning these legal documents will be incorporated into the detailed analysis on key issues of TEIA in Section V.

88. See generally COMM'N FOR ENVTL. COOPERATION, DRAFT NORTH AMERICAN AGREEMENT ON TRANSBOUNDARY ENVIRONMENTAL IMPACT ASSESSMENT (Dec. 2, 1997), available at <http://www.cec.org/Page.asp?PageID=122&ContentID=1906&SiteNodeID=366>.

89. Issues pending further discussions include, but are not limited to: mitigation measures, post-project monitoring, exemption, relation to existing bilateral mechanisms/obligations, on-going consultations, and dispute resolution.

90. Ignacia S. Moreno et al., *Free Trade and the Environment: The NAFTA, the NAAEC and Implications for the Future*, 12 TUL. ENVTL. L.J. 405, 430 n.142 (1999). The most recent available information on this agreement is that on August 31, 2005, the Council of the Commission for Environmental Cooperation "rejected a proposal for the CEC Secretariat to prepare Case Studies on Transboundary Environmental Impact Assessment on the basis that the parties were seeking to negotiate a TEIA agreement through the Security and Prosperity Partnership of North America." Neil Craik, *Transboundary Environmental Impact Assessment in North America: Obstacles and Opportunities*, in THEORY AND PRACTICE OF TRANSBOUNDARY ENVIRONMENTAL IMPACT ASSESSMENT 93, 113-14 (Kees Bastmeijer & Timo Koivurova eds., Martinus Nijhoff Publishers 2008); Charles M. Kersten, *Rethinking Transboundary Environmental Impact Assessment*, 34 YALE J. INT'L L. 173, 178 n.36 (2009).

This case reflects the degree of difficulty for countries to achieve consensus on transboundary EIA in a regional-specific context outside the EU and Espoo regimes with additional constitutional hurdles to surmount in federalist systems of government. Another potential EIA regime is the 2003 Framework Convention for the Protection of the Marine Environment of the Caspian Sea, which includes hortatory requirements on member states to “take all appropriate measures” to introduce and apply EIA that may have a significant negative impact on the marine environment of the Caspian Sea and to cooperate in the development of protocols on TEIA.⁹¹ Discussions among member states regarding this specific protocol are underway, and the current draft is in line with the Espoo Convention and the 2003 UNEP Guidelines on TEIA in the Caspian Sea Region.⁹² Difficulties remain due to issues such as the highly varied national EIA procedures and former Soviet Union countries’ unfinished reforms.⁹³

Interestingly, China has also taken some very initial steps towards TEIA. This is represented by relevant cooperation in the Greater Tumen region. The Tumen River is bordered by China, Russia, and North Korea and is vital for biodiversity preservation in the delta, as well as agricultural and industrial development in the region. Water pollution from industrial sewage has now become one of the key priority environmental concerns.⁹⁴ In 1991, the United Nations Development Programme (UNDP) initiated a Tumen River Area Development Program, and a formal agreement was signed in December 1995 to establish a Consultative Commission with membership of China, North

91. This Convention is signed by Azerbaijan, Iran, Kazakhstan, the Russian Federation, and Turkmenistan. See Barbara Janusz, *The Framework Convention for the Protection of the Marine Environment of the Caspian Sea*, 44 I.L.M. 257, 257, 268 (2003); Kersten, *supra* note 90.

92. Rie Tsutsumi & Kristy Robinson, *Environmental Impact Assessment and the Framework Convention for the Protection of the Marine Environment of the Caspian Sea*, in *THEORY AND PRACTICE OF TRANSBOUNDARY ENVIRONMENTAL IMPACT ASSESSMENT* 53, 56-57 (Kees Bastmeijer & Timo Koivurova eds., 2008).

93. *Id.* at 61-64.

94. Marsden, *supra* note 18, at 24.

Korea, Mongolia, South Korea, and Russia.⁹⁵ The Agreement is further supplemented by the 1995 Memorandum of Understanding (MoU) on Environmental Principles Governing the Tumen River Economic Development Area and Northeast Asia (the 1995 MoU). In addition, at the Eighth Consultative Commission Meeting in 2005, a new Greater Tumen Initiative (GTI) was established.⁹⁶ Supported by the UNDP and Global Environmental Facility (GEF), it now serves as “an intergovernmental platform for economic cooperation and exchanges for Northeast Asia” and “a catalyst in expanding policy dialogue and strengthening fundamentals for improving the cooperation.”⁹⁷

In particular, some common understandings on TEIA were recorded in the 1995 MoU. Article 1.2 generally requires a joint “regional environmental assessment” for regional development plans for the region as a whole, and a specific mitigation plan needs to be prepared accordingly.⁹⁸ It provides a basic provision on SEA, but no detailed arrangements are made on how to carry out such an assessment. More specific requirements are made for TEIA. Article 1.5 stipulates that an EIA and a mitigation plan should to be conducted and prepared for any proposed project in the region which may have a significant environmental impact.⁹⁹ However, no detailed list or criteria is elaborated to guide the screening or scoping process. The whole EIA process will be led by the member state where the project is located and with the participation of experts from affected states. The affected public and the NGOs, however, are not expressly required to be included in the process. Instead, countries only agree on a broad basis to

95. Steve S. Sin, *Greater Tumen Area Economic Development Project: A Background*, NE. ASIA MATTERS (Jan. 27, 2010), <http://asiamatters.blogspot.com/2010/01/greater-tumen-area-economic-development.html>. Another agreement was signed at the same time to establish a Coordination Committee with membership of China, Russia, and North Korea.

96. *Id.*

97. *The Greater Tumen Initiative*, UNITED NATIONS DEV. PROGRAMME, <http://www.undp.org.cn/modules.php?op=modload&name=News&file=article&catid=11&topic=51&sid=4222&mode=thread&order=0&thold=0> (last visited Apr. 16, 2013).

98. *See generally MOU on the Environment*, GREATER TUMEN INITIATIVE (July 19, 2000), <http://www.tumenprogram.org/news.php?id=172>.

99. *Id.*

“consult with, give access to information to and provide opportunities for involvement by affected citizens and interested NGOs at *appropriate stages* of the development and environmental planning processes for the region.”¹⁰⁰ In addition, there are no specific arrangements on how to notify or consult with the affected states.

Article 1.6 requires the results of TEIA and SEA to be “taken into account” in developing planning activities and the corresponding mitigation plans.¹⁰¹ Here, “due diligence” is not explicitly required. Furthermore, Articles 1.7 and 2.1 simply state that both the SEA and EIA will be conducted “in accordance of internationally accepted procedures and guidelines,” and parties will strive to “meet the objectives of international environmental agreements and norms.”¹⁰² The language used here is very vague and impractical. Finally, parties are required to provide or seek necessary funding for the preparation of TEIA and to carry out their other environmental responsibilities under this MoU.

From the above observations, it can be concluded that, although the MoU briefly covers some of the key issues regarding TEIA, most of these provisions are very general and ambiguous, not to mention the fact that the MoU itself is not a legally binding document. Instead of making a normative commitment, the whole MoU resembles more of a political statement upon which further negotiations can be based and is less likely to provide necessary guidance to any TEIA practices in reality. This document reflects the degree of difficulty for developing a TEIA mechanism between China and other downstream states. Although what has been accomplished so far remains quite immature in many ways, it does at least provide some minimal commitments for China where previously there had been none.

Further cooperation and negotiation on relevant matters were facilitated through the TumenNet project and Strategic Action Programme. Since 2004, an annual TEIA workshop has

100. *Id.* (emphasis added).

101. *Id.*

102. *Id.*

been held six times.¹⁰³ In 2000, based on Article 1.2 of the MoU, the Tumen Programme undertook a long-overdue EIA for the development of the Hunchun Border Economic Cooperation Zone in China, which was established in 1992 without any form of EIA.¹⁰⁴ Interestingly, although the establishment of an economic cooperation zone should be categorized as a regional development plan instead of a specific project and be subject to a SEA rather than an EIA, this environmental assessment was in fact conducted based on standards and legislation on EIA. The confusion can be mainly attributed to both the misguided understanding of EIA and the fact that there was no requirement for SEA in China at the time. Since it is the EIA requirements that apply to “development plans,” after some hesitation, this mix of SEA and EIA methodology will likely still be used as an example regarding transboundary or joint EIA.

