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Vietnamese Water Resources Legislation and Legal Regulation of Dams: Viewed Through the World Commission on Dams' Suggested Policy Framework

Le Thanh Long

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# VIETNAMESE WATER RESOURCES LEGISLATION AND LEGAL REGULATION OF Dams: VIEWED THROUGH THE WORLD COMMISSION ON DAMS' SUGGESTED POLICY FRAMEWORK

LE THANH LONG \*

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## INTRODUCTION

On November 16, 2000, after two years of work, extensive research and surveys, and the contribution of hundreds of individual experts and organizations worldwide, the World Commission on Dams ("WCD") released a final report, *Dams and Development: A New Framework for Decision-Making* (the "Report").<sup>1</sup> This Report, a "landmark in the history of the development and operation of dams,"<sup>2</sup> which "represent[ed] a major milestone in the assessment of economic, technical, and environmental performance of large dams,"<sup>3</sup> immediately attracted the attention of a large number of people and organizations interested in the topic. This article examines the elements of this revolutionary Report in order to understand its groundbreaking uniqueness.

The Report is the first and most comprehensive work to cover such a wide spectrum of issues pertaining to dams and the related issues of water resources management, environmental protection, and sustainable development. Though not giving a definitive answer to the question of whether or not to dam a river, the Report does offer a number of options and priorities for countries to follow—a model policy framework to help stakeholders decide whether or not to go ahead with a particular dam project.<sup>4</sup> To what extent and how effectively the identified priorities and recommendations for a new policy framework can be applied in any one country naturally depends on the specific socio-economic and political conditions of that country. At the very least, however, any country could find

4. WCD REPORT, supra note 1.

<sup>1.</sup> WORLD COMMISSION ON DAMS, DAMS AND DEVELOPMENT, A NEW FRAMEWORK FOR DECISION MAKING (Earthscan Publications 2000) [hereinafter WCD REPORT].

<sup>2.</sup> Maritta Koch-Weser, *The World Conservation Union's Reaction Dams and Development, A New Framework for Decision Making,* (Nov. 16, 2000) [hereinafter Koch-Weser, *Reaction to Dams Report*] at http://www.dams.org/report/reaction\_iucn.htm (last visited June 29, 2001) (remarking that the WCD documented previously unknown environmental costs).

<sup>3.</sup> Letter from Oumar Aw, African Development Bank, to Kader Asmal, Chair, World Commission on Dams (Jan. 26, 2001), *at* http://www.dams.org/report/reaction\_afdb.htm (last visited June 29, 2001) (expressing appreciation for the well-rounded and helpful report).

something relevant in the Report since the issues addressed are common to all.

To this end, a developing country such as Vietnam may take several lessons from this Report. Today, Vietnam has but a newly emerging system of water legislation and regulations on dams.<sup>5</sup> As any developing country, Vietnam is confronted with the challenge of balancing the need to utilize its natural resources, including water, to develop the country, and to protect against the depletion of its resources. This ambivalence is clearly reflected in Vietnamese law, such as the Law on Water Resources ("LWR"),<sup>6</sup> adopted by the Vietnamese National Assembly in May 1998.

The LWR outlines a legal framework for "managing, protecting, exploiting and using water resources; and preventing, combating and overcoming the negative effects of water."<sup>7</sup> Further, the passage of the LWR embodies approximately ten years of work by Vietnamese law-makers and legal drafters, with the technical support from experienced foreign experts. Assigned with the objective of tackling the problem of unfair and unequal allocation of water during any given year in Vietnam,<sup>8</sup> the LWR provides for the different uses of water, and covers other important water policy issues such as

7. LWR, supra note 6.

<sup>5.</sup> See discussion infra Part II (discussing important Vietnamese water legislation and regulations, including implementation and enforcement).

<sup>6.</sup> See Luat Tai nguyen nuoc [Law on Water Resources], May 20, 1998, Official Gazette No. 21, July 31, 1998 [hereinafter LWR] (defining Vietnamese water resource management). See also Nghi dinh so 179/99/ND-CP cua Chinh phu quy dinh viec thi hanh Luat Tai nguyen nuoc [Government Decree No. 179/99/ND-CP], Dec. 30, 1999 [hereinafter Gov't. Decree 179/99] (on file with the author) (detailing criteria for implementation of the LWR).

<sup>8.</sup> See Phat bieu cua Thuong truc Uy ban Khoa hoc, Cong nghe va Moi Truong ve Du thao Luat Tai nguyen nuoc [Speech of the Standing Members of the Commitee on Science, Technology and Environment of the National Assembly on the Draft LWR], Official Dispatch No. 66/KHCNM, Nov. 19, 1998 at 3 [hereinafter CSTEVNA] (on file with the author) (explaining that the allocation of water within Vietnam is dependent upon the country's two season climate). During the rainy season, for example, the water volume makes up approximately 70-80 percent of the total annual volume, while during the dry season, the water volume is just about 1-3 percent of the annual volume. This unequal allocation causes problems of water supply, and gives rise to disputes over the use of water. See id.

principles of use, water ownership, water rights, the system of agencies in charge of managing water, and protecting water resources from pollution. The issue of whether to establish a river dam is also included among the LWR provisions.

Given the natural characteristics of the water resources in Vietnam, multipurpose dams are considered one of the most effective uses of the country's water supply. There are two major reasons for this. First, damming a river can help overcome chronic water problems by providing for flood control during the rainy season, and water storage for other uses during the dry season." Second, multipurpose dams are a source of electricity generation.

Hydropower has been, and will remain important for Vietnam for two reasons.<sup>10</sup> First, the country has a wide and densely allocated network of rivers, with the Mekong and Red River systems being the two major ones. As a result, hydropower capacity is equally allocated in all parts of the country.<sup>11</sup> Vietnam's geography, characterized by sudden inclination of mountains and hilly land, makes harnessing rivers for electricity generation technically advantageous.

Second, the high rate of economic growth within Vietnam has created an increasing demand for electricity.<sup>12</sup> With nuclear power unavailable, and thermal power limited, hydropower will remain the primary source of power in Vietnam in the years to come. As such, there is a need to exploit rivers in such a manner as to meet this

11. See Dong Manh Quynh, Phuong huong xay dung cac cong trinh thuy dien o Viet Nam [Directions for Development of Hydropower Plants in Vietnam], 8 TAP CHI NANG LUONG [Energy Review] 7, at 8, 23 (1989) (on file with author).

12. NHAN DAN, Jan. 6, 2000, at 1 (on file with author) (stating that the Vietnam Ministry of Industry predicted that in the year 2000, Vietnam was expected to produce approximately 24.6 billion kWh of electricity, and that if the demand continues to increase at the current rate, Vietnam would need to import approximately 1.5 billion kWh).

<sup>9.</sup> See Vu Trung Tang, QUAN LY CAC HE SINH THAI O NLOC [Management of Biological Systems in Water] 60 (Hanoi National University for Natural Resources and Environmental Center 1996) (on file with author).

<sup>10.</sup> See WORLD BANK & KEIDANREN, WORLEY INTERIM REPORT ON STUDY OF DEVELOPMENT OF HYDROPOWER BOT PROJECTS IN VIETNAM 10 (1999) (on file with author) (explaining that there are currently seven major hydropower plants in Vietnam with the total installed capacity of 2,816 MW, occupying 58 percent installed capacity, and providing 70 percent of the electricity generated in Vietnam).

increasing demand. In this context, damming rivers for hydropower production is economically necessary for Vietnam.

This Article presents an analysis of the Vietnamese water resources legislation and dams' regulations in light of the WCD's recommendations for a new policy framework. It discusses the relevance of these recommendations to Vietnam, and the extent to which Vietnamese laws and regulations are consistent with the recommendations. The Article concludes that while the WCD's suggested policy framework is rational, well-rooted, and justifiable, some of its components will be too difficult to implement in a developing country such as Vietnam, recommending that Vietnam develop a legal framework for wider and more active participation of all stakeholders, including the private sector, in the development of water resources and dams.

The Article contains five parts. Part I highlights the major findings and recommendations of the WCD in its Report. Part II deals with Vietnamese water resources legislation. Part III addresses legal regulations pertaining to different aspects of dams. Part IV comments on the implications of the WCD's recommendations for legislation and regulation of dams in Vietnam. Part V contains certain recommendations.

## I. DAMS AND DEVELOPMENT: MAJOR FINDINGS AND POLICY FRAMEWORK RECOMMENDATIONS

As the world's population continues to increase, the amount of fresh water drawn from different sources has increased dramatically, resulting in a strain on the world's water resources. Currently, the world consumes approximately thirty-eight hundred km<sup>3</sup> of water per year.<sup>13</sup> If this trend continues, it is estimated that one-third of the countries in water-stressed regions of the world will face water shortages in the twenty-first century.<sup>14</sup> Given this reality, the

<sup>13.</sup> See WCD REPORT, supra note 1, at xxix (indicating that current fresh water consumption worldwide has doubled since 1950).

<sup>14.</sup> See id. at 7 (stating that a nation can be fresh water stressed as a result of uneven water distribution and limited access).

countries of the world must soon develop a new way of managing freshwater resources to ensure that the water supply is not depleted.<sup>15</sup>

Over the last century, damming rivers has been a popular way to harness hydropower and to balance water supplies, with over fortyfive thousand dams built all over the world.<sup>16</sup> Historically, dams have been used for various purposes, with large dams being used for irrigation and hydropower generation.<sup>17</sup> It is important to note that as the number of dams increased, opposition to dams also became more widespread.<sup>18</sup> Opposition grew as the economic, technical, social, and environmental costs associated with dams became more apparent.<sup>19</sup>

The environmental and social impacts caused by dam construction are among the most noteworthy reasons for opposition to dam building. Dams change the natural hydrological regime of rivers, resulting in an increasing and cumulative loss of natural resources, habitat quality, environmental sustainability, and ecosystem integrity.<sup>20</sup> Increased dam construction also causes significant social problems, such as population displacement.<sup>21</sup> For example, within the last century somewhere between forty to eighty million people have been displaced worldside.<sup>22</sup> Compounding the problem of displacement is the fact that benefits stemming from dams are unfairly allocated. The main beneficiaries of dams are often those

18. See id. at 26 (arguing that "the cost of controversy could seriously affect future prospects for dams.").

19. See WCD REPORT, supra note 1, at xxxii-iii (discussing the creation of the Commission and the importance of the decision-making guidelines).

20. See id. at 88 (stating that one effect of inter-basin water supplies is that new species are often transferred into the new basins).

21. See id. at 104 (describing the fact that tangential aspects, such as power plant construction, lead to additional displacement of persons).

22. See id. (citing China as an example of severe population displacement, with over ten million people relocated between 1950 and 1990).

<sup>15.</sup> See id. (stating that proper water management calls for sharing of water resources in an equitable and sustainable fashion).

<sup>16.</sup> See id. at 8 (indicating that 40,000 large dams have been erected worldwide since 1949).

<sup>17.</sup> See id. (discussing the fact that dams have been developed and used since the Roman Empire).

from outside dam areas, while the rights of those directly affected by dams are not always respected.<sup>23</sup>

Undoubtedly, dams play an important role in human development, and the benefits derived from them have been considerable. However, before undertaking dam construction, it is important to weigh all the different interests, and to carefully consider the resulting impacts to determine whether the proposed project is the best alternative.<sup>24</sup> In this context, the decision-making process is of vital significance.<sup>25</sup> The traditional top-down scheme of decisionmaking, which has prevailed in the last century of dam building, should be revisited because it fails to take into consideration the rights of people living in the immediate vicinity of proposed dam areas.<sup>26</sup> Chapters 8 and 9 in the WCD Report are significant in this respect because they present a series of priorities, guidelines, and recommendations for governments, developers, the private sector, and major stakeholders in dam projects to consider before deciding on the construction of a dam.<sup>27</sup>

To address some of the problems associated with dam construction, the WCD has identified seven strategic priorities that help to ensure equitable and sustainable water use and energy resources development.<sup>28</sup> First, project developers and decision makers must first gain public acceptance and institute a decision-making process that ensures informed participation of all affected

26. See e.g., id. at xxxiv (noting that the WCD Report seven strategic priorities will help future dams gain public acceptance and ensure the sharing of the dams' benefits).