This EIA study was conducted by the Chinese Research Academy of Environmental Sciences with the participation of one specialist from South Korean Academy of Environmental Sciences. In the EIA report, which is open to the public only in English, environmental analysis focused on water issues (including Tumen River), pollution control, solid waste disposal, and ecological environment, while economic benefits were considered as well.¹⁰⁵ Given the after-the-fact nature of the EIA, alternatives were not mentioned, although it is unsure whether they will be considered in future. The outcomes of public participation were also included. As outlined in the report, individuals in and around the economic cooperation zone participated mainly through questionnaires, while the approach of spot visits was also used.¹⁰⁶ However, the public from the affected states was not consulted at all. As a conclusion, the report stated that as long as the development of economic cooperation zone is subject to the relevant laws and fulfills the environmental protection measures proposed in the report, its

103. Marsden, *supra* note 18.

104. *MOU on the Environment*, *supra* note 98.

105. See generally CHINESE RESEARCH ACAD. OF ENVTL. SCI., ENVIRONMENTAL IMPACT STATEMENT FOR HUNCHUN BORDER ECONOMIC COOPERATION ZONE 106 (2000), available at <http://www.tumenprogram.org/news.php?id=375>.

106. *Id.* at 98-99.

construction is absolutely feasible in terms of environmental protection.¹⁰⁷ There is no information on whether countries entered into further consultation after the release of the EIA report.

The EIA methodology is based on the relevant Chinese legislation at the time and two documents from the International Financial Organization regarding EIA for environmental protection. The whole report makes no mention of the Espoo Convention or other oft-cited international documents on EIA. In addition, an environmental assessment conducted subsequent to the establishment of the economic cooperation zone does not really embody the essence of what constitutes a proper EIA and is more akin to a post-project analysis or monitoring effort. The timing of this EIA raises serious doubt on whether the whole gesture was merely employed to justify the decision already made. In addition, this EIA falls short of active public participation and adequate information transparency. The approach used to collect public opinion was wholly inadequate, and only fifty people were able to participate through questionnaires. Since the affected public is not actively engaged in the process, it is difficult for them to fully express their opinions and comments on the project through formal channels. The public also lacks necessary information on the environmental issues in the region, and the government and media usually tend to focus on the possible economic benefits. A large number of the population is not even aware of the EIA being undertaken at all. Moreover, although the preparation of the EIA report includes the participation of a South Korean expert, the governments of affected states and their citizens are not really involved in the process. In fact, the whole assessed area does not fall outside of Chinese territory.¹⁰⁸ In reality, this after-the-fact exercise can be characterized as a domestic EIA carried out under a regional development program with very limited participation from other states.

After this first attempt, the project of the GTI Environmental Cooperation (focusing on TEIA in the Greater Tumen Region and

107. *Id.* at 111.

108. *Id.* at 4.

Environmental Standardisation in North-East Asia) was approved in 2007 to promote further development of TEIA. It recognized that since the general ability of member states to produce and distribute environmental information varies significantly, a TEIA mechanism is necessary to evaluate the impact on environment of undergoing projects.¹⁰⁹ However, with highly varied domestic legislation and capacity, the development of the transboundary mechanism at the regional level will be very difficult, and the implementation of such regional arrangements will likely to be less effective. The project also seems to recognize the significance of information transparency and public participation for it stated that environmental information data should be available for public and private institutions. In addition, standardized data collection procedures are promoted in this project. Further, TEIA will be applied to other projects within the region. At the Ninth Meeting of the Consultative Commission, specific projects were identified, such as the Mongolia-China Railway Feasibility Study (this railway will link Mongolia with seaports) and the Road and Harbor Project on the China-North Korean Border, which includes reconstruction of the existing trans-border road into a new road and bridge.¹¹⁰

As mentioned, since 2000, China's domestic legislation on EIA has undergone several important improvements. There are reasons to believe that EIA, as practiced in China today, is better than the situation a decade ago. However, public participation and the relevant information transparency remains one of the major problems in China's contemporary EIA legislation and practice. In addition, while the TEIA arrangements under the MoU and the ongoing workshops on TEIA mark a milestone in China's cooperation with neighboring countries, further progress in this area seems to be quite limited. It is very unlikely for countries in this region to agree on a more solid foundation

109. *GTI Environmental Cooperation (Focusing on Trans-boundary Environmental Impact Assessment (TEIA) in GTR and Environmental Standardization in North-East Asia (ESNA)*, GREATER TUMEN INITIATIVE (Apr. 7, 2010), <http://www.tumenprogram.org/news.php?id=1012>.

110. Marsden, *supra* note 18; *Feasibility Study on Tumen River Water Protection*, GREATER TUMEN INITIATIVE (Apr. 7, 2010), <http://www.tumenprogram.org/news.php?id=1011>.

regarding TEIA in the near future, but it is possible that TEIA will be increasingly applied to joint development projects in the region. Russia has signed, but not yet ratified, the Espoo Convention. This is a potential boost for the development of TEIA in the Greater Tumen region. For China, at least the concept of TEIA has begun to be introduced into economic and environmental cooperation initiatives with neighboring countries. Due to different geopolitical considerations, China's compromise in the Greater Tumen region cooperation does not necessarily lead to the conclusion that China will likely do the same in the MRB context. However, it will certainly provide a more positive example for future domestic and regional discussions on whether and how to develop the TEIA mechanism with the participation of China. Politically, China's leaders have, on different occasions, declared that China would be a large country with international responsibility.¹¹¹ Combined with its diversified interests in Southeast Asia,¹¹² this political gesture may open a door for more constructive cooperation with other Mekong states.

V. DEVELOPING TEIA IN THE MRB CONTEXT

In 2010, a severe drought in southwest China seriously decreased the water level in the Mekong (Lancang) River and exacerbated tensions between China and neighboring countries.¹¹³ Whether China's management of a series of dams on the Mekong (Lancang) River has aggravated the crisis is the subject of serious concern.¹¹⁴ In addition, despite the conclusion of the MRC SEA report which recommends a 10-year deferral for mainstream hydropower development on the lower Mekong River

111. For example, this statement is reaffirmed by Yang Jiechi, the current and the tenth Foreign Minister of PRC. See Yang Jiechi, *Weihu shijie heping cunjin gongtong fazhan - jinian xinzhongguo waijiao 60zhounian* [*Safeguard World Peace, Promote Common Development - Commemorate the 60th Anniversary of New China's Diplomacy*], QIUSHI, Oct. 1, 2009, <http://www.fmprc.gov.cn/chn/gxh/tyb/zyxw/t619863.htm>.

112. See generally Katri Makkonen, *Integrated Water Resources Management in China*, in *INTEGRATED WATER RESOURCES MANAGEMENT IN SOUTH AND SOUTH-EAST ASIA* 267, 287-89 (Asit K. Biswas et al. eds., 2005).

113. See Richard Stone, *Severe Drought Puts Spotlight on Chinese Dams*, 327 *SCI.* 1311, 1311 (2010).

114. See *id.*

and the strong protest of downstream countries and various NGOs against the Xayaburi Dam project during its MRC consultation process, the Lao government finally gave the official green light to the Xayaburi Dam project in November 2012.¹¹⁵ As the first mainstream dam that will be built on the lower Mekong River, this decision will likely trigger a chain effect on the rest of the mainstream dam proposals.

In order to avoid, or at least handle, such controversies better in the future, the development of TEIA is considered essential. The TEIA process requires states to consider the potential significant transboundary environmental impact, attempting to integrate environmental protection and economic development on a case-by-case basis. Meanwhile, the development of civil society in the region demands more information transparency and public participation on transboundary issues. TEIA can definitely provide an important legal mechanism to promote this.

A. Two Levels of TEIA

The crux of the problem is how to tailor TEIA and comprehend it in the specific MRB context. To deal with this complicated issue, it is necessary to recognize two levels of TEIA. On the one hand, TEIA as a notion can be referred to as a “basic version,” which has the general function of cultivating goodwill, increasing transparency, and enhancing the involvement of a more vibrant civil society, especially with respect to developing stronger NGOs. At this level, TEIA is mainly a framework and is easier to be accepted by riparian states.

On the other hand, TEIA as an institution can be referred to as a “classic version,” which is represented by the EU’s EIA Directive,¹¹⁶ the Espoo Convention, and other relevant agreements, including the Aarhus Convention and the UNECE Water Convention. An institutionalized TEIA certainly has a

115. Jonah Fisher, *Laos Approves Xayaburi ‘Mega’ Dam on Mekong*, BBC, Nov. 5, 2012, <http://www.bbc.co.uk/news/world-asia-20203072>.

116. The EIA Directive was first adopted in 1985 via the Directive 85/337/EEC. It has been amended three times, 1997, 2003, and 2009, and then codified by Directive 2011/92/EU in December 2011. See Council Directive 85/337/EEC, 1985 O.J. (L 175) 40-48; Council Directive 2011/92/EU, 2011 O.J. (L 26).

greater chance to be effective, but consensus on such detailed regulation is much more difficult to achieve. Since this issue is addressed with difficulty by developed countries, it is unlikely to be any easier to deal with in the MRB context.

The regional experiences demonstrate that the development of TEIA is very controversial and time-consuming. It took the EU countries around two decades to reach the position today. It is notable that the amendments on the original EIA Directive mainly aim at increasing information transparency and enhancing public participation.¹¹⁷ The situation in the NAFTA region is not as optimistic as the EU's. In order to make a breakthrough of the dilemma, Craik suggested that a proper short-term strategy is to set out the goals and broad principles for TEIA,¹¹⁸ namely the "basic version" referred to here. The case of the Greater Tumen region further illustrates the huge barriers to developing TEIA in a less developed region.

Having considered the above experiences and the situation of environmental cooperation in the MRB, it is more realistic at this stage to promote the acceptance of the general notion of TEIA between China and the other Mekong countries, and it is an essential step for further development. To make TEIA work at this level, two key aspects need to be emphasized. They are access to information and public participation. It is argued that only by increasing transparency and involving the public effectively, can a TEIA get beyond justification of dams into actual analysis of impacts. Meanwhile, as a part of a complete TEIA structure, other issues like notification and consultation, screening, scoping, final decision, and post-project analysis should also be considered. In fact, there are discussions within the MRC concerning developing a non-binding procedural document on TEIA. Endeavors in this area will likely be the best chance of the lower Mekong countries to formulate a more detailed TEIA

117. It was first amended by the Directive 97/11/EC in order to widen the scope, strengthen the procedural stages, and integrate the changes provided by the Espoo Convention, and then revised by the Directive 2003/35/EC to align the provisions on public participation with the Aarhus Convention. The Directive 2009/31/EC further applies EIA to the capture and transport of CO₂ streams for the purposes of geological storage.

118. Craik, *supra* note 90, at 115.

document. A brief discussion on SEA will also be included in this section. Finally, attention will be paid to the issue of compliance. Aside from the relevant international law, this section will also be based on the domestic EIA legislation and practice in the MRB.

B. Screening

The screening process determines whether an EIA process will be required for certain projects.¹¹⁹ The prevalent practice is that a TEIA is only necessary when activities are likely to cause a “significant” adverse transboundary impact. Not much controversy exists regarding the term “significant,” especially considering the domestic EIA legislation in the MRB is generally in line with this threshold requirement. The next question is what counts as “significant.” The Espoo Convention clarifies the threshold requirement by enumerating certain types of activities that are subject to TEIA when they are likely to have a significant adverse transboundary impact, and further develops some general criteria to assist countries in the determination of the environmental significance of activities that are not included in the list.¹²⁰

Similar approaches are adopted under the domestic EIA legislation in the MRB as well. In China, Classified Catalogue of Construction Projects Subject to Environmental Impact Assessment was issued in 2008, which specified the kind of EIA documents needed for various activities based on types, sizes, and

119. *Report from the Commission to the Council, the European Parliament, the European Economic and Social Committee and the Committee of the Regions on the Application and Effectiveness of the EIA Directive (Directive 85/337/EEC, as Amended by Directives 97/11/EC and 2003/35/EC)*, at 3, COM(2009) 378 final (July 23, 2009), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2009:0378:FIN:EN:PDF> [hereinafter *Report from the Commission*].

120. *See* Convention on Environmental Impact Assessment in a Transboundary Context art 2, apps. I, III, Feb. 25, 1991, 1989 U.N.T.S. 309 [hereinafter *Convention on EIA*]. In contrast, in focusing on developing regional standards for domestic EIA, the EIA Directive first creates a detailed list of projects that are automatically subject to an EIA and then identifies another set of projects which are left for the member states to decide whether the EIA procedure should be applied. For projects enumerated in the second list, selection criteria are set out in the Annex III to be taken into account by member states. *See* Council Directive 2011/92/EU, *supra* note 116, art. 4, Annexes I, II, III.

locations.¹²¹ With respect to dam construction, two criteria are applied to decide whether an environmental impact report is needed. One is based on size, namely those with storage volume of ten million m³ or more. The other one is by location—whether the activities are located in certain environmental sensitivity areas.¹²² Similar requirements can be found in Thailand as well. The activities subject to an EIA process are categorized into seven groups based on types, sizes, and locations, among which the dam or reservoir constructions with storage volume of 100 million m³ or more, or storage surface area fifteen square kilometers or more, are subject to full EIA.¹²³ Here, the criterion of storage volume is not as strict as the counterparts in China, but the size of storage surface area is taken into consideration. In addition, all types of projects located in the areas approved by the Cabinet as class 1 B watershed area are also required to prepare the EIA reports.¹²⁴ Therefore, those dam constructions which do not satisfy the size requirement may also be subject to full EIA.

According to the 2010 Directive on the List of Projects to Undertake IEE and EIA in Laos, dams and reservoirs with storage volume of 200 million cubic metres or more, with installed capacity of fifteen megawatts or more, or with a reservoir area of 1,500 hectare or more, are subject to a full EIA.¹²⁵ Although installed capacity is a new factor introduced into the threshold consideration, its standard based on the storage volume is much looser than that of China and Thailand, leaving ample room for

121. Huanjing baohu bu [MINISTRY OF ENVIRONMENTAL PROTECTION OF THE PEOPLE'S REPUBLIC OF CHINA], *Jianshexiangmu huanjingyingxiangpingjia fenlei guanli minglu* [CLASSIFIED CATALOGUE OF CONSTRUCTION PROJECTS SUBJECT TO ENVIRONMENTAL IMPACT ASSESSMENT] 4 (2008), *available at* <http://www.mep.gov.cn/info/bgw/bl/200809/W020080905398664224537.pdf>.

122. *Id.*

123. OFFICE OF NATURAL RES. & ENVTL. POLICY & PLANNING, ENVIRONMENTAL IMPACT ASSESSMENT IN THAILAND 82 (2012), *available at* http://www.onep.go.th/eia/images/stories/inf/Environmental_Impact_Assessment_in_Thailand.pdf.

124. *Id.* at 83.

125. MINISTRY OF NATURAL RES. AND ENV'T OF THE LAO PEOPLE'S DEMOCRATIC REPUBLIC, DIRECTIVE ON THE LIST OF PROJECTS TO UNDERTAKE IEE AND EIA (2010), *available at* <http://monre.gov.la/esia/images/download/type%20and%20size%20697%20pm%20wrea%2012%20mar%202010.pdf>. The relevant provision is translated by Manolinh Thepkhamvong and verified by Oulavanh Keovilignavong.

its national agenda to become the “battery of Southeast Asia.” What is even more surprising or bizarre is the threshold standard set according to the reservoir area; 1,500 hectares is a huge area, but there is no other information available to further interpret this criterion. Despite the above domestic standards, the threshold standards adopted by the 1995 Mekong Agreement and the MRC Procedures for Notification, Prior Consultation and Agreement are in fact very different from the domestic criteria.¹²⁶

In order to address the screening issue in the Mekong context, several questions need to be answered first. For one thing, which template will the future TEIA document in the MRB follow? Is it the Espoo Convention which focuses on the application of EIA in a transboundary context, or the EIA Directive which focuses on the development of European standards for domestic EIA and only partially addresses the TEIA? Considering the circumstances in the MRB, although ASEAN has attempted to standardize or harmonize member states’ legislation on various issues, this job remains a very difficult task in Southeast Asia. Therefore, it is more likely that the future efforts on developing a regional EIA document will focus on the transboundary application of EIA. The next issue is whether we should attempt to develop a TEIA document that is applicable to various kinds of activities, or only target water management of the Mekong River. It also relates to another question, namely under which platform should we develop this mechanism: the MRC, ASEAN, GMS, or others?