27. See id. at 213-59 (defining and applying the strategic priorities and policy framework to improve dam projects).

28. See id. at 213-14 (stating that the priorities are based on lessons learned from past experiences with decreased dam performance and negative community impact).

<sup>23.</sup> See id. at 240 (stating that proper recognition of those adversely affected is key to establishing fair and equitable entitlements).

<sup>24.</sup> See id. (discussing the drawbacks of large dam construction and how to limit them via better decision making).

<sup>25.</sup> See WCD REPORT, supra note 1, at 168 (detailing how, historically, social and environmental factors have been outside the decision matrix, leading to dissatisfaction with the dam projects).

and interested groups of people.29 Second, decision makers must perform a comprehensive options assessment to help identify different alternatives to building dams, and to guide them in their assessment of whether building a dam is the best possible choice in the given situation.<sup>30</sup> Third, before deciding to build a new dam, decision makers must look to existing dam projects to determine whether there are ways to increase the effectiveness and sustainability of the existing water works.<sup>31</sup> Fourth, decision makers and developers should be guided by the fact that rivers, watersheds, and ecosystems are interrelated components of a single whole, and should implement holistic and protective measures to protect the health and integrity of the river system, and to sustain the livelihood of rivers.<sup>32</sup> Fifth, decision makers must ensure social justice and equity by recognizing the entitlements of, and ensuring benefits to, dam-affected people.<sup>33</sup> Sixth, all parties should work to ensure that agreements between the stakeholders and affected people are fully implemented.<sup>34</sup> Finally, sharing rivers for peace, development, and security means that all parties should cooperate in the use and protection of internationally shared water resources.35

Recognizing that the above strategic priorities would be difficult to achieve, the WCD also established a set of general guidelines to

<sup>29.</sup> See id. at 215 (discussing than an open, fair, and informed process acknowledges existing entitlements and encourages participation in the decision process).

<sup>30.</sup> See id. at 221 (stating that this process gives equal weight to social, environmental, economic, and financial factors).

<sup>31.</sup> See WCD REPORT, supra note 1, at 225 (arguing that management and operation of a dam must continuously adapt to social change to ensure maximum benefits).

<sup>32.</sup> See id. at 234 (indicating that maintenance of a river system is "essential to foster equitable human development and the welfare of all species.").

<sup>33.</sup> See id. at 240 (arguing that negotiations with the adversely affected people, beneficiaries, and developers results in legally enforceable construction and mitigation provisions).

<sup>34.</sup> See id. (stating that public trust and confidence are built by all parties meeting their commitments to the dam project).

<sup>35.</sup> See id. at 251 (encouraging governments to treat water supplies as sustainable assets that are to be allocated equitably instead of treating them as commodities to be divided).

ensure that the strategic priorities are recognized in practice.<sup>36</sup> The first guideline calls for an assessment phase. The goal of this phase is to ensure that a proposed plan for water and energy development adequately reflects local and national needs.<sup>37</sup> Building on this assessment, the second guideline aims to review alternatives for development.<sup>38</sup> The third guideline calls for extensive project preparation to ascertain that all the necessary arrangements are in place before tendering the construction contract.<sup>39</sup> Finally, the fourth guideline covers project implementation and calls for ensuring compliance before contracting out, obtaining necessary licenses, and actual construction of the project.<sup>40</sup> According to the guidelines, the project should also be operated in such a way as to be able to adapt to changing contexts.<sup>41</sup> Any decision to modify the project should be based on a participatory review of project performance and the subsequent impact of modification.<sup>42</sup>

### II. WATER RESOURCES POLICY AND LEGISLATION IN THE VIETNAMESE LEGAL SYSTEM

#### A. THE CIVIL LAW TRADITIONS

Existing water law and regulations in Vietnam are partly a result

40. See id. (stating that the license to operate should be contingent on implementation of the sharing and compensation measures).

41. See id. at 263 (providing that decisions to change facilities, operating rules, or conditions for licensing will be made in response to changing conditions).

42. Id.

<sup>36.</sup> See id. at 260 (expressing the fact that technical guidelines for dams have existed for years, but that the comprehensive decision model is new).

<sup>37.</sup> See WCD REPORT, supra note 1, at 262 (explaining that a decentralized consultation process is used to validate and modify the assessment).

<sup>38.</sup> See id. at 262 (stating that investigations and studies are conducted to determine options to dam construction).

<sup>39.</sup> See *id*. (arguing that the preparation should be detailed and that the contract should not issue until an agreement on benefit sharing and legal compensation have been reached).

of the country's written law traditions.<sup>43</sup> The implications of these traditions are twofold, especially where water rights and water disputes are concerned. First, there is no established recognition of water rights in Vietnam, and even if such rights existed, they could easily be overturned by any written piece of legislation adopted by competent state authorities. Second, court decisions and judgments play a very limited role in establishing and exercising water rights. While decisions and judgments by higher courts may from time to time act as a reference for lower courts in cases of similar nature, decisions made by the highest court of the land generally do not serve as precedents for lower courts in similar cases. The limited role of the courts has naturally affected implementation and enforcement of water resources legislation in Vietnam.

Laws and regulations in Vietnam are commonly referred to as normative legal documents.<sup>44</sup> This term denotes the mandatory

44. See Luat Ban hanh van ban quy pham phap luat [Law on Normative Legal Documents], Nov. 12, 1996, Official Gazette No. 2, Jan. 31, 1997 [hereinafter LNLD] (defining what entity can promulgate law and what type of law it may pass). Normative legal documents in Vietnam are enacted and promulgated by authorities prescribed in the LNLD. See also Nghi dinh so 101/1997/ND-CP cua Chinh phu quy dinh chi tiet thi hanh Luat Ban hanh van ban quy pham phap luat [Government Decree 101/1997/ND-CP], Sep. 23, 1997 [hereinafter Gov't Decree 101/1997] (on file with the author) (defining implementation standards for LNLD). Under the LNLD, the National Assembly adopts Constitutions, Codes of Laws, Laws, and Resolutions. See id. art. 13. The Standing Committee of the National Assembly, the body that operates between the Sessions of the National Assembly, adopts Ordinances and Resolutions. See id. It may also abrogate or recommend that the National Assembly abrogate regulations that do not conform with superior rules. The State President makes orders and decisions. See id. art. 14. The

<sup>43.</sup> These characteristics of the law trace back to early history when feudal dynasties, drawing upon the customs and practices already in place, wrote down regulations to govern the country. Today, important pieces of those ancient laws, such as *Bo luat Hong Duc* (the Hong Duc Code), adopted under King Le Thanh Tong's reign from 1460-1497, and *Quoc Trieu Hinh Luat* (the National Criminal Code), consisting of 22 books with 398 articles, adopted in King Gia Long's reign during 1803-1818, are still preserved in their entirety. *See* Quynh Cu & Do Duc Hung, CAC TRIEU DAI VIET NAM [Vietnamese Dynasties], 185, 343 (Hanoi Youth Publ'g House 1999) (on file with author) (stating that the civil law traditions, also known as the written law traditions, form the basis of the Vietnamese legal system). Following the colonization of Vietnam, the French introduced their own written law traditions, and continued the traditions that already existed within Vietnam. After its independence, Vietnam continued to adopt the written law system, this time with heavy Soviet influence.

character of rules made by State authorities. Only those laws and regulations adopted by the competent State authorities have legal effect in the country.<sup>45</sup> For example, judge-made law does not have any legal effect except as a source of reference for lower courts.

#### B. THE LAW ON WATER RESOURCES ("LWR")

Adopted by the National Assembly, the LWR, Vietnam's most important water legislation to date, cannot be implemented without issuance of under-law regulations by the Government and concerned Ministries. Thus, in order for the LWR to be fully realized, the appropriate Vietnamese government authorities must adopt implementing regulations.

The LWR adopts two major policy elements. First, the State is charged with ensuring that water is used in a sustainable manner.<sup>46</sup> More specifically, the State is responsible for planning, managing, conserving,<sup>47</sup> and protecting<sup>48</sup> water use; zoning river basins; setting investment policy for developing water use;<sup>49</sup> and for setting financial policies for developing water resources.<sup>50</sup> The State is also responsible for adopting the appropriate policies to develop water

47. See LWR, supra note 6, art. 4 (noting that the government promotes unified state management of water resources and "all activities in the protection, exploitation and use of the water resource, the prevention from combat against and overcoming the harmful effects caused by water throughout the country.").

48. See id. art. 13 (emphasizing that it is prohibited to introduce noxious waste, unprocessed discharge water, or water that has not been processed according to the standards of legislation designed to protect the environment).

49. See id. art. 6 (arguing that the State should invest in a survey of the water resources; work out a plan for priority investment to supply water in areas where supply is scarce; and create a preferential policy with regard to those who invest in developing the water source).

50. See id. art. 7 (commenting that those who exploit and use the water resources have a financial duty to build works for the use and protection of the water resource).

Government, the executive organ of the State, adopts Decrees and Resolutions, and the Prime Minister adopts Directives and Decisions. *See id.* art. 15. Ministries and departments under the Government enact circulars. *See id.* art. 16.

<sup>45.</sup> See generally LNLD, supra note 44.

<sup>46.</sup> See infra notes 47-50 and accompanying text.

resources in remote regions and regions with special difficulties."

The second major policy element of the LWR involves fostering cooperation among the interested parties. Since the State does not have the financial resources to sponsor all activities concerning the use, exploitation, development, and conservation of water resources, it must encourage participation by the various actors involved.<sup>52</sup> Lessons from the years of a centrally planned economy have indicated that successful economic and social development requires active participation by different economic actors, including the private sector. The reality, however, is that Vietnam does not currently have a sufficient legal framework to encourage wide participation in exploiting water resources.

Further, in order to ensure that a country's water resources are properly harnessed and used, it is imperative that each country establish specific water policies within a national strategy for water resources. Unfortunately, Vietnam does not have such a strategy at the present time. In drafting a national strategy for water resources, the following issues addressed in the LWR should be taken into account: information and data collection on national water resources,<sup>53</sup> finance,<sup>54</sup> investment, and recovery of the costs;<sup>56</sup> planning and management of each river basin within the country;<sup>56</sup> the role of different actors in implementing water law and protecting

54. See id. art. 7 (providing for financial policy on water resources).

55. See id. art. 6 (setting forth policy guidelines for investment in developing water resources).

56. See id. art. 5 (providing that the approach of specific river basins will be used for management of water resources in general).

<sup>51.</sup> See id. (stating that the State shall provide exemptions and reduced taxes for areas with poor socio-economic conditions to aid in development of water resources).

<sup>52.</sup> See HIEN PHAP NUOC CONG HOA XA HOI CHU NGHIA VIET NAM 1992 [The Constitution of the Socialist Republic of Vietnam, 1992], art. 15 (Vietnam) [hereinafter Vietnamese Constitution] (providing for a multi-sector market oriented economy in Vietnam, and forming the basis for equal participation of all economic sectors in developing the economy).

<sup>53.</sup> See LWR, supra note 6, art. 6 (requiring the State to invest in basic surveys of water resources and systems to collect information on water related issues).

#### C. WATER OWNERSHIP, WATER RIGHTS, AND WATER PERMITS

The traditional concept of the value of water in Vietnam has changed radically because water is no longer free. According to the Vietnamese Constitution, water resources in Vietnam belong entirely to the people, and must be managed by the State, which presently allows people to access water resources through a system of permits.<sup>59</sup> Thus, in Vietnam, water has become a tradable good.<sup>60</sup> Given the State's limited capacity to invest in water works, the permit system is significant because it increases the amount of revenues collected from water usage. These new revenues, in turn, can be reinvested in upgrading and building new water facilities.

In addition to permit revenues the State has also imposed a variety of taxes and license fees relating to water use and rights.<sup>61</sup> For example, a natural resources tax is collected on water used for largescale electricity generation,<sup>62</sup> which accounts for somewhere between

60. See Cong tac phoi hop quan ly tai nguyen nuoc cua Hoi dong Quoc gia ve Tai nguyen nuoc [A Working Paper on Coordination in Management of Water Resources by the National Water Resources Council], July 2000, at 4 [hereinafter NWRC] (unpublished paper on file with the Ministry of Agriculture and Rural Development) [hereinafter MARD].

61. See generally Phap lenh thue Tai nguyen [Ordinance on Natural Resources Tax], April 16, 1998, art. 10 [hereinafter Ordinance on Natural Resources Tax] (on file with MARD). See also Nghi dinh so 68-1998/ND-CP cua Chinh phu quy dinh chi tiet thi hanh Phap lenh thue Tai nguyen [Gov't Decree No. 68-1998/ND-CP], Sept. 3, 1998, art. 12 [hereinafter Gov't Decree 68-1998] (on file with the author).

62. See Ordinance on Natural Resources Tax, *supra* note 61, art. 2. See also Gov't Decree 68-1998, *supra* note 64, art.2 (providing details for the implementation of the Ordinance on Natural Resources Tax).

<sup>57.</sup> See id. art. 4, 10 (stating that economic, political, socio-political, and social organizations have responsibility to implement legislation on water resources).

<sup>58.</sup> See LWR, supra note 6, art. 58, 63 (providing for duties of State authorities and the National Water Resources Council in managing water).

<sup>59.</sup> See Vietnamese Constitution, supra note 52, art. 17 (noting those natural resources that are managed by the State). See also LWR, supra note 6, art. 1 (stating that individuals and organizations may use the water resources and also protect it from harm); LWR, supra note 6, art. 24 (providing for permits for exploitation and use of water).

zero and two percent of commerical produced electricity.<sup>63</sup> Water use for small-scale electricity generation, however, is exempted from the natural resources tax.<sup>64</sup> Other means to collect revenues from water use include fees and charges for: using water;<sup>65</sup> discharging wastewater;<sup>66</sup> using water for domestic purposes;<sup>67</sup> and granting different permits.<sup>68</sup>

The Vietnamese government manages the country's water supply by granting or revoking water use and water discharge permits.<sup>69</sup> In general, discharging untreated wastewater into any water source is prohibited.<sup>70</sup> Discharging some types of wastewater, however, is allowed with a permit obtained from the Ministry of Agriculture and Rural Development ("MARD") and the Provincial People's Committee, the agencies responsible for granting general wastewater discharge permits.<sup>71</sup> Such a permit may be granted for a period of three to five years with the right of extension, and can be revoked on non-compliance grounds.<sup>72</sup>

65. See LWR, supra note 6, art. 23 (noting that organizations and individuals who use the water resources must pay for the use of water). See also Gov't Decree 179/99, supra note 6, art. 8 (on file with the author).

66. See LWR, supra note 6, art. 19 (commenting that those individuals and organizations that are allowed to discharge wastewater must pay discharging water and compesate for the damage they may cause in discharging the water). See also Gov't Decree 179/99, supra note 6, art. 6 (on file with author).

67. See LWR, supra note 6, art. 25 (noting that, although the State will give priority to those who use the water resources for living, they must contribute manpower and finance to the treatment of the water).

68. See Gov't Decree 179/99, supra note 6, art. 8 (stating that individuals and organizations must pay fees for granting permits) (on file with author).

69. See LWR, supra note 6, art. 57 (stating that the State retains the right to issue and revoke permits as part of the State's duty to manage water resources).

70. See id. art. 13 (emphasizing the importance of preventing water pollution).

71. See id. art. 18 (stating that permits are granted based on the water source's capacity to receive waste and assurance that the water source will not be polluted). See also Gov't Decree 179/99, supra note 6, art. 5 (on file with author).

72. See Gov't Decree 179/99, supra note 6, art. 5.

<sup>63.</sup> See Ordinance on Natural Resources Tax, supra note 61, art. 6. See also Gov't Decree 68-1998, supra note 64, art. 5.

<sup>64.</sup> See Ordinance on Natural Resources Tax, supra note 61, art. 10.

The same two agencies that dispense wastewater discharge permits—MARD and the Provincial People's Committee—also issue the country's water use permits.<sup>73</sup> Organizations and individuals using water for domestic, agricultural, industrial, and mining purposes, or for electricity generation on a commercial scale, are required to obtain permits.<sup>74</sup> The permit is not unconditional, and the agency granting a water use permit retains power to revoke it in case of misuse or non-compliance with specified conditions.

Not all water use requires a permit. For example, water use permits are not required for exploitation and use of surface and underground waters by a family household on a non-commercial scale for domestic, agricultural, forestry production, aquaculture, small industry, handicraft production, and small scale hydropower generation purposes; small scale use for salt production and farming marine products; and exploitation and use of rain and surface water on land which has been assigned or leased to land users in accordance with the land law.<sup>75</sup> The Government is empowered to add to the list of uses not requiring water use permits.<sup>76</sup>

#### D. WATER RESOURCES MANAGEMENT AGENCIES

#### 1. Basin-Wide Planning

The LWR introduced a new basin-wide planning approach in water management.<sup>77</sup> This approach ignores territorial and administrative division, and allows each specific basin, as a hydrologic single unit, to serve as the basis for planning any activity

75. Id.

76. Id.

<sup>73.</sup> See LWR, supra note 6, art. 24 (noting that organizations and individuals who exploit and use the water resources must receive permission from the competent State agencies). See also Gov't Decree 179/99, supra note 6, art. 9 (on file with author).

<sup>74.</sup> See id. art. 24 (stating that in general organizations and individuals must obtain permits before exploiting and using water resources).

<sup>77.</sup> See id. art. 5 (describing a plan to prevent, avoid, and limit the harm caused by water on a basin-wide basis).

in that basin.<sup>78</sup> The LWR specifically requires that all types of water use be considered objectively in the context of integrated use; that agencies share information and data with one another; that different parties be encouraged to participate in the process of planning and managing water uses; that the management of water resources be based on laws and regulations; and that project implementation be on a phase-to-phase basis.<sup>79</sup> Furthermore, the basin-wide planning approach should also include activities or projects, such as hydropower projects planned on tributaries.<sup>80</sup> The LWR also mandates that important water use projects, such as extra-basin diversion, be made only in accordance with the established national strategy and basin planning.<sup>81</sup>

One of the most important contributions of the LWR is that it establishes a relatively unified system of agencies in charge of water management.<sup>82</sup> This integrated water resources management approach is a new and promising development in Vietnamese water resources management. In the past, different government ministries and/or departments were assigned to manage water resources depending on how the water was to be used. For example, the Ministry of Transport managed use of water for transportation; the Ministry of Energy (now Ministry of Industry) was in charge of water used for electricity generation; the Ministry of Agriculture (now MARD) managed water used for irrigation; and Ministries of Health and Environment were in charge of ensuring water quality.

#### 2. The National Water Resources Council

Prior to the LWR, coordination among the above mentioned Ministries and Departments was weak. The LWR addresses this issue

<sup>78.</sup> See id. arts. 5, 20 (stating that regulation and distribution of water resources must be based on river basin planning).

<sup>79.</sup> See NWRC, supra note 60, at 5 (on file with author).

<sup>80.</sup> See Gov't Decree 179/99, supra note 6, art. 2 (on file with author).

<sup>81.</sup> See LWR, supra note 6, art. 21 (noting that, in order to divert water from one basin to another, the potential of the river sources, the need for water, and the impact on the environment must be considered).

<sup>82.</sup> See id. arts. 4, 58, 63.

by vesting ultimate authority for managing national water resources in the Government.<sup>83</sup> MARD assists the Government in fulfilling this task through the National Water Resources Council ("NWRC").<sup>84</sup>

On June 15, 2000, the Prime Minister signed the Decision that established the NWRC,<sup>85</sup> for the purpose of consulting the Government on important water projects.<sup>86</sup> The NWRC is an advisory body that attempts to provide a forum for discussion among high-level government representatives, government ministries, and water management agencies while also ensuring a fair and equal representation of water management agencies and other water users.<sup>87</sup> Specifically, the Council will advise the Government on six major issues: 1) national water resources strategies and policies; 2) approval of important river basin planning; 3) large extra-basin diversions: 4) important water use and conservation projects, flood prevention, and other damages brought about by water; 5) use, management and preservation of international water resources, and settlement of disputes among ministries; and 6) dispute settlement between a ministry and a People's Committee of a province, and among the People's Committees of provinces.<sup>88</sup> The NWRC may give advice in advance or at the request of the government. The Council has a limited advisory role, however, as final decision-

86. See id. art. 63 (stating that the NWRC was designed to consult the government in making important decisions regarding water resources). See also Gov't Decree 179/99, supra note 6, art. 16 (on file with author).

87. See An Australian Water Consultancy Company [AWCC], Paper on Establishment of National Water Resources Council in Project TA No 2871-VIE: Project on Management of Water Resources of the Red River Basin, Mar. 2000, 2 [hereinafter Paper on Establishment of NWRC] (unpublished paper on file with author).

88. See Decision No. 67/TTg, supra note 85, art. 2.

<sup>83.</sup> See id. art. 58 (outlining the State's and various organizations' authority in managing water resources).

<sup>84.</sup> See id. art. 63 (describing the various organizations that help the government manage the water resources).

<sup>85.</sup> See Quyet dinh so 67/2000/QD-TTg ngay 15- 6-2000 cua Thu tuong Chinh phu thanh lap Hoi dong quoc gia ve tai nguyen nuoc [Decision No. 67/2000/QD-TTg of 15 June 2000 of the Prime Minister on Establishment of the National Water Resources Council], June 2000 [hereinafter Decision No. 67/TTg] (on file with the MARD).

making authority on a particular project remains with the Prime Minister.

The members of the NWRC are appointed by the Prime Minister, who chairs the NWRC, and are selected for their expertise in water resource management. The permanent members of the NWRC include: (1) the president, who is a Deputy Prime Minister; (2) the standing vice-president, who is the Minister of Agriculture and Rural Development; and 3) representatives selected from an agencies or organizations concerned with water resources, or from among various other scientists and experts.<sup>89</sup> The NWRC also has non-permanent members who are invited by head of the Council to participate in Council sessions. These members are generally representatives of the central and local agencies who have interests in specific water issues. Presently water users and the private sector are unrepresented in the Council, although they may be invited by the Head of the Council to participate in participate in participate in participate.

One of the NWRC's major objectives is to provide a vehicle to implement an integrated approach to water management. Implementation of this approach requires coordination and cooperation by all agencies, organizations, and individuals involved in water management or development of water resources. Given the tendency of chronic localism within each branch of the administration, it is important to maintain a balance among agencies represented in the NWRC. In the interest of impartiality, it is also important to ensure that the Council does not fall into the hands of any single agency.

For the NWRC to function properly and effectively, it must also have political support. As such, the Government should consult with the NWRC before making any important decisions relating to water

<sup>89.</sup> See id. (laying out the members of the Council as follows: Deputy Prime Minister; Minister of Agriculture and Rural Development; Vice Ministers of Agriculture and Rural Development; Aquatic Culture; Science, Technology and the Environment; Planning and Investment; Finance; Defense; Construction; Transport; Industry; Health; Director General of General Department of Meteology and Hydrology; Representatives at the departmental level (under Ministry) from MARD; Ministry of Defense; Aquatic Culture; and General Department of Hydrology and Meteology). The list of Permanent Members of the Council is part of this decision. *Id.* 

management. Furthermore, the Government should implement all justifiable recommendations made by the NWRC.<sup>90</sup> Coordination remains crucial at present because there is no overall mechanism for cooperation among the agencies dealing with water resources management in Vietnam, and because there is no national strategy to coordinate implementation of water policies.

Water management agencies in Vietnam will undoubtedly face challenges, as the goals presented in the LWR remain elusive. Presently, the water management system in Vietnam is too fragmented to be truly effective.<sup>91</sup> In addition, the functions of the agencies in charge of water management overlap in ways that make each agency ineffective without the requisite amount of cooperation. As such, the effectiveness of the NWRC remains to be seen.