Currently, the MRC is in the process of drafting a procedural document on TEIA, but discussion under this platform excludes the participation of China or Myanmar. In addition, since the MRC Procedures for Notification, Prior Consultation and Agreement only apply to mainstream Mekong development, it is likely that the future TEIA document will leave out tributary developments as well. It is certainly not the most reasonable screening arrangement, but it is probably the most feasible under

126. See generally Mekong Agreement, *supra* note 32, art. 5; see also MEKONG RIVER COMM’N FOR SUSTAINABLE DEV., PROCEDURES FOR NOTIFICATION, PRIOR CONSULTATION AND AGREEMENT, art. 5(1) (2003), available at <http://www.mrcmekong.org/assets/Publications/policies/Procedures-Notification-Prior-Consultation-Agreement.pdf>.

the current MRC regime. However, even this degree of consensus will not be easy.

The GMS platform involves all six Mekong countries and deals with numerous infrastructure development projects regarding hydropower, but the platform itself remains loosely structured, operates in an obvious “ASEAN Way,” and lacks incentives to develop regional arrangements around this mechanism. Dialogue cooperation between ASEAN and China is another potential stage for TEIA, but it involves too many countries and consensus would be difficult to achieve. Therefore, a more realistic approach is to pursue relevant development through the MRC. Meanwhile, it is important to try to engage China in the dialogues and negotiations via China’s dialogue relationship with the MRC or through the GMS. Even if it is probably too late to conduct a TEIA for China’s hydropower projects on the upstream Mekong, arrangements could be made regarding post-project analysis or monitoring.

C. Scoping

Scoping is “the stage of the EIA process that determines the content and extent of the matters to be covered in the environmental information to be submitted to a competent authority.”¹²⁷ Scoping is another area that generally does not appear to have much difference between TEIA and the domestic EIA process. With regard to the situation in the Mekong countries, the current EIA legislation in Cambodia and Thailand does not specify what information should be included in the full EIA report. In Thailand, this is compensated for by the General Guidelines in Preparing EIA Report issued by the Ministry of Natural Resources and Environment.¹²⁸ These guidelines should be followed in conducting an EIA in Thailand. In Cambodia, this major deficiency may be addressed by Cambodia’s future EIA Law. Among the Mekong countries’ legislation, only the recently updated Decree on EIA in Laos includes consideration for

127. *Report from the Commission*, *supra* note 119, at 3.

128. *See generally* OFFICE OF NATURAL RES. & ENVTL. POLICY & PLANNING, *supra* note 123.

“appropriate alternatives.”¹²⁹ Notably, according to the Thailand EIA Guidelines, alternatives including no-action should be considered.¹³⁰ The lack of requirements on alternatives in most of the domestic EIA legislation in the MRB indicates that such requirements are less likely to be included in the future TEIA document unless the domestic legislation in this area can be further improved. In addition, both China and Vietnam expressly require the EIA report to include the public opinion.¹³¹ Public participation during the EIA process will be discussed later.

Generally speaking, none of the domestic EIA legislation in the MRB is as specific as the EIA Directive in terms of the contents of the EIA report. For example, except in Vietnam,¹³² there is no express requirement under the Mekong countries’ EIA legislation for a description of the forecasting methods used to assess the environmental impact. Moreover, except the Laos EIA Decree’s explicit request for consideration of the short, long-term, direct, and indirect impact and the similar instructions under the Thailand EIA Guidelines,¹³³ other EIA legislation includes no specific requirements with respect to the kinds of impact that should be examined. None of the EIA legislation in the MRB considers cumulative effects or requires an indication of any difficulties or knowledge gaps encountered in carrying out the EIA. However, almost all Mekong countries do require the

129. PRIME MINISTER’S OFFICE, LAO PEOPLE’S DEMOCRATIC REPUBLIC, DECREE ON ENVIRONMENTAL IMPACT ASSESSMENT art. 3(2) (Feb. 18, 2010), *available at* http://www.thereddesk.org/sites/default/files/39._pm_decree_on_environmental_impact_assessment_1_1.pdf.

130. OFFICE OF NATURAL RES. & ENVTL. POLICY & PLANNING, *supra* note 123, at 22.

131. Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat’l People’s Cong., Oct. 28, 2002, effective Sept. 1, 2003), art. 21 (2002) (China); Law on Environmental Protection (promulgated by the Nat’l Assembly, Nov. 29, 2005), art. 20 (2005) (Viet.).

132. Law on Environmental Protection (promulgated by the Nat’l Assembly, Nov. 29, 2005), art. 20(9) (2005) (Viet.).

133. PRIME MINISTER’S OFFICE, *supra* note 129, arts. 3(2), 12(4)(c); OFFICE OF NATURAL RES. & ENVTL. POLICY & PLANNING, *supra* note 123, at 22.

inclusion of an outline of, or suggestions for, ongoing monitoring and management plans.¹³⁴

The above deficiencies in domestic requirements on scoping have a negative impact on the effectiveness of EIA in each country to varying degrees. The differences in domestic legislation on this issue increase the difficulty for reaching specific regional consensus in this area. Notably, the Laos EIA Decree appears more favorable in several aspects of the scoping issue, but the effectiveness of these provisions in practice remains doubtful. Generally speaking, it is very likely that countries will only reach agreement on some minimal requirements with respect to the contents of a TEIA report. The requirements may resemble the provisions under the Espoo Convention but probably will not include several criteria that countries have not accepted under their domestic EIA legislation. Nevertheless, there remains a possibility that transboundary application of EIA may transcend domestic practice as a result of the influences and pressures mandated by foreign donors and investors. If this proves to be the case, it may contribute to future review and revision of the domestic legislation on EIA and may facilitate more effective implementation according to more stringent international standards.

D. Notification and Consultation

Notification is the first major step taken by the relevant countries during a TEIA process. According to the Espoo Convention and the EIA Directive, in case a proposed activity may cause a significant transboundary impact, the state of origin shall notify any affected state “as early as possible and no later than when informing its own public.”¹³⁵ This provision applies

134. Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2003), art. 17(F) (2002) (China); PRIME MINISTER'S OFFICE, *supra* note 129, art. 13; Law on Environmental Protection (promulgated by the Nat'l Assembly, Nov. 29, 2005), art. 20(6) (2005) (Viet.); OFFICE OF NATURAL RES. & ENVTL. POLICY & PLANNING, *supra* note 123, at 23.

135. Convention on EIA, *supra* note 120, art. 3(1); *see also* Council Directive 2011/92/EU, *supra* note 116, art. 7(1).

the non-discrimination principle to address the issue of who should receive notification and when. This procedure is designed to trigger a timely response on certain projects. One negative example in this area is China's dam construction plans on the upper reaches of the Mekong, of which other riparian states were not been formally notified. It was "not until the mid-1990s that there was any general awareness of the scope of China's plans," and by then the first dam (Manwan) was almost completed and the construction of the second one (Dachaoshan) was about to begin.¹³⁶

The timing of the notification is crucial. According to the MRC Procedures for Notification, Prior Consultation and Agreement, member states are required to notify "in a timely manner prior to implementation,"¹³⁷ but this timing requirement is criticized for being too vague. In addition, it should be noted that this MRC procedural document deals with the notification issue in general instead of considering it as a part of the TEIA process. The broader obligation to notify actually occurs after any domestic EIA has been undertaken. The TEIA procedure, however, is supposed to be integrated with any domestic EIA process. Hence, notification as a part of the TEIA procedure should in fact occur at a much earlier time. The non-discrimination principle thus serves as a practical linkage between the domestic EIA procedures and the TEIA process.