#### E. ENSURING COMPLIANCE WITH WATER RESOURCES LEGISLATION

As with any piece of legislation, the LWR presents problems of compliance. Public opinion, administrative, civil, and penal methods of compliance are the four major ways to ensure compliance with water resources legislation. Of these, the administrative method is most important. Recognizing the importance of the administrative method, the LWR established a specialized type of inspection for water resources.<sup>92</sup> The system of specialized inspection on water resources is established within MARD and its local departments, and seems to duplicate the already existing Inspection Division in charge of inspecting matters under MARD's jurisdiction. However, because MARD deals with so many other issues besides water management, establishing this special inspection system may be a positive development because it draws attention to the problem of water resource management.

Under this system of inspection, a specialized inspector of water resources is tasked with inspecting and monitoring implementation

<sup>90.</sup> See Paper on Establishment of NWRC, supra note 87, at 3.

<sup>91.</sup> See CSTEVNA, supra note 8, at 3 (on file with author).

<sup>92.</sup> See LWR, supra note 6, ch. VIII (providing for specialized inspection on water resource).

of general plans and programs concerning the use, exploitation, and protection of water resources.<sup>93</sup> The specialized inspector is also charged with ensuring observance of technical norms and rules pertaining to water use, exploitation, and protection of water conservancy works.<sup>94</sup> In addition, the specialized inspector oversees the issuance of, and compliance with, water use permits,<sup>95</sup> and conducts specialized inspections on uses of water resources.<sup>97</sup>

Public opinion is another important means to ensure compliance with water regulations.<sup>97</sup> This approach encourages compliance by dispensing rewards for compliance.<sup>98</sup> For example, individuals or organizations may be rewarded for: promoting activities aimed at protecting and using water resources in a sustainable manner, participating in activities aimed at preventing or combating the harmful effects of water, or assisting in the prevention of violations of the LWR, such as detecting and reporting breaches of water law and regulations.<sup>99</sup> The reward is more likely to be moral than material in nature.<sup>100</sup> Even though the reward is not tangible, public education and raising public awareness is an important way to encourage public participation in monitoring compliance with water resources legislation.

Lastly, civil and criminal methods may be used to ensure compliance, although they are limited both in scope and practical use. Civil suits are usually used for breaches of contract concerning

95. See id. (identifying the remaining tasks of the Special Inspector's tasks).

96. See id. (describing further the responsibilities of specialized inspector on water resources).

97. See id. art. 70 (stating that organizations and individuals with good records, *i.e.*, those who have not received any complaints, shall be rewarded). See also Phap lenh Khai thac va Bao ve cong trinh thuy loi [Ordinance on Exploitation and Protection of Water Conservancy Works], August 31, 1994, art. 35 [hereinafter Ordinance on Water Works] (on file with author).

98. See LWR, supra note 6, art. 70.

99. See id.

100. See id. (vaguely providing that rewards for fighting against acts of violation of the LWR are rewarded according to the provisions of law).

<sup>93.</sup> See id. art. 66 (identifying the first of the Special Inspector's tasks).

<sup>94.</sup> See id. (identifying the second of the Special Inspector's tasks).

water supply for domestic use or small-scale irrigation. Criminal sanctions could be applied to cases concerning intentional destruction or to cases involving severe harm to water conservancy works such as dikes and dams,<sup>101</sup> although to date no cases of criminal prosecution for water pollution have been reported.

#### F . SETTLING WATER DISPUTES

To address the problems that may arise with respect to the water management system, both the LWR and the Ordinance on Exploitation and Protection of Water Conservancy Works establish dispute settlement mechanisms.<sup>102</sup> In order to settle water disputes successfully, it is incumbent upon the parties involved to use the administrative mechanisms in place, and to actively cooperate with the executive branch, both at the central and local levels of government.<sup>103</sup>

Initially, water disputes must be submitted for mediation and conciliation procedures.<sup>104</sup> Where conciliation of the dispute is unsuccessful, administrative authorities may step in. Generally, the state agency that issued the permit on water resource shall settle any complaints arising from the execution of that permit.<sup>105</sup> However, if the individual or organization is not fully satisfied with the agency's

<sup>101.</sup> See id. art. 71 (providing for administrative fines or penal liability).

<sup>102.</sup> See id. art. 62 (describing the settling of disputes on water resources). See also Ordinance on Water Works, supra note 97, art. 31 (on file with author).

<sup>103.</sup> See LWR, supra note 6, art. 62 (enumerating the different responsibilities for local and state agencies).

<sup>104.</sup> See id. art. 62 (providing for the settlement of disputes on water resources). See also Ordinance on Water Works, supra note 97, art. 31 (on file with author). Both the LWR and the Ordinance on Water Works contain only general provisions on mediation/conciliation. See Phap lenh Hoa giai o co so [Ordinance on Mediation and Conciliation at the Grass-root Level] [hereinafter Mediation Ordinance] (on file with author) (providing detailed procedures for mediation and conciliation).

<sup>105.</sup> See LWR, supra note 6, art. 62 (listing general procedures for resolving complaints). See also Luat Khieu nai To cao [Law on Complaints and Denunciations], Dec. 2, 1998, arts. 19-29 [hereinafter Law on Complaints and Denunciations] (on file with author) (outlining the jurisdictional elements for settling complaints and denunciations). The Law on Complaints and Denunciations also lays out the procedures for settlement. See id. arts. 30-47.

decision regarding the dispute, he has a right to lodge a further complaint to a higher state agency or to initiate legal action in the courts.  $^{106}$ 

The Ordinance on Protection of Water Conservancy Works also sets out a detailed dispute settlement mechanism, to be administered by administrative bodies.<sup>107</sup> The chairperson of the People's Committee of a commune, for example, must settle a dispute within that commune. If the decision by the chairperson of a commune's People's Committee is not acceptable to the parties, the chairperson of the district's People's Committee (who represents the next level of dispute resolution) may settle the complaint. Where there is an appeal of the decision by the chairperson of a district's People's Committee, the chairperson of the People's Committee of the province/city where the district is located shall settle the complaint. Finally, a dispute involving different districts within a province shall be settled by the chairperson of the People's Committee of the province/city where the districts involved are located.

Where a party in dispute is not satisfied with a decision made by any decision-maker mentioned above, that party may further complain to the Minister of Water Resources (now the Minister of Agricultural and Rural Development) for settlement. The Minister's decisions are final.<sup>108</sup> Complaints relating to the Minister's decision on a dispute between provinces/cities or ministriesn can be appealed to the Prime Minister. As such, disputes between a province/city and/or ministry, and MARD shall be settled by the Prime Minister.<sup>109</sup> In rendering these decisions, the NWRC advises the Prime Minister on issues relating to water disputes among ministries and ministries with provincial People's Committees.<sup>110</sup>

As apparent from the foregoing discussion, administrative authorities in Vietnam retain primary jurisdiction for most water disputes. The court's role in settling disputes, on the other hand, is

<sup>106.</sup> See LWR, supra note 6, art. 62(2) (providing for a state review process).

<sup>107.</sup> See Ordinance on Water Works, supra note 97, art. 31 (on file with author).

<sup>108.</sup> See id.

<sup>109.</sup> See id.

<sup>110.</sup> See Gov't Decree 179/99, supra note 6, art. 16 (on file with author).

strictly limited to those disputes arising from water contracts concerning the exploitation and protection of water conservancy works.<sup>111</sup>

#### G. IMPLEMENTATION OF WATER RESOURCES LEGISLATION

There three major problems associated with the are implementation of water resources legislation in Vietnam. First, water resources legislation lacks the details necessary for successful implementation, namely the promulgation of regulations.<sup>112</sup> While it is a general requirement that implementing regulations for any new law be enacted near the time of the approval of the law itself, in practice this is a rare occurence.<sup>113</sup> For example, the LWR was adopted on May 20, 1998, but the first of the two implementing regulations were not enacted until December 30, 1999. Furthermore, the Government has not yet adopted the Decree on Water Permits, which is necessary for the LWR to be fully implemented.<sup>114</sup> Even when the necessary decrees are approved, the Government must still enact several regulations and circulars before the LWR can be fully implemented.115

114. For the implementation of the LWR, the Vietnamese Government must adopt the two implementing decrees: 1) Decree Providing Details for Implementation of the Law on Water Resources, and 2) Decree on Granting Permits for Use and Discharge of Waste Water. To date (September 2001) only the first one has been adopted.

115. See LWR, supra note 6, arts. 39, 49, 50, 59-60, 66 (setting forth the regulations that need to be enacted: regulations on responsibility of each administrative level in operating major water reservoirs; on power to approve and allocate responsibilities in carrying out plans for protection of water conservancy works; on areas of protection of water conservancy works, the power to decide on areas of protection of water conservancy works and other permitted activities within an area of protection of water conservancy works; on assignment of power and allocation of responsibilities to ratify plans and proposed projects; on assignment of work and responsibilities, on management of results of basic survey of water resource; and on duties and organization of the Specialized Inspector of water resource). Pending adoption of the normative legal documents mentioned in this paragraph, the LWR could hardly be said to being realized in practice.

<sup>111.</sup> See Ordinance on Water Works, supra note 97, art. 31 (on file with author).

<sup>112.</sup> See infra notes 113-15 and accompanying text.

<sup>113.</sup> See LNLD, supra note 44, art. 7 (finding that legal documents must be detailed in order to aid in the implementation of other legal documents).

Second, implementing water legislation is complicated by socioeconomic conditions, namely, the lack of financial resources and pressing development concerns. While in theory the LWR is a positive development for water law, implementation and realization of the aspirations of the LWR still require vast amounts of resources. For example, the LWR makes state agencies, organizations, and individuals responsible for protecting water resources, but nowhere provides for the allocation of resources to make implementation a reality.<sup>116</sup>

Finally, implementation of the country's water legislation is severely hindered by a lack of public education concerning the issue.<sup>117</sup> Although there have been efforts to educate the population, the people who are most affected, especially those in remote and mountainous areas, still know little about water resources legislation, their rights and obligations, and the procedures and mechanisms for enforcement. Both the Ministry of Justice and MARD are tasked with dissemination of water resources legislation education,<sup>118</sup> but because financial and human resources allocated for such work are minimal, much remains to be done.

# H. LEGAL ARRANGEMENTS OF VIETNAM'S INTERNATIONAL WATERS

Although the total volume of surface water in Vietnam is quite large, sixty percent of this resource originates outside of Vietnam.<sup>119</sup> As a result, the quantity and quality of surface water available in

119. See CSTEVNA, supra note 8, at 3 (on file with author).

<sup>116.</sup> See id. art. 10 (providing for the responsibilities of protecting water resources).

<sup>117.</sup> See PER BERGLING & LE THANH LONG ET AL., AN INTRODUCTION TO THE VIETNAMESE LEGAL SYSTEM 40 (1998) (discussing the dissemination of legal information).

<sup>118.</sup> The Ministry of Justice has a Department of Legal Dissemination and Education and a Legal Aid Center. Similar divisions are organized within the Provincial Justice Departments. In addition, a National Council for Legal Dissemination, headed by the Minister of Justice, has also been established. The Council, the Department and Center are responsible for dissemination and education of law in general, and water resources legislation in particular. MARD, as administrator of water resources legislation, is also tasked with dissemination of water resources legislation.

Vietnam depends very much on how the water is used in Vietnam's neighboring countries.

#### 1. Regional Cooperation

Vietnam shares two major international river systems with its neighbors: the Mekong River in the south and the Red River in the north. Unfortunately, the lack of resources available for water projects means that there is little to no international cooperation in the exploitation of the Red River.<sup>120</sup> The Mekong River, with its total course of forty-two hundred kilometers, is the twelfth longest river in the world, and is shared by China, Burma, Thailand, Laos, Cambodia, and Vietnam. Both China and Myanmar have been unwilling to participate in cooperative activities with respect to the Mekong River, leaving cooperation efforts to Thailand, Laos, Cambodia, and Vietnam.