Nevertheless, it is less likely that the Mekong countries can agree to use the timing of "informing its own public" as the trigger for notification. As will be discussed later, information transparency and public participation are far from satisfactory in the region, and there is as yet no formal regional consensus on public participation. Considering the necessity to differentiate two kinds of notification, it is recommended that, at the very least, the future TEIA document should link the TEIA process with the domestic EIA procedure and require the affected states and their public to be notified during the corresponding domestic EIA process. This approach is supported by the judgment of the International Court of Justice (ICJ) in the Pulp Mills Case, which

136. OSBORNE, *supra* note 12, at 11.

137. MEKONG RIVER COMM'N FOR SUSTAINABLE DEV., *supra* note 126, art. 4.5.

stated unequivocally that the duty to inform “become applicable at the stage when the relevant authority has had the project referred to it with the aim of obtaining initial environmental authorization and before the granting of that authorization.”¹³⁸

The content of notification is important as well. Sufficient information could serve as a good foundation for public participation and consultation. In particular, the EIA Directive now reflects a combination of the requirements under both the Espoo Convention and the Aarhus Convention. According to the Directive, along with the notification, at least the following information should be provided: a description of the project, available information on its potential transboundary impact, information on the nature of the decision, and reasonable time for the notified state to respond.¹³⁹ In order to ensure information transparency for effective consultation with the affected states and their public, a certain degree of protection of the domestic public’s right to know and participate is logically essential.

The Espoo Convention further requires the state of origin to enter into consultations with the affected state without undue delay after the completion of the EIA report.¹⁴⁰ The EIA Directive, however, does not specify when the consultation should be held, implying that it can occur prior to the completion of the EIA report. Since the consultation with the public of the affected state often occurs in conjunction with the consultation process among states, it is clear that the Espoo Convention does not provide an opportunity for the public to participate during the scoping or report preparation stages of the EIA.¹⁴¹ The Aarhus Convention and the EIA Directive are not explicit on this issue. Compared to the Directive, the Espoo Convention further sets out several issues that may be included in the consultation, such as possible alternatives and measures to monitor the effects of preventive measures. Although it is commendable for mentioning these issues, the Espoo Convention does not require the consideration of them during consultation. Moreover, countries

138. *Pulp Mills on the River Uruguay (Arg. v. Uru.)*, 2010 I.C.J. 14, ¶ 105 (Apr. 20).

139. Council Directive 2011/92/EU, *supra* note 116, art. 7(1).

140. Convention on EIA, *supra* note 120, art. 5.

141. CRAIK, *supra* note 23, at 143.

are required to agree on a reasonable time-frame for the duration of the consultation period, but there is no further explanation on what counts as reasonable and no minimum standard is set. This is in contrast with the provisions under the UN Watercourses Convention, which stipulates six months as a minimum period for consultation, and this period can be extended by unanimous decision.¹⁴²

It is argued that future consultation requirements for TEIA in the Mekong region, particularly the document prepared under the MRC platform, should be combined with the broader consultation process under the international watercourse law. For example, this process should include consideration of both the factual findings of the TEIA report and a broader agenda to reach agreement on a particular project. However, due to the deficiencies of the existing MRC procedural requirements on consultation, especially with respect to the time-frame and the provision of information,¹⁴³ future provisions on consultation during the TEIA process do not necessarily have to mirror the existing document. It is suggested that consultation should be encouraged and welcomed even prior to the completion of the EIA report. With respect to China, consultation in a general sense is also an oft-used approach during transboundary cooperation on water management with countries like Russia and Kazakhstan.¹⁴⁴ If China was able to agree on any form of transboundary EIA commitment, the introduction of a consultation process is less likely to be a highly disputed issue. However, at this stage, it may be difficult to agree on specific or relatively detailed provisions.

E. Access to Information and Public Participation

According to Principle No. 2 of the Dublin Statement on Water and Sustainable Development's Guiding Principles, "water development and management should be based on a participatory

142. U.N. Convention on the Law of the Non-Navigational Uses of International Watercourses, G.A. Res. 51/229, U.N. GAOR, 51st Sess., Supp. No. 49, U.N. Doc. A/51/869, art. 13 (May 21, 1997).

143. See Gao, *supra* note 52, ch. 4(I)(B).

144. See *id.* at ch. 4(I)(B)(3).

approach, involving users, planners and policy-makers at all levels.”¹⁴⁵ Public participation is democratic in nature and is viewed as a guiding principle underpinning IRBM. At the international level, the Espoo Convention only requires the member states to provide an opportunity to the affected public (equal treatment for domestic public and the public of the affected states) to participate and to ensure relevant information transparency.¹⁴⁶ The current version of the EIA Directive (2011) is much more advanced in this area since it incorporates the contents of the Aarhus Convention.¹⁴⁷ In particular, most of the relevant provisions focus on addressing the issue of informing the public. This is reflected at different stages of the EIA procedure: during the screening process (Article 4), during notification (in a transboundary context) (Article 7), before and after the preparation of the EIA documentation (Articles 5 and 6), and after the final decision is made (Article 9).¹⁴⁸ In addition, information relating to the decision granting any exemption of the Directive and the reasons for granting it should be made available to the public (Article 2).¹⁴⁹

Other than the broad coverage of information disclosure requirements throughout the EIA process, minimum standards are set for the kinds of information that should be made available to the public. This includes information regarding the nature of the possible decisions, the fact that the project is subject to EIA and public participation, information that should be revealed in

145. In January 1992, a water conference took place in Dublin in preparation for Rio and resulted in the Dublin Statement on Water and Sustainable Development (Dublin Statement), including the Dublin Principles. *The Dublin Statement on Water and Sustainable Development*, WORLD METEOROLOGICAL ORG., <http://www.wmo.int/pages/prog/hwrp/documents/english/icwedece.html> (last visited Apr. 19, 2013).

146. Convention on EIA, *supra* note 120, arts. 2(6), 3(8), 4(2).

147. As observed by Craik, the relationship between the Aarhus Convention and the Espoo Convention is not explicit. But since the Aarhus Convention contains a provision that applies to activities subject to EIA procedures under national legislation, the member states are required to apply the Aarhus Convention for “any activity subject to a national EIA process regardless of whether it is otherwise enumerated in Appendix I to the Espoo Convention.” CRAIK, *supra* note 23, at 148-49.

148. Council Directive 2011/92/EU, *supra* note 116.

149. *Id.* art. 2.

the EIA report, details of the arrangements for public participation and the relevant information disclosure process, and the content and reasons of the final decision.¹⁵⁰ Two criteria are set for the timing of information disclosure: (1) early in the decision-making procedures and, at the latest, as soon as information can reasonably be provided; and (2) within reasonable time-frames.¹⁵¹ Details for informing the public are left to the discretion of the member states. The provisions under the EIA Directive on the obligation to inform the public are largely derived from the Aarhus Convention but are better integrated with the domestic and transboundary EIA procedure.

Compared to the requirements on informing the public, the provisions on public participation are much more general. The public should be provided with early and effective opportunities to participate and express their opinions when all options are open before the decision is taken.¹⁵² Considering the diversity of domestic legislation on this issue, detailed arrangements with respect to public participation shall be determined by member states, including reasonable time-frames for the different phases to allow sufficient time for informing the public and for the public concerned to prepare and participate effectively. The information and comments gathered through the participation process should be taken into account during the decision-making.¹⁵³ Technically speaking, the Aarhus Convention is more stringent by requiring the member state to take *due* account of public opinions.¹⁵⁴ Another issue only addressed by the Aarhus Convention is that, where appropriate, in case a specific activity is reconsidered or updated in terms of the operating conditions, the public participation requirements should also be applied *mutatis mutandis*.¹⁵⁵ Therefore, post-project analysis can be also subject to public participation. Further, both the EIA Directive and the

150. *Id.* arts. 5, 6, 7, 9.

151. *Id.* art. 6.

152. *Id.* art. 6(4).

153. *Id.* art. 8.

154. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters art. 6(8), June 25, 1998, 2161 U.N.T.S. 447.

155. *Id.* art. 6(10).

Aarhus Convention require the member states to ensure the public's right of access to justice regarding the public participation provisions.¹⁵⁶

Based on the above provisions, it is clear that while there are relatively more international standards on the obligation to inform the public, details regarding the obligation to consult with the public during the EIA procedure remain largely left to the discretion of the member states. Therefore, the domestic development of public participation, both in general and specifically on proposed activities, still plays a dominate role in ensuring effective participation in each member state. However, the increasing recognition of the procedural rights at the international level is also valuable in setting international benchmarks and principles.