Cooperation on exploitation of the Mekong began in the late nineteenth and early twentieth centuries between France, representing Indochina (Laos, Cambodia, and Vietnam) and Siam (now Thailand).<sup>121</sup> In 1957, by virtue of a statute, a body known as the Committee for Coordination and Investigations of the Lower Mekong Basin (the "Mekong Committee") was established among the governments of the four lower riparian countries: Cambodia, Laos, Thailand, and the Republic of Vietnam (former South Vietnam).<sup>122</sup> In 1978, following unification of Vietnam, the Interim

122. See Statute of the Committee for Coordination of Investigations of the Lower Mekong Basin, Sept. 17, 1957 (amended Aug. 1962 & Mar. 1972),

<sup>120.</sup> See Red River Basin Water Resources Management Project, at http://www.adbta2871.vnn.vn/project-ta-2871/en/project-overview.htm (Feb. 11, 2000) (providing an overview of the Basin Study Program).

<sup>121.</sup> A series of Treaties and Conventions containing provisions on free navigation of the Mekong were concluded during this period. These include the Treaty between France and Siam for the Regulation of the Position of the Kingdom of Cambodia, July 15, 1867, 57 Brit. & Foreign State Papers, 1340-42; Treaty of Peace and Convention between France and Siam, Oct. 3, 1893, 87 Brit. & Foreign State Papers 187-88; Treaty of Friendship, Commerce and Navigation between Siam and France, Dec. 7, 1937, 201 L.N.T.S. 113; and the Convention on the Regime for Maritime and River Navigation on the Mekong and for River Navigation Approaching the Port of Saigon, Nov. 29, 1950, Cambodia-France-Laos-Vietnam, *in* U.N. Doc. E/CN.11/WRD/MKG/L.237, vol.2, App.4. (Pau Convention) (1968).

Mekong Committee replaced the Mekong Committee.<sup>123</sup> Both the Mekong Committee and the Interim Committee were empowered to promote, coordinate, supervise, and control the planning and investigation of water resources development projects in the lower basin.<sup>124</sup>

#### 2. The 1995 Agreement

In 1995, as a response to changing circumstances in the region and increasing concerns about environmental problems in the Mekong, the Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin ("1995 Agreement") was reached<sup>125</sup> and the Interim Mekong Committee was reformed, establishing the Mekong River Commission.<sup>126</sup>

The 1995 Agreement's guiding principle was a reasonable and equitable utilization of the Mekong waters.<sup>127</sup> As such, the Mekong River Commission was given the mandate to study technical issues and sustainable development of Mekong Basin.<sup>128</sup> The Council, the highest body of the Commission, is empowered to make policies and

123. See Declaration Concerning the Interim Committee for Coordination of Investigations of the Lower Mekong Basin, Jan. 5, 1978, Laos-Thailand-Vietnam, in H.G. Halbertsma, Legal Aspects of the Mekong River System, 34 Net'l Int'l L. R. 25, 50 (providing for the Interim Committee for Coordination of Investigations of the lower Mekong Basin).

124. See id. at 49, 52 (describing the functions of the Committee for Coordination of Investigations of the Lower Mekong Basin, and describing the functions of the Interim Committee).

125. See Agreement on the Cooperation for the Sustainable Development of the Mekong River Basin, Apr. 5, 1995, Cambodia-Laos-Thailand-Vietnam, ch. VI, art. 36, 34 I.L.M. 864, 877 (1995) [hereinafter 1995 Agreement] (stating that the Mekong River Commission replaces the proper agreements).

126. See id. at ch. IV, art. 11 (providing for the Mekong River Commission).

127. See id. at ch. III, art. 5 (detailing the reasonable and equitable utilization of the waterway).

128. See id. at ch. III (discussing the objectives and principles of the Mekong River Commission).

Cambodia-Laos-Thailand-Vietnam [hereinafter Committee Statute], in H.G. Halbertsma, Legal Aspects of the Mekong River System 34 Net'l Int'l. L. R. 25, 48-51 (1987) (detailing the organization and functions of the Committee for Coordination of Investigations of the Lower Mekong Basin).

decisions, and to provide necessary guidance concerning the promotion, support, cooperation, and coordination in joint activities and projects for the sustainable development of water resources of the Mekong River Basin.<sup>129</sup> The Council is also charged with protecting the environment in the Basin,<sup>130</sup> and has the power to entertain, address, and resolve issues, differences, and disputes arising out of the use of the Mekong.<sup>131</sup> Disputes and issues relating to matters covered by the 1995 Agreement may be referred to the Council by any member state.<sup>132</sup>

One of the issues covered by the 1995 Agreement relates to intrabasin diversion of water.<sup>133</sup> Under the agreement, the Joint Committee, the executive organ of the Commission, must be notified prior to any such diversions from the main stream of the Mekong during the dry season.<sup>134</sup> The Joint Committee is thus charged with coming to a specific agreement on such matters.<sup>135</sup> It is not clear, however, what happens if the members of the Joint Committee fail to arrive at an agreement.<sup>136</sup>

132. See id. ch. IV, arts. 15-20.

133. See id. art. 26 (providing that the Joint Committee is charged with preparing and providing rules for inter-basin diversion for the Council's approval).

134. See id. ch. III, art. 5 (providing rules governing the use of the Mekong River during the dry season).

135. See id. (stating the each project must be agreed to before any proposed diversion).

<sup>129.</sup> See id. ch. IV, art. 18 (describing the functions of the Council).

<sup>130.</sup> See id. arts. 15-20 (describing the functions and makeup of the Council).

<sup>131.</sup> See 1995 Agreement, supra note 125, art. 18 (stating that the Council is charged with addressing conflicts arising out of the agreement and referred to it by any Council member, the Joint Committee, or member State).

<sup>136.</sup> See MEKONG WORKING GROUP, COMMENTARIES TO THE 1993 DRAFT AGREEMENT ON THE COOPERATION FOR THE SUSTAINABLE DEVELOPMENT OF THE MEKONG RIVER BASIN, Jul. 28, 1993 (unpublished document on file with the Mekong Secretariat). The Mekong Working Group, established in 1993 to draft the existing 1995 Agreement, explained water use "agreement" in Article 5 to mean the "result from discussion and analysis of the [Joint] Committee on proposed use of water during the dry season on the mainstream. The purpose is to provide for determination of water flows during the dry season, and if flows exceed the minimum average low base flow established by the Committee, optimum sharing and use of the waters through practical agreement, and not a means to restrict water use." See id.

#### 3. Balancing National and Basin-Wide Interests

Protecting the environment is one of the most basic principles of the 1995 Agreement.<sup>137</sup> Article 3 provides that the parties involved are committed to cooperate "to protect the environment, natural resources, aquatic life and conditions, and ecological balance of the Mekong Basin from pollution or other harmful effects resulting from any development plan and uses of water and related resources in the basin."<sup>138</sup> The Commission's power to achieve these goals, however, is limited because it is under constant pressure to balance national and basin-wide interests. However, because the 1995 Agreement does not give the Mekong River Commission the power to approve individual projects on the Mekong, its power to secure basin-wide interests is severely limited. Indeed, much of the power is still vested in individual member states as each state retains the power to decide on a specific development project within its borders.

Further, the Mekong River Commission's ability to achieve the goals set forth in Article 3 is constrained because it must remember that "sustainable development also reflects a commitment to promote development."<sup>139</sup> With this in mind, the Mekong countries understand that the core of their cooperation under the 1995 Agreement is directed toward the development of the water resources, and to a lesser extent, managing the environment.

As part of their mandates, both the Mekong Committee, the Interim Mekong Committee, and later, the Mekong Commission, were involved in conducting extended investigation on navigational and non-navigational projects on the Lower Mekong Basin. Undoubtedly, one of the major goals was to investigate the potential of the river to yield hydropower.

Through such investigation, the Mekong basin hydropower potential has been estimated to be thirty-seven thousand megawatts, of which thirty-three percent is in Cambodia and fifty-one percent in

<sup>137.</sup> See 1995 Agreement, supra note 125, ch. 111, art. 3 (providing for the protection of the environment and ecological balance).

<sup>138.</sup> Id.

<sup>139.</sup> See WORLD COMMISSION ON ENVIRONMENT AND DEVELOPMENT (WCED), OUR COMMON FUTURE 49-54 (1987) (on file with author).

Laos.<sup>140</sup> It is also estimated that, if harnessed for electricity generation, the Mekong potential would far exceed the projected demand of the countries in the lower basin over the coming decades. Until now, only a few projects have been built on the Mekong tributaries.<sup>141</sup> The river's mainstream development is still in an embryonic and preparatory phase.<sup>142</sup>

Of the proposed mainstream dams projects, the Pa Mong project is one of the most advanced in terms of investigation and studies under the Mekong Committee. The Pa Mong Dam project was proposed rather early in the history of Mekong cooperation. In the 1960s, the Mekong Committee planned to build a High Pa Mong Dam. However, the current understanding of problems, such as dislocation and unacceptable levels of required resettlement, plus a clearer understanding of the dam's environmental impact, have led to a reevaluation of the project. As a result, following the Mekong Committee's revision of the Indicative Basin Plan in 1987, planners considered a Low Pa Mong alternative with a reduced elevation. The Mekong Secretariat completed and published its Low Pa Mong Optimization Study in 1992. If built, the Pa Mong dam project will be used for electricity generation and irrigation, but will also have considerable effects on both upstream and downstream countries in the Mekong Basin.<sup>143</sup> There has been no further progress with the

<sup>140.</sup> See P. Chomchai, *The Mekong River Basin Development Plan, Relevant Projects and Associated Issues*, Paper Presented at the Workshop on Water Law and Management of the Mekong River Basin, Bangkok, Thailand, June 1992 (on file with author).

<sup>141.</sup> See MEKONG SECRETARIAT, THE MEKONG COMMITTEE, A HISTORICAL ACCOUNT 1957-1989, 35-36 (1989) (detailing the capacity of the various projects built on the Mekong tributaries). For example, the following projects produce a significant amount of hydropower: Battambang in Cambodia (31,500 kW), Nam Ngum in Laos (150,000kW), Nam Pong, and Nam Pung in Thailand (25 and 6.3 MW respectively). *Id.* 

<sup>142.</sup> There are different and sometimes controversial views on the benefits of damming the Mekong River. Some represent a very careful approach, suggesting that damming may not be as economically beneficial as different alternatives for power generation. Those taking the opposite view suggest different cascades of dams to be built rivers.

<sup>143.</sup> Various documents on the Pa Mong Dam Project are available. See e.g., Mekong Committee, Main Report on Pa Mong Optimization and Downstream Effects Study, (Bangkok: Mekong Secretariat, 1977); Swedpower &IMC, Prerequisites for Development of Mekong Hydropower (Stockholm, April 1989);

proposed project since 1992.144

# III. REGULATION OF DAM PROJECTS IN VIETNAM

Design, construction, operation, and decommissioning of dams are subject to various laws and regulations. These include water resources law, environmental law, land law, construction and investment law, bidding law, and tax law. Where foreign investment regarding dams is concerned, foreign investment law and buildoperate-transfer law also apply. The laws, in light of the comprehensive and integrated approach on managing water resources and river basins, set out requirements and conditions for this particular water use. Since there is no piece of legislation alone which comprehensively and sufficiently covers legal issues of dams, one can find related rules in all of these types of laws.

In the initial stages of the process, however, dams are primarily subject to domestic investment and construction law.<sup>145</sup> The following discussion highlights how domestic investment and regulations relating to construction, coupled together with water law and other related laws, apply to dams. Further, this section argues that practical realization of these regulations is not provided for in substantive law. Finally, in order to present a more comprehensive picture of investment in dams, regulations on foreign funded "build-operate-transfer"<sup>146</sup> ("BOT") dam projects will be included.

146. See Part III (C) infra (defining and discussing the concept of "build-operate-transfer").

and Team Consulting Engineers Co., Ltd. et al, Preparatory Environmental Study for the Lower Pa Mong Project (Bangkok: Mekong Secretariat, July 1992).