Currently, there are no regional arrangements among the Mekong countries on the obligation to inform and consult the public, except some stakeholder participation policies and communication strategies regarding the operation of the MRC (not the member states) and the relevant policies under the World Bank, the ADB, and other multilateral funding institutions. Despite the relatively better status of transparency and public engagement during the operation of the MRC than most of its member states, many problems with the MRC policies regarding access to information and public participation can still be identified. For example, the current major approach of information disclosure (electronic databases) under the MRC remains distant from local communities and accessibility to information for them still needs to be improved; the misunderstanding in the usage of the term "public participation" when it actually refers to more broad stakeholder participation, which also involves the governments and business sectors; no differentiation of specific activities between the more general plans, programs, and policies when applying the public participation strategies; the participation agenda is very much disconnected to the situation in the field; limited attention given to the directly affected people (compared to NGOs); and lower

156. *Id.* art. 9(2); Council Directive 2011/92/EU, *supra* note 116, art. 11(1).

degrees of participation according to Arnstein's ladder.¹⁵⁷ In addition, the lack of real influence on water development decision-making by the MRC creates a more fundamental challenge to the effectiveness of public participation under the MRC regime. Whilst there are merits in continuing to promote public participation and information transparency under the MRC platform, especially with regard to the drafting of the TEIA document, more fundamental challenges lie in the relevant political and legal reforms at the domestic level.

The major deficiencies of public participation in the Mekong countries include, but are not limited to, the following examples. The Mekong countries tend to interpret and apply exemption clauses in a broad sense, especially with regard to national security and even the so-called national stability (represented by the status quo in China).¹⁵⁸ The biggest legal obstacle for China to share flow information of the Mekong River actually comes from its domestic regulation, according to which the hydrologic data, water resources development and utilization information, river basin plans, and certain information about hydroelectric project are all confidential in the case of a transboundary river, unless certain international agreements exist.¹⁵⁹ While such information is not even accessible to its own public, it is even more difficult to get the Chinese government to share such information with other riparian states and public. Although an increasing domestic demand for transparency has put more pressure on the Chinese government and the current legislation for the lower Mekong countries, the only possible way to overcome this legal barrier is to achieve further agreements with China on sharing relevant information.

Public participation across the region is challenged by diversified, often problematic, domestic legislation, restricted

157. At the risk of oversimplification, the ladder indicates different degrees of public participation from the perspective of power relationships between the public and those holding or exercising the power. See Sherry R. Arnstein, *A Ladder of Citizen Participation*, 35 J. AM. PLANNING ASSOC. 216 (1969).

158. See Gao, *supra* note 52, ch. 5(III)(B)(1).

159. See Shuili gongzuo zhong guojiamimi jiqi miji juti fanwei de guiding [Regulations on State Confidentiality in Water Resources Management and its Specific Scope and Security Classification] (promulgated by the Ministry of Water Res. and State Secrets Bureau, Dec. 29, 2000), arts. 3, 4 (China).

political freedom, and civil society development. Other than some strict, but general, provisions under the 1997 and 2007 Constitution, and the 1992 Enhancement and Conservation of National Environmental Quality Act, Thailand has not yet expressly incorporated public participation into its EIA provisions. However, compared to the other Mekong countries, it has the most vibrant civil society and enjoys more political tolerance for implementing public participation. China probably has the most specific arrangements in this aspect among all the Mekong countries,¹⁶⁰ but they are heavily criticized for not enough information transparency,¹⁶¹ late involvement by the public, and a short time-frame allowed for participation. The recently updated Laos EIA Decree (under the influence of foreign donors and investors) adopts some strong provisions on public participation,¹⁶² but the political reform towards effective implementation is very restricted.

Vietnam has some minimal requirements on information disclosure and the requirement that the public opinion should be included in the EIA report,¹⁶³ but the requirements still fall short of more specific legislation and more open political tolerance. Cambodia only has some hortatory provisions on public participation during the EIA process, but is likely to develop more specific provisions on public participation in future EIA

160. See *Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa* [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2003), arts. 5, 21 (China); *Huanping gongzhong canyu zanxing banfa* [Interim Measures of Public Participation in EIA] (promulgated by the State Env'tl. Prot. Admin., Feb. 22, 2006), arts. 1-32 (China); *Huanjing baohu bu* [Ministry of Env'tl. Prot. of the People's Republic of China], *Huanjingyingxiangpingjia jishu daoze: gongzhong canyu (zhengqiu yijian gao)* [*Technical Guideline for Public Participation in Environmental Impact Assessment (Draft for Comments)*] (Jan. 30, 2011), available at <http://www.es.org.cn/download/2011/1-6/2135-1.pdf>.

161. In particular, only the summary, instead of the full report of the EIA, is required to be disclosed and the public do not have access to the responses of their comments.

162. Decree on Environmental Impact Assessment (promulgated by the Prime Minister's Office, Feb. 18, 2010), arts. 7, 8 (Laos).

163. Law on Environmental Protection (promulgated by the Nat'l Assembly, Nov. 29, 2005), arts. 20, 21 (Viet.).

legislation.¹⁶⁴ With an exception of Thailand, other Mekong countries fall short of formal recognition of access to information and public participation as rights under the existing legislation. In addition, civil society development in most Mekong countries is constrained or underdeveloped to varying degrees, reflected in the fact that: “civil society” is still a relatively new concept and theory to these countries, the lack of awareness of the general public on their participation rights, unclear separation of civil society organizations with the government and business sectors, various restrictions on the formation, registration, management, and operation of NGOs, and the lack of free media.¹⁶⁵

The public also has a relatively weak ability to participate, and the governments or developers fall short of the necessary capacity and willingness to facilitate participation. This includes the lack of confidence, training and education (basic education and professional knowledge), necessary infrastructure, and economic resources. In addition, there is a prevalent feature of formality in existing participation practices, and the notable gaps still exist between the legislation and the situation in the field. The tokenism of implementation is very detrimental for the confidence and activeness of the public to participate via this newly emerging mechanism. Since the concept of access to justice is not very well developed or entrenched, public opinion is either restricted or more likely to be expressed through more violent and non-conventional methods.¹⁶⁶ Further, the development of public participation on proposed activities often falls short of necessary support from other levels of participation (i.e. plans and legislation), and the status of information transparency in most of the Mekong countries remains far from satisfactory, in part a result of varying degrees of immature representative democracy and the establishment of rule of law across the region.

164. Sub-Decree on Environmental Impact Process (promulgated by the Council of Ministers, Aug. 11, 1999), art. 1 (Cambodia).

165. See Gao, *supra* note 52, ch. 5(III)(B).

166. A typical case is the mass public protest (resembling a riot) against a planned molybdenum copper plant that occurred in Shifang, Sichuan Province in early July 2012. *China Morning Round-Up: Shifang Protest*, BBC, July 4, 2012, <http://www.bbc.co.uk/news/world-asia-china-18700819>.

Nevertheless, it should also be recognized that public participation during the EIA process is taking a leading role in promoting legal reforms towards deliberative democracy. The growth of environmental NGOs is the most vibrant aspect of civil society development, and their operation is relatively less sensitive compared to other areas involving advocacy. For most Mekong countries, public participation during the EIA process is a breakthrough point for a wider or expanded application of this mechanism at different levels of decision-making in the future. Major historical impediments created by the political and legal environment cannot be overcome overnight, and it is important to fully utilize the existing opportunities to raise awareness, to gain more experience in the field, and to continue with political reform. While top-down processes remain vital to encourage future reforms, bottom-up approaches should attract at least equal attention. In addition to efforts in promoting public participation at the national level, it is argued that at least some general principles regarding public participation should be included in the regional arrangements on TEIA. Considering the fact that Laos is likely to be the state of origin for most projects that may be subject to a TEIA, its recently updated provisions on public participation for domestic EIAs can provide a necessary foundation for future negotiations. Although the relevant legislation in Vietnam and Cambodia is much less strong or specific, their downstream status can create incentives for them to apply more stringent requirements on public participation to strengthen TEIA methodology. Meanwhile, disincentives like other geopolitical concerns (such as Vietnam's intention to win support from Laos on its territorial disputes with China in the South China Sea) and domestic obstacles impeding relevant reforms should not be overlooked. With regard to China, its past transboundary cooperation has not yet included public participation, except a very general and opaque reference in the case of Greater Tumen region.