<sup>144.</sup> Interview with Mr. Nguyen Nhan Quang, Deputy Secretary General of the Vietnam National Mekong Committee, in Hanoi, Vietnam (Apr. 11, 2001).

<sup>145.</sup> See Hoa Huu Long, Mot vai y kien ve du thao Bao cao cuoi cung nghien cuu su phat trien cua cac du an BOT ve thuy dien tai Viet Nam [Some Views on the Final Draft Report of Development of Hydropower BOT Projects in Vietnam] (unpublished manuscript, on file with Mr. Hoa Huu Long, Vietnam Ministry of Justice) (asserting that two legal frameworks for investment presently exist in Vietnam: domestic investment and foreign investment).

#### A. GENERAL REQUIREMENTS

The LWR contains general provisions on the exploitation and use of water resources for hydro projects.<sup>147</sup> The law explicitly encourages the use of water resources for hydro-electricity.<sup>148</sup> Under the LWR, the building of hydroelectric works must be in compliance with the planning of river basins and regulations on environmental protection.<sup>149</sup> The LWR also requires organizations and individuals who exploit and use water resources for hydro electricity to comply with the technical processes of operating and regulating water approved by the regulating government entities.<sup>150</sup> The law ensures the integrated use of water resources.<sup>151</sup>

Under the LWR, a "water conservancy work" explores the benefits of water, prevents and combats negative effects of water, protects the environment, and secures an ecological balance.<sup>152</sup> Dams, therefore, are considered to be water conservancy works.<sup>153</sup> A water conservancy work includes the work itself as well as the neighboring area.<sup>154</sup> Therefore, those charged with the responsibility of protecting the environment must consider the surrounding areas in addition to the work itself.<sup>155</sup> A dam should not be treated alone as distinct from

149. See id. at art. 29(2).

150. See id. at art. 29(3) (explaining that an exception to this rule exists if the exploitation and use of water sources for hydroelectricity are for small scale family use).

152. See LWR, supra note 6, at art. 3(17).

153. See Ordinance on Water Works, supra note 97, at art. 2 (recognizing dams as a part of water conservancy works).

154. See LWR, supra note 6, at art. 50 (asserting that a water conservancy work should not be regarded as isolated; rather, the area of protection should include the area surrounding the work).

155. See id. at art. 50(1) (explaining the definition of "neighborhood" must be

<sup>147.</sup> See LWR, supra note 6, at art. 29 (providing for the use of water resources for electricity generation in general).

<sup>148.</sup> See id. at art. 29 (maintaining that hydro-electric works still must comply with environmental law as well as any regulations ratified by the competent state agency).

<sup>151.</sup> See id. (providing an exception for small scale family use); see also id. at art. 3(10) (defining "integrated use of the water resource" as any attempt to make and a develop a rational use of the water source, in order to limit the negative effect of using the source).

other water works in the same area, but rather should be designed, operated, and managed as a constituent part of other related water conservancy works.<sup>156</sup>

#### B. DESIGN, CONSTRUCTION, OPERATION, AND DECOMMISSIONING OF DAMS

#### 1. Decision-Making Power on Dam Construction and Operation

The authority to make decisions on dam projects is limited, and the process of licensing for their operation is rather specific. To make this point clear, it is important to understand the regulatory classification of investment and construction projects in Vietnam. Under existing law, projects are divided into three groups: A, B, and C.<sup>157</sup> Group A projects consist of those with investment capital of four hundred billion VND (approximately thirty million United States dollars) or more, and are considered to be of important socioeconomic significance.<sup>158</sup> Group B and C projects are those with investment under the aforementioned amount.<sup>159</sup>

The Prime Minister, on the basis of recommendations from concerned ministries and state agencies, makes decisions regarding the construction and licensing of projects. On important national projects, the Prime Minister may either submit the issue to the

based on the characteristics of the water conservancy work; the designing criteria; and the conveniency for the operation, and maintenance of the works).

<sup>156.</sup> *Cf. id.* at art. 5(2) (maintaining that the protection of a water source must be linked to the development of forests and to the building and protection of other water resources as well).

<sup>157.</sup> See Nghi dinh so 52/1999/ND-CP cua Chinh phu ban hanh Dieu le Quan ly Dau tu va Xay dung [Government Decree Promulgating the Regulation on Investment and Construction Management, No. 52/1999/ND-CP], Official Gazette No. 31, Aug. 22, 1999, at app. [hereinafter Gov't Decree No. 52/CP] (dividing investment projects into three groups according to the total capital involved for the project).

<sup>158.</sup> See id. (noting that such projects are mainly large capital infrastructure projects including power industry, oil and gas exploitation, chemicals, traffic projects, machine building, etc.).

<sup>159.</sup> See id. (explaining that Group B projects range from VNdong 7-400 billion, while Group C projects consist of those valued under 30 billion VNdong).

National Assembly for approval prior to making a decision,<sup>160</sup> or, if the project is classified as Group A, may authorize the relevant ministry to decide on the project.<sup>161</sup> Incidentally, almost all dam projects fall under group A,<sup>162</sup> and therefore are decided by the Prime Minister with assistance from the relevant ministries.<sup>163</sup>

#### 2. Participating Agencies and Their Responsibilities

In a broad sense, a number of ministries and state agencies participate in licensing dam projects.<sup>164</sup> They present their views and submit proposals on dam projects to the Prime Minister who decides whether to proceed with the project. The Ministry of Planning and Investment ("MPI") is one such ministry that plays a key role in the process. MPI oversees investment projects nationwide including various aspects of dam projects such as feasibility studies.<sup>165</sup> After reviewing and appraising the projects, MPI, if required conditions are met, submits the project proposal to the Prime Minister for approval.<sup>166</sup>

Other ministries also participate in the dam projects process.<sup>167</sup>

163. See supra note 161 and accompanying text (discussing the decision-making procedure for Group A projects).

164. See Gov't Decree No. 52/CP, supra note 157, at art. 7 (listing the ministrics and agencies responsible for investment and construction management).

<sup>160.</sup> See LWR, supra note 6, at art. 59(1) (asserting that the National Assembly approves the policy of investment in water resource projects of national importance).

<sup>161.</sup> See Gov't Decree No. 52/CP, supra note 157, at app. (explaining that "projects of national importance" include Group A projects).

<sup>162.</sup> See id. (stating that projects involving the water supply and drainage are Group A projects).

<sup>165.</sup> See id. at art. 7(1)(e)-(f) (listing the responsibilities and functions of the MPI, some of which include organizing Group A investment projects, issuing investment licenses, and submitting annual and five year plans on development investment to the Prime Minister).

<sup>166.</sup> See id. at art. 7(1)(e) (stating that the MPI is charged with the organization of the appraisals of Group A investment projects prior to submitting them to the Prime Minister).

<sup>167.</sup> See id. at art. 7(5)(b) (stating that branch-managing ministries and ranging from biology, technologies, trade, and national defense, consider the proposals and give written comments on matters relating to investment).

The Ministry of Science, Technology and the Environment ("MOSTE") reviews environmental impact assessment ("EIAs") reports.<sup>168</sup> MARD is responsible for ensuring that the project in question is consistent with proper water use planning.<sup>169</sup> The Ministry of Construction ensures that technical standards concerning construction work are met.<sup>170</sup>

The People's Committee at the provincial level makes decisions regarding land allocation and clearing for construction on the basis of the land use planning and regulations at the provincial and city level.<sup>171</sup> The Prime Minister makes decisions pertaining to investment and construction in each specific case, and is in charge of land allocation and clearing for construction sites. Moreover, despite the decision-making power delegated to the various ministries,<sup>172</sup> it must be noted that the Prime Minister retains the ultimate authority.

While the system is admirable for its attempt to consult with numerous actors, the reality is that there are often too many actors involved with no clear line of authority.<sup>173</sup> Neither relevant decrees,

169. See generally LWR, supra note 6, at art. 5 (stating that protection, exploitation, and use of the water resource must comply with the zoning of the river basin already ratified by the relevant state agency).

170. See Gov't Decree No. 52/CP, supra note 157, at art. 7(2) (explaining that technical standards include design, construction criteria, and quality control).

171. See id. at art. 7(6) (defining the role of the provincial-level committees as entities that execute investment projects in their respective regions and providing them with the equivalent of state management powers).

172. See supra notes 164-9 and accompanying text (discussing the levels of participation by the ministries in the licensing, construction and operation of dam projects).

173. For example, the role of the Ministry of Industry is only inferred.

<sup>168.</sup> See Nghi dinh so 175/ND-CP cua Chinh phu quy dinh chi tiet thi hanh Luat Bao ve Moi truong [Government Decree Guiding the Implementation of the Law on Environment, No. 175/CP], Oct. 18, 1994, at art. 14(2) [hereinafter Gov't Decree No. 175/CP1. available at http://home.vnn.vn/english/legal\_docs/doc00067.html (discussing MOSTEs ministerial duties with regard to the submission of EIAs); see also Luat Bao ve mor truong [Law on Environmental Protection], Dec. 27, 1993, at art. 38 [hereinafter LEP], available at http://home.vnn.vn/english/legal\_docs/doc00234.html (naming MOSTE as the principal ministry responsible for exercising the state function of environmental protection).

nor other pieces of legislation, provide procedures for the proper functioning of the coordinating mechanism for dam projects.

Despite the lack of clear authority, MPI, the Ministry of Industry, and to a lesser extent, MARD, appear to be the lead actors in proposing and proceeding with dam projects.<sup>174</sup> The Ministry of Industry, acting as investment owner, normally initiates a dam project in collaboration with MARD. MPI is important because it ensures that a fund is allocated to the project out of the total national investment fund.<sup>175</sup> MARD is essential to the process because it manages water use.<sup>176</sup> If MPI, the Ministry of Industry, and MARD approve of the project, the project, in most of cases, then passes to the Prime Minister for ultimate approval. It should be noted that the agencies have a "prescribed time limit" to either approve or disapprove of the project.<sup>177</sup> If any of the agencies have not expressed their views on a project within the time limit, then its approval will be inferred.<sup>178</sup>

In contrast to the state ministries, the public does not play a role in the decision-making process of a dam project. While there is a provision in environmental law stating that public hearings may be held if the concerned state agency believes it is necessary, such hearings are not required.<sup>179</sup>

<sup>174.</sup> See generally Gov't Decree No. 52/CP, supra note 157, at art. 7(1)(a) (stating that the MPIs responsibilities include developing policies for investment, issuing investment licenses, organizing appraisal of projects, and assuming the lead in managing socio-economic development projects).

<sup>175.</sup> See id. at art. 7(1)(f) (explaining that the MPI coordinates with the Ministry of Finance to inspect and supervise state funded investment plans).

<sup>176.</sup> See infra notes 194-6 and accompanying text (discussing role of the MARD in granting water use permits).

<sup>177.</sup> See Gov't Decree No. 52/CP, supra note 157, at art. 7(5)(b) (noting, that "prescribed time" is not specifically defined).

<sup>178.</sup> See id. (contending that if the relevant agencies do not reply within the prescribed time their approval will be inferred).

<sup>179.</sup> See infra note 254 and accompanying text (contending that a general public right to access information about proposed dam projects can be inferred from a broad reading of the LEP).

### 3. Investment Owner

Under existing law, investment projects have an investment owner.<sup>180</sup> The investment owner may be an individual who owns or borrows from a fund established for the project, or an organization authorized to manage and use the fund for investment.<sup>1N1</sup> While the responsibilities of the investment owner are numerous, the primary responsibility of the owner is to manage the use of the capital resources for the project.<sup>182</sup> The investment owner of a dam project is specified in the Prime Minister's decision on investment and construction.<sup>183</sup> Up until the time the Prime Minister's decision is made—the end of the preparation phase—there exists only a potential investment owner, not an official one. In most cases, the organization which assumes the responsibility of initiating a project is appointed investment owner.

Which organization will be appointed investment owner depends on the purpose of the dam to be constructed. Practice has indicated that even though a dam is used for various purposes, the primary purpose has in all cases been for electricity generation. The Ministry of Industry is often assigned the role of investment owner. Once appointed, the Ministry of Industry becomes directly responsible to the Prime Minister for construction, operation, and organization and coordination of work relating to the dam project. As an administrative agency, the Ministry of Industry does not construct and operate the project by itself. Under the ministry's general supervision, state owned companies operating on a self-accounting principle may be appointed to oversee the project.

#### 4. Preparation, Investment and Construction, and Operation

The process of constructing and operating a dam project is divided

<sup>180.</sup> See Gov't Decree No. 52/CP, supra note 157, at art. 14(1)(a) (stating that the investment projects of state-owned-enterprises are determined by "persons competent to decide the investment").

<sup>181.</sup> See id. at art. 14 (iterating the duties and authority of investors).

<sup>182.</sup> See id. at 14(2) (stressing that the investment owner is ultimately responsible for repayment of any borrowed capital).

<sup>183.</sup> See supra note 180 (explaining that the investment owner is determined by persons competent to decide the investment).

into three phases: preparation, construction, and operation.<sup>184</sup>

## a. Preparation

Prior to the preparation phase, the Ministry of Industry and MARD decide who will lead the project, and upon consent from MPI, will submit the proposal to the Prime Minister for authorization to begin the preparation phase. This authorization is different from, and made earlier than, the decision on investment and construction. During the preparation phase, the following works are undertaken: (1) determination of the necessity for the project; (2) a study of the consumption need for products produced by the project; (3) an investigation and survey of the location of the project; (4) a preliminary design of the project; (5) a preliminary estimation of costs; and (6) a feasibility studies report.<sup>185</sup>

The primary action undertaken during the preparation phase is the feasibility study.<sup>186</sup> This study covers a wide range of topics including: (1) rationale for investment; (2) investment modes; (3) location of the project (which must be approved); (4) suggestions for land expropriation and population reallocation; (5) preliminary construction design; (6) environmental assessments; and (7) funds.<sup>187</sup>

Potential participants of the project work together on the draft report of the feasibility study.<sup>188</sup> Upon its completion, the draft report

187. See id. at art. 24 (noting that such things as time targets and responsibilities of agencies are also included in the feasibility report).

188. See id. at art. 22 (noting, however, that the participants in the project must provide different levels feasibility studies determined by the project's

<sup>184.</sup> See generally Gov't Decree No. 52/CP, supra note 157, at arts. 21-69 (setting forth the step by step the statutory process, from cradle to grave, of preparing for and executing a project).

<sup>185.</sup> See id. at art. 21 (detailing the steps necessary in investment preparation beginning with a study on the necessity of the investment and ending with submitting the requisite "project dossiers" and supporting documentation to the appropriate authorities).

<sup>186.</sup> See id. at arts. 23-24 (setting forth the main contents of the pre-feasibility and feasibility reports, which comprise the first steps in the investment preparation process). The feasibility report is "the basic document, through which the investors have studied, compared and selected the investment options to be sent to the investment expertising agencies and submitted to the persons competent to decide the investment for consideration and decision." *Id.* at art. 22(3).

is sent to MPI for official review. At this point, MPI may suggest to the Prime Minister that a National Review Council be established to review the entire project.<sup>189</sup> If established, the council would focus its review on the following areas: (1) compliance with the planning; (2) the scope of exploitation and use of natural resources, including water; (3) the scope of production and technology used; (4) construction standards; (5) the use of land and natural resources; (6) population displacement; (7) overall assessment of feasibility; and (8) budget and financial conditions.<sup>190</sup>

The Council then forwards its version of the feasibility study to the Prime Minister for final approval. If approved, the Prime Minister makes a decision on investment and construction.<sup>191</sup>

b. Investment and Construction

While the Prime Minister's decision on investment and construction is pending, the investment owner of the project must obtain various permits before construction can begin: (1) a permit for use of natural resources; (2) a permit for land expropriation work; (3) a permit demonstrating approval of the project's design; (4) a permit for selection of constructors; (5) a permit for actual construction;<sup>192</sup> (6) a permit for technical supervision; (7) a permit for trial operation; and (8) a permit authorizing the investment owner to hand the constructed project over to a named operator.<sup>193</sup>

In addition, dam projects must also apply for water use permits from MARD.<sup>194</sup> MARD is given the statutory authority to grant and

classification—Group A, Group B, or Group C).

189. See id. at art. 28 (explaining that the council will then appraise or reappraise the project prior to making investment decisions).

191. See id. at art. 30 (prescribing the major subject contents of a decision on investment and construction).

192. See id. at art. 39 (remarking that if the Prime Minister already approved the project, it is not necessary to obtain a permit for actual construction).

193. See id. at art. 39-42 (listing the criteria for each permit and the process by which it is approved).

194. See LWR, supra note 6, at art. 24 (requiring individuals and businesses to obtain the requisite consent from authorized state agencies prior to using water for

<sup>190.</sup> See Gov't Decree No. 52/CP, supra note 157 at art. 27 (describing the issues to be reviewed).

revoke water use permits for projects of national importance.<sup>195</sup> The grant of the water use permit in this case is just a formality, because in the decision-making process on investment and construction, the Prime Minister consults MARD.<sup>196</sup>

An important part of work in the construction phase is the technical design of the dam.<sup>197</sup> There are strict requirements on design.<sup>198</sup> Data used to design the project must be supplied by authorized institutions and bodies,<sup>199</sup> and further, must meet the general construction standards approved by the Ministry of Construction, the Ministry of Industry, and MARD.<sup>200</sup> The ministry proposing the project may hire an authorized advisory institution to design the project.<sup>201</sup> Once the design is complete, it is reviewed by the agencies concerned or by a review council established specifically for this purpose.<sup>202</sup>

There are strict rules on testing and monitoring the quality of a construction work. Under Decision 35/QD-BXD of the Minister of

any large scale operation).

198. See id. (establishing a detailed and comprehensive procedure for project design).

199. See *id.* at art. 36(1) (requiring that documents on "topographic, geological, hydrographic, meteorological exploration or surveys" must be provided by authorized organizations only).

200. See id. (declaring the construction design must meet with the standards and technical criteria set by the state).

201. See id. at art. 36(3)(a) (stating that the proposing Ministry may hire experts and/or specialized consultancy organizations to design different parts of a project).

202. See Gov't Decree No. 52/CP, supra note 157, at art. 37 (mandating the technical designs as well as the total cost estimates for the projects be approved by the competent bodies; the competent bodies being those assigned the function of managing construction). See also id. at art. 38(3.1)(a) (stating design approval for Group A projects is made by the ministers, the heads of ministerial-level agencies, managing boards of state companies under the Prime Minister's direct management, and the presidents of the provincial-level People's Committees in the localities where the projects are situated).

<sup>195.</sup> See Gov't Decree 179/99, supra note 6, at art. 9.

<sup>196.</sup> See id.

<sup>197.</sup> See Gov't Decree No. 52/CP, *supra* note 157, at art. 36 (providing the legal documents necessary for designing, the order in which designing must take place, and the organizations authorized to design a project).

Construction,<sup>203</sup> the designer is responsible for the design work.<sup>204</sup> In addition to the general technical standards set out by the Ministry of Construction, the designer must follow special standards established by the agencies in charge of state administration in this area.<sup>205</sup> In the case of dams, this means rules established by the Ministry of Industry, MARD, and MOSTE will apply. A design shall be reviewed, as in the case of Group A projects, by the Ministry of Construction and the Ministry of Industry in collaboration with MARD and MOSTE before submission to the Prime Minister for approval.<sup>206</sup>

Competitive bidding is encouraged for actual construction of a dam project, but is not compulsory in every case.<sup>20°</sup> The Tri An dam project,<sup>208</sup> for example, was constructed by a number of companies which were chosen by bidding.<sup>209</sup> While bidding is encouraged, the

- 204. See id.
- 205. See id.
- 206. See id.

208. Tri An project is a multi-purpose dam project in the Dong Nai River in the southern part of Vietnam which was put into full operation in 1990. The project is designed for electricity generation (construction capacity of 400 MW), domestic and industrial water supply, aquatic farming, tourism, transportation, and improvement of environmental conditions in downstream areas. See Nguyen Dinh Tranh, Tong luan phan tich Thuy dien Tri An [Overall Analysis of Tri An Hydropower Project] 15 (1993) (providing an account of the project).

209. Design was undertaken by the Ministry of Electricity (now the Ministry of Industry), through the General Company of Electricity Works Design and Investigation. The Ministry of Energy, through its General Company of Electricity, acted as owner of the project, coordinating the work of construction. General

<sup>203.</sup> Quyet dinh so 35/QD-BXD cua Bo truong Bo Xay dung ban hanh Quy che quan ly chat luong cac cong trinh xay dung [Decision No. 35 QD-BXD by the Minister of Construction Issuing Rules on Management of Quality of Construction Works], Nov. 12, 1999 [hereinafter Decision 35/QD] (on file with author).

<sup>207.</sup> See Gov't Decree No. 52/CP, supra note 157, at art. 43 (providing, in a general manner, for bidding procedures). See also Nghi dinh so 88/1999/ND-CP cua Chinh phu ban hanh Quy che dau thau [Government Decree Issuing Rules on Bidding, No. 88/1999/ND-CP], Sept. 1, 1999 Official Gazette No. 37, Oct. 8, 1999 (stating the specific bidding procedures) (on file with author); Nghi dinh so 14/2000/ND-CP ve sua doi, bo sung mot so dieu cua Nghi dinh so 88/1999/ND-CP ban hanh Quy che dau thau [Government Decree No. 14 2000 ND-CP Amending and Supplementing Certain Articles of Decree No. 88/1999/ND-CP Issuing Rules on Bidding], May 5, 2000 Official Gazette No. 21, June 8, 2000 (on file with author).

state reserves the right to appoint the construction contractor, if the project is one involving national security, or is of urgent need.<sup>210</sup>

Subject to oversight from the Ministry of Construction,<sup>211</sup> monitoring the quality of construction work is the responsibility of the investment owner.<sup>212</sup> Once the dam is complete, the investment owner conducts a preliminary test before the dam is authorized to begin operation.<sup>213</sup>

# c. Operation

The third phase is operation.<sup>214</sup> In principle, there are four ways in which the operation of the project is managed: (1) the investment owner manages and operates the work; (2) a hired manager runs the work; (3) the project is run by turn-key; or (4) the project is self-executed.<sup>215</sup> To date, only the first option has been employed; that is, the investment owner chose to operate the project.<sup>216</sup>

210. See Gov't Decree No. 52/CP, supra note 157, at art. 43 (outlining types of projects exempt from the bidding process).

211. See id. at art. 46(4)(a) (providing that the Ministry of Construction is responsible for the quality of construction works nationwide and allowing for the promulgation of regulations to ensure such quality).

212. See id. at art. 46 (stating that the investment owner shall be responsible for the quality control throughout the construction process).

213. See id. at art. 47(1)-(2) (stating that the test will be carried out by the investor with assistance from outside organizations and/or consulting groups); see also id. at art. 47(3) (providing that the Prime Minister shall appoint a council to conduct the initial tests where the project is important or requires complicated techniques and technologies).

214. See Gov't Decree No. 52/CP, supra note 157, at art. 53 (explaining that the final phase is actual operation of the project).

215. See id. at art. 59 (providing acceptable forms of project management).

216. See generally id. at art. 60 (mandating that the investment owner have a "fully capable" project management apparatus, or its equivalent, in order to operate the project).