F. Final Decision and Post-Project Analysis

The right to make a final decision on whether to approve a proposed activity belongs to the state of origin.¹⁶⁷ According to the Espoo Convention, the authority is not obliged to follow the recommendation of a TEIA report, but should take due account of the report, as well as opinions gained through consultation with the public and the affected states.¹⁶⁸ In addition, countries are still bound by the general obligation to prevent harm and to cooperate.¹⁶⁹ Aside from this, it is also necessary for the state of origin to notify the final decision to the affected state.¹⁷⁰ Consultation should be introduced into the final decision-making process and provide an opportunity for countries to reach agreement on the proposed activity before, not after, any final decision is made.

Final decision is not the end of the TEIA process. Both international instruments and domestic legislation tend to include some post-project measures to monitor and review the actual impact and to cope with uncertainties. Considering the continuous feature of environmental governance, post-project analysis is a good complement to the beforehand evaluation. Depending on the outcome of the post-project analysis, further consultation may be needed to deal with the situation cooperatively. So far, post-project analysis and monitoring is included in the EIA legislation in China, Vietnam, and Laos.¹⁷¹

Post-project analysis is not a compulsory procedure under the Espoo Convention because of the variations on this issue among its member states. In the MRB context, at least, it is necessary to include this issue during negotiation. Post-project analysis is an important mechanism for future cooperation between China and

167. Convention on EIA, *supra* note 120, art. 2.

168. *Id.* arts. 2, 5, 6.

169. *Id.* art. 2.

170. *Id.* art. 2(4).

171. Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2003), arts. 24-28 (China); Law on Environmental Protection (promulgated by the Nat'l Assembly, Nov. 29, 2005), art. 23 (Viet.); Decree on Environmental Impact Assessment (promulgated by the Prime Minister's Office, Feb. 18, 2010), arts. 22-25 (Laos).

other Mekong countries regarding its mainstream hydropower projects. China does have relatively detailed provisions on this issue, but the public has not yet been involved in this process. Even if countries may not agree on post-project analysis to be included as a part of the TEIA document, joint monitoring and study between China and the other Mekong countries is a promising approach to deepen the cooperation on transboundary water management.

G. Strategic Environmental Assessment (SEA)

More recently, SEA has emerged as a response to the criticism that EIA often comes late in the planning process when economic benefits are already well defined and by which time it is difficult to analyze the potential environmental impact rigorously. Therefore, it is argued that environmental evaluation should be employed and integrated into a more comprehensive decision-making process. This often refers to plans, programs, and, to a lesser extent, policies. The valuable role of SEA is also recognized as a promising approach to tackling global environmental concerns like climate change.¹⁷² As noted earlier, the Mekong downstream countries are among the most vulnerable to climate change in the world. Facing this global challenge, it is necessary to consider its regional impacts on the MRB and arrange certain procedures to respond to it. From these two perspectives, SEA should be further developed in this region. Compared to well-developed EIA processes, however, SEA is still a relatively new concept, and the experience on the application of domestic SEA beyond the state remains very limited. The most important international documents in this area are the EU's SEA Directive and the UNECE SEA Protocol to the Espoo Convention (SEA Protocol). The latter finally entered into force in July 2010. At this stage, international obligations only cover SEA of plans

172. See Wolfgang Wende et al., *Climate Change Mitigation and Adaptation in Strategic Environmental Assessment*, 32 ENVTL. IMPACT ASSESS. REV. 88 (2012). Another linkage between EIA and climate change is reflected in the *EU Directive 2009/31/EC* which applies EIA to the capture and transport of CO₂ streams for the purposes of geological storage. Council Directive 2009/31/EC, 2009 O.J. (L 140) 114.

and programs, while SEA of policies and legislation is only mentioned on a voluntary basis.¹⁷³

Among all six Mekong countries, only China and Vietnam have legislated SEA as a compulsory legal mechanism for certain kinds of strategies and plans.¹⁷⁴ It should be noted, however, that when China planned the Lancang cascade in the 1980s and 1990s, there was no requirement for SEA. Even if there had been, the situation would have been the same as the case of the Nu River hydropower planning, in which the Chinese government denied the public from having access to the SEA report due to the confidentiality of certain information regarding international rivers. Vietnam, on the other hand, does not have any Mekong mainstream dam plans. Therefore, the domestic SEA procedure cannot be applied to mainstream hydropower development on the Mekong River. With regard to Thailand, Cambodia, and Laos, a few pilot SEAs have been done in the past.¹⁷⁵ However, a lack of political will, relevant legislation, and necessary capacity ultimately reduces the chances of effective implementation for domestic SEA pilot practices. The World Bank¹⁷⁶ and the GMS program¹⁷⁷ have adopted the SEA as a method or as a part of environmental protection programs. To date, two SEAs have

173. Protocol on Strategic Environmental Assessment to the Convention on Environmental Impact Assessment in a Transboundary Context, art. 13, U.N. Doc. ECE/MP.EIA/2003/2 (May 21, 2003).

174. See *Zhonghua Renmin Gongheguo huanjing yingxiang pingjia fa* [Environmental Impact Assessment Law] (promulgated by the Standing Comm. Nat'l People's Cong., Oct. 28, 2002, effective Sept. 1, 2003), arts. 7-15 (China); *Guohua huanjing yingxiang pingjia tiaoli* [Regulations on Environmental Impact Assessment of Planning] (promulgated by the State Council, Aug. 12, 2009) (China); Law on Environmental Protection (promulgated by the Nat'l Assembly, Nov. 29, 2005) at arts. 14-17 (Viet.).

175. See INT'L CTR. FOR ENVTL. MGMT., *supra* note 10.

176. See generally *Strategic Environmental Assessment (SEA)*, WORLD BANK, <http://go.worldbank.org/1RT0P09R80> (last visited at Apr. 20, 2013); WORLD BANK, ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS AND STRATEGIC ENVIRONMENTAL ASSESSMENT REQUIREMENTS: PRACTICES AND LESSONS LEARNED IN EAST AND SOUTHEAST ASIA (2006), available at <http://siteresources.worldbank.org/INTEAPREGTOPENVIRONMENT/Resources/EIA&SEA-regional-review.pdf>.

177. *Strategic Environmental Assessments (SEA)*, GREATER MEKONG SUBREGION ENV'T OPERATIONS CTR., <http://www.gms-eoc.org/strategic-environmental-assessments> (last visited at Apr. 20, 2013).

been completed for power development planning in Vietnam, and energy sector SEA capacity building is being undertaken in Laos, which aims to increase awareness and build capacity for the application of SEA to energy sector planning.¹⁷⁸ Meanwhile, the GMS is also “supporting the GMS Regional Power Trade Coordination Committee (RPTCC) [desire] to apply SEA in regional power trade planning.”¹⁷⁹ Therefore, they can—at least—play an important role in promoting SEA practices in the lower Mekong countries through their projects and programs.¹⁸⁰

In May 2009, the MRC Secretariat (with the approval from the Joint Committee) commissioned the International Centre for Environmental Management (ICEM, an Australian background independent technical service center) to conduct a SEA report for all proposed mainstream hydropower project in the lower MRB, which took sixteen months to finish.¹⁸¹ Although most of these dam projects are in Laos or on the Lao-Thailand reaches of the mainstream, the SEA process was not led by the Lao government. Instead, it was the MRC Secretariat and the ICEM that played a key role in conducting the research and organizing dialogues. Notable information gaps and uncertainties were expressly stressed in the SEA findings and the report specifically recommends a ten year deferral for mainstream hydropower development.¹⁸² It is argued, however, that the whole process may have been started too late considering the fact that the

178. *Strategic Environmental Assessments of Economic Sector Strategies and Corridors*, GREATER MEKONG SUBREGION ENV'T OPERATIONS CTR., <http://team.gms-eoc.org/index.php/activities/sea.html> (last visited Apr. 20, 2013).

179. GREATER MEKONG SUBREGION ENV'T OPERATIONS CTR., THE CORE ENVIRONMENT PROGRAM AND BIODIVERSITY CONSERVATION CORRIDORS INITIATIVE PROGRESS REPORT FOR THE PERIOD APRIL - SEPTEMBER 2011 4 (2011), *available at* <http://www.gmseoc.org/uploads/resources/117/attachment/CEPBCI%20Progress%20Report%20April-Sept%202011.pdf>.

180. See *Strategic Environmental Assessments (SEA)*, *supra* note 177; Bruce Dunn et al., *Vietnam: Strategic Environmental Assessment on the Quang Nam Hydropower Plan*, in STRATEGIC ENVIRONMENTAL ASSESSMENT IN DEVELOPMENT PRACTICE: A REVIEW OF RECENT EXPERIENCE 29 (OECD Publishing 2012).

181. INT'L CTR. FOR ENVTL. MGMT., *supra* note 10, at 4. The SEA process also included the participation of China through the high level Ecosystem Study Commission for International Rivers.

182. *Id.* at 137.

Xayaburi Dam was already close to its final stage of planning and preparation when the SEA process was initiated.

While the above case sets a precedent for other plans in the region that may have a transboundary impact, so far it looks less likely that it will become a mechanism that can be sustained in future development practices of the lower Mekong countries. There is no general commitment for transboundary SEA among Mekong countries, and there are no specific arrangements or guideline documents available for pilot practices in a transboundary context. This is further complicated by the fact that infrastructure developments which may have a transboundary impact or as a part of a regional development strategy (such as roads, railways, electricity transmissions lines, hydropower projects) are often initiated under different cooperation regimes and are funded by different international and domestic investors. Therefore, it is very difficult to apply unified standards at the regional level to cover development framework for the entire plan or program that should be subject to one comprehensive SEA, not to mention developing regional arrangements that are applicable for all development plans that may have significant environmental effects. In addition, the polycentric feature of regional water cooperation and the danger of MRC's marginalization also add uncertainties to the future development in this aspect.

With regard to future development of SEA in the MRB context, the most obvious task is to legislate on the SEA procedure in Thailand, Cambodia, Laos, and Myanmar. However, considering the problematic SEA legislation and practice in China and Vietnam,¹⁸³ even if the SEA procedure can become a compulsory legal procedure in other Mekong countries, the effectiveness of the SEA procedure will be less likely to improve significantly in the near future. In light of the current development of hydropower projects on the lower Mekong mainstream, a more urgent matter is to introduce the TEIA procedure at the regional level. Meanwhile, it is necessary to encourage more SEA practices in this region so that more valuable experiences and lessons can be gained to contribute to a

183. See generally Gao, *supra* note 52, ch. 6(III)(A).

better-designed SEA in the future. During this process, effective public participation and consultation should be emphasized.

H. Compliance

Compliance is an ongoing process, which refers to “a state of conformity or identity between an actor’s behavior and specified rule.”¹⁸⁴ As an international regime for TEIA, the Espoo Convention addresses the issue by requiring regular meetings of parties, information exchange, self-reporting evaluation, encouraging implementation via new bilateral and multilateral cooperation, developing research programs, seeking methodological and technical support from competent third parties, and establishing dispute settlement mechanisms.¹⁸⁵ While member states can voluntarily accept the jurisdiction of ICJ or agree to resolve disputes via arbitration, they have further adopted a non-adversarial and assistance-oriented compliance monitoring mechanism, which allows states to bring issues of non-compliance before an Implementation Committee to seek its recommendations.¹⁸⁶ Compared to the non-compliance mechanism established under the Aarhus Convention, non-state actors have not yet been able to be directly involved under this mechanism.¹⁸⁷

With regard to the MRC regime, however, there is no self-reporting system introduced, and information exchange focuses more on scientific data rather than relevant domestic legislation and policies. In addition, considering the contents of the MRC Procedures for Notification, Prior Consultation and Agreement, it is likely that the future TEIA document will pay more attention to technical issues regarding how to carry out this process via the MRC institutions instead of dealing with non-compliance situations. Other than the lack of necessary information exchange on domestic implementation, the MRC regime also suffers from the ambiguity of the Mekong Agreement itself and

184. Kal Raustiala, *Compliance & Effectiveness in International Regulatory Cooperation*, 32 CASE W. RES. J. INT’L L. 387, 391 (2000).

185. Convention on EIA, *supra* note 120, arts. 8, 9, 11, 15.

186. CRAIK, *supra* note 23, at 160.

187. *Id.*

the sole reliance on consensus building (underpinned by the “ASEAN Way”) or mediation to settle disputes. These problems also widely exist in other cooperative regimes in the region. Dialogue relationships between China and the MRC and ASEAN are even less systematic, and the structure of the GMS program remains very loose.

Further, a major difficulty in addressing the above issues also lies in the donor-driven feature of the MRC and its increasingly marginalized situation, resulting in the passive involvement of the lower Mekong countries (particularly Laos) and the MRC’s limited impact on hydropower decision-making. Introducing TEIA as a mechanism or a tool under the MRC regime is different from developing a new regional regime to address this issue, and the pre-existing deficiencies of the general compliance system of the MRC will be very difficult to overcome. Therefore, future discussions on the non-compliance mechanism for TEIA in the MRB context will probably not lead to a breakthrough in this aspect. Another fundamental challenge is that none of the MRC procedural documents are legally-binding documents. Accordingly, there is unfortunately no hard law foundation for any kind of compliance mechanism if the TEIA mechanism will be introduced in this way.

Nonetheless, it is argued that at least more active information exchange on relevant domestic policy and experiences and a self-reporting evaluation system are relatively less-controversial compared to others. In addition, scientific services and research is another approach to assist the EIA implementation of the Mekong countries. A direct approach of implementing international commitments on TEIA is to incorporate the international requirements into domestic EIA procedures. For example, the domestic EIA legislation can include the transboundary impact, which is now being considered by the experts in drafting the Cambodian new EIA Law. Aside from this, administrative or other measures should be taken to incorporate TEIA commitments into national policies, programs, or strategies, but the degree of implementation via domestic measures largely depends on the influences of the MRC on domestic policies and legislation in general.

Relevant to compliance, a more fundamental question is how to ensure the effectiveness of the TEIA procedure. Once a TEIA document is incorporated under the MRC regime, it is less likely that there will be obvious violations of these requirements, especially when the provisions are ambiguous. Even if countries complied with the procedural document, the effectiveness of a TEIA in avoiding and addressing environmental disputes should not be over-exaggerated. However, it certainly provides another valuable opportunity to engage with the affected states and their citizens. It remains the most feasible and reliable approach to evaluate the potential transboundary environmental impact of a proposed project.

VI. CONCLUDING REMARKS

TEIA is not a purely legal issue. Instead, political and scientific factors have strong influences on a TEIA in practice. From the legal perspective, the major task is to provide suitable arrangements for such factors to work properly towards a more cooperative decision-making process and a more benign environmental outcome.

Although the existence of some forms of EIA legislation in most of the Mekong countries can at least provide a basic foundation for regional negotiations on TEIA, the general effectiveness of domestic EIA in this region remains far from satisfactory, and the deficiencies of relevant legislation still needs to be improved. This is particularly true with regard to issues like consideration of alternatives and the public's right to be notified and to participate. At the regional level, the promotion of TEIA under the MRC should certainly be considered as a priority, especially given the urgent situation of Mekong mainstream hydropower development.

TEIA has two tendencies of development in practice. It should be admitted that there is a high risk that it could be strongly influenced by national interests and end up as a mere formality to go through to justify a state's behavior. However, there is also a good chance that through the TEIA process, the right of access to information and public participation could be enhanced, so that civil society can be actively involved into the decision-making process. Only by increasing transparency and

involving the public effectively, can a TEIA get beyond justification of dams into actual analysis of environmental impact.

TEIA can be established at two levels: namely as a basic notion and framework, or as an institution with more detailed arrangements. The former is a more realistic target for relevant negotiations under other regional platforms, while the latter may be pursued, at least partly, under the MRC regime. In addition to access to information and public participation, it is necessary to integrate TEIA with the mechanisms of information exchange and notification and consultation. Despite the realistic considerations, bolder proposals on future TEIA agreement should not be completely rejected and the cooperation with other international organizations, regions, and countries should be welcomed.