Construction Company No. 1, under the Ministry of Construction, was in charge of constructing the energy line. The Union of Water Conservancy Works Construction Enterprises, under the Ministry of Water Resources (now MARD), constructed hydraulic works. The Union of Transportation Works Construction Enterprises No. 6, under the Ministry of Transport, constructed transportation works. Finally, the People's Committee of Dong Nai Province prepared the land area and population reallocation. *See id.* 

# C. HYDROPOWER/DAM BOT PROJECTS

Hydropower projects, like all infrastructure projects, can be constructed as a BOT venture.<sup>217</sup> The general theory behind BOTs is simple: a nation unable to develop a project allows a private contractor to *build* the structure. After construction, the private contractor *operates* the structure for profit for a specific amount of time. When the agreed upon operating time expires, the private contractor *transfers* ownership to the nation.<sup>218</sup>

Presently, specific regulations addressing domestic hydropower BOT projects do not exist. As a result, no domestic or foreign investors built BOT hydropower projects in Vietnam. While the absence of BOT hydropower regulations may be a factor, the lack of domestic private investment is also explained by the fact that Vietnam does not have private companies financially and technically capable of investing in dam projects. In addition, the policy, legal, and managerial framework in Vietnam is not favorable to BOT projects.<sup>219</sup>

Dams, in general, and hydropower projects in particular, are not an easy fit for the BOT model. First, dams are a major investment and require a long lead time for construction.<sup>220</sup> Second, geological and hydrological risk pervades the construction of dams and hydropower projects.<sup>221</sup> Finally, there are extensive social and environmental impacts.<sup>222</sup> Studies therefore suggest that Vietnam's private sector infrastructure is not yet ready to support hydropower BOT

221. See id.

222. See id.

<sup>217.</sup> See Charlie Pahlman, Public Subsidies for the Private Sector B-O-T Under Review, THIRD WORLD NETWORK (May 1999), at http://www.twnside.org.sg/title/1902-ch.htm (discussing the development of B-O-Ts in economically unstable countries).

<sup>218.</sup> See id. (presenting the advantages and disadvantages of the B-O-T system).

<sup>219.</sup> VIETNAMESE CONSULTATION TEAM FOR HYDROPOWER BOT PROJECTS, Tom tat Bao cao cuoi cung ve su tham gia cua khu vuc tu nhan vao cac du an BOT thuy dien o Viet Nam [Summary of the Final Report on Participation of the Private Sector in Hydropower BOT Projects in Vietnam] (unpublished document, on file with Vietnam Ministry of Justice).

<sup>220.</sup> See WORLD BANK & KEIDANREN, supra note 10, at 3.

projects.223

Foreign investment in dam and hydropower BOT projects is regulated by foreign investment law and BOT law – namely: (1) the Law on Foreign Investment of 1996;<sup>224</sup> (2) its implementing decree;<sup>225</sup> (3) Decree 62/1998/ND-CP;<sup>226</sup> and (4) Decree 02/1999/ND-CP.<sup>227</sup> Environmental and land issues, other than those covered in the investment and BOT law, are regulated by the same laws and regulations that apply to domestic investment. While Vietnamese law strongly encourages BOT hydropower projects,<sup>228</sup> as of yet, there is no foreign investment.<sup>229</sup>

224. Luat Dau Tu Nuoc Ngoai Tai Viet Nam [Law on Foreign Investment in Vietnam] (as amended and supplemented on June 9, 2000).

225. Government Decree on The Law on Foreign Investment in Vietnam and Government Decree Providing Details for the Implementation of the Law on Foreign Investment in Vietnam, No.24/2000/ND/CP, July 31, 2000 [hereinafter Gov't Decree No. 24/CP].

226. Nghi dinh so 62/1998/ND-CP cua Chinh phu ban hanh Quy che dau tu theo hop dong xay dung – kinh doanh – chuyen giao, hop dong xay dung – chuyen giao – kinh doanh va hop dong xay dung – chuyen giao ap dung cho dau tu nuoc ngoai tai Viet Nam [Government Decree Issuing Rules on Investment in Forms of Build-Operate-Transfer Contracts, Build-Transfer-Operate Contracts and Build-Transfer Contracts Applicable to Foreign Investment in Vietnam, No. 62/1998/ND-CP], Aug. 15, 1998 Official Gazette No. 29, Oct. 20, 1998.

227. Nghi dinh so 02/1999/ND-CP cua Chinh phu ve sua doi, bo sung mot so dieu cua Nghi dinh so 62/1998/ND-CP cua Chinh phu ban hanh Quy che dau tu theo hop dong xay dung – kinh doanh – chuyen giao, hop dong xay dung – chuyen giao – kinh doanh va hop dong xay dung – chuyen giao ap dung cho dau tu nuoc ngoai tai Viet Nam [Government Decree Amending and Supplementing a Number of Articles of the Rules on Investment in Forms of Build-Operate-Transfer Contracts, Build-Transfer-Operate Contracts and Build-Transfer Contracts Applicable to Foreign Investment in Vietnam, No. 02/1999/ND-CP], Jan. 27, 1999 Official Gazette No. 9, Mar. 8, 1999.

228. See Gov't Decree No.24/CP, supra note 225, at app. I (listing BOT investment projects as "specially encouraged investment projects").

229. It was estimated in 1995 that Vietnam would need US\$ 24 billion by 2010 to properly invest in its power sector. This amount that far exceeds the State's resources. *See* WORLD BANK & KEIDANREN, *supra* note 10, at 8.

<sup>223.</sup> See id. at 3.

# D. ENVIRONMENTAL ISSUES AND ENVIRONMENTAL IMPACT ASSESSMENT

## 1. General Requirements

Dam projects have a substantial impact on the environment.<sup>230</sup> In recognition of this fact, Vietnam has general environmental laws, as well as more specific regulations that apply to dams.

The 1992 Vietnamese Constitution contains general provisions addressing environmental protection.<sup>231</sup> The environmental provisions of the Constitution are supplemented by the Law on Environmental Protection of 1993 ("LEP")<sup>232</sup> and its implementing decree, Government's Decree 175/CP of 1994.<sup>233</sup> The LEP is the General Assembly's first attempt at codifying environmental protection principles, and as a result, is very general. An important principle specified in the preamble of the LEP expresses the right of the people to live in a clean and healthy environment.<sup>234</sup> The law establishes environmental protection, <sup>235</sup> but also stress the importance of development.<sup>236</sup>

As the State agency charged with implementation of the LEP,<sup>237</sup>

232. LEP, supra note 168.

233. Gov't Decree No. 175/CP, supra note 168.

234. See LEP, *supra* note 168, at pmbl. (asserting that the environment is of "special importance to the life of humans and other living creatures," as well as to the "economic, cultural, and social development of the country").

235. See id. (declaring broad objectives of law).

236. See *id.* at art. 11 (encouraging environmental consciousness, but also recognizing the need to create favorable conditions for organizations and individuals so that they may harness the environment for business gain).

237. See Gov't Decree No. 175/CP, supra note 168, at art. 4 (stating that MOSTE shall be responsible for State management of environmental protection).

<sup>230.</sup> See WCD REPORT, supra note 1, at 73-96 (examining the environmental impact of dams).

<sup>231.</sup> Under the Constitution, "[s]tate organs, units of the armed forces, economic and social bodies, and all individuals must abide by State regulations on the rational use of natural wealth and on environmental protection. All acts likely to bring about exhaustion of natural wealth and to cause damage o the environment are strictly forbidden." Vietnamese Constitution, *supra* note 52, at art. 29.

MOSTE conducts EIAs of investment and construction projects.<sup>238</sup> While the law in theory is a positive development, Vietnam does not have the financial resources, public awareness of environmental issues, or political commitment to effectively implement the LEP.

## 2. Environmental Impact Assessment of Dam Projects

In 1985, the Chairman of the Council of Ministers (now the Prime Minister) issued a decision on basic investigation and rational use of natural resources and environmental protection. The decision required that an EIA be included in the feasibility study conducted for major construction projects.<sup>239</sup> During the 1980s, EIAs were conducted on several dam projects, including the Tri An,<sup>240</sup> Yali, Son La,<sup>241</sup> Song Hinh, Thac Mo, and Ham Thuan.<sup>242</sup>

Under Decree 175/CP, the LEP's implementing decree, a preliminary EIA report for a proposed dam project must include the following: (1) a description of the current environmental state of the area where the proposed project will be located; (2) an assessment of the possible environmental impacts; and (3) suggested measures to handle environmental problems and incidents.<sup>243</sup> The preliminary report must present an analysis of the impact of each of the different components of the environment, including water, land, ecology, places of national interest, infrastructure, transportation, and public

242. See Le Thac Can, et al., Danh gia tac dong moi truong - Phuong phap luan va Kinh nghiem thuc tien [Environmental Impact Assessment - Methodology and Practical Experiences] at 7 (Science and Technology Publishing House, 1993) (on file with author).

243. See Gov't Decree No. 175/CP, supra note 168, at app. 1.1 (stipulating the contents of an EIA).

<sup>238.</sup> See generally LEP, supra note 168, at art. 40 (acknowledging the need for environmental protection, the LEP requires MOSTE to coordinate with other "specialized inspectors" in order to enforce the law's provisions).

<sup>239.</sup> See supra notes 186-93 and accompanying text (discussing the feasibility study's role during the preparation phase of construction).

<sup>240.</sup> See generally supra note 208 (providing a general history of the dam's origin and purpose).

<sup>241.</sup> See generally infra notes 282-86 and accompanying text (discussing the resettlement issues encountered during construction of the dam).

health.244

Later in the process, a more detailed EIA is compiled.<sup>245</sup> It assesses the impact of the proposed project on each of the environmental components and predicts the state of the environment if the project is not implemented.<sup>246</sup> The report must contain an analysis of the impact on: (1) flora and fauna; (2) water supply, transportation, agriculture, irrigation, land use, health and entertainment; and (3) socioeconomic and cultural conditions.<sup>247</sup> Moreover, the report proposes technical solutions to overcome negative environmental impacts.<sup>248</sup> Finally, suggestions on construction and operation of the project in an environmentally sound manner is given.<sup>249</sup>

MOSTE and the provincial Department of Science, Technology and the Environment review both the preliminary and detailed EIAs.<sup>250</sup> In some cases, MOSTE may assign the report to another ministry that specializes in the project's field.<sup>251</sup>

Neither the LEP, nor Decree 175/CP, contain specific provisions on the right of people to access information on dam projects. Likewise, the law does not impose an obligation upon the project sponsor to consult with the public. For example, during the impact assessment process, the public has no specific right to participate. Only from a very broad reading of the LEP's general provisions can such a right possibly be inferred of individuals and organizations in detecting and reporting breaches, and in supervising the

- 247. See id. at app. I.2.
- 248. See Gov't Decree No. 175/CP, supra note 168, at app. 1.2.
- 249. See id. at app. I.2.

250. See id. at art. 14(1)(a)-(b) (stating that the completed report should be reviewed both at the central level—MOSTE—and at the local level—provincial department).

251. See id. at art. 14(1)(a) (explaining that this method should only be employed with "concrete case").

<sup>244.</sup> See id. (stating that the assessment should include an analysis of the environmental impact on Vietnam's "norms").

<sup>245.</sup> See id. at art. 11 (explaining that the drafting of an EIA is a two-step process—i.e., the preliminary report is followed by a detailed one).

<sup>246.</sup> See id. at app. I.2 (listing the contents of the detailed report).

implementation of environmental law and regulation.<sup>252</sup>

If MOSTE is satisfied after reviewing the EIA, it submits the report to the Prime Minister, or through him, to the National Assembly for approval.<sup>253</sup> An EIA approved by MOSTE is one of the factors considered by the Prime Minister in determining whether to proceed with construction and investment on the project.

The LEP requires the Standing Committee of the National Assembly to submit a list to the National Assembly of the proposed environmental projects that will require an EIA.<sup>254</sup> This process will, in turn, give direction to MOSTE as to which projects require a report. To date, no such list has been submitted.<sup>255</sup> Environmental standards in specialized areas have not been fully set by MOSTE.<sup>256</sup> Detailed guidelines for an EIA, especially for dam and hydropower projects, have not been adopted by MOSTE.<sup>257</sup> The EIA is often under-budgeted in investment projects, and in a number of cases, the EIA is not considered a proceeding step (that should be taken first). Reviewers of an EIA are not specialized, which results in a low-quality review.<sup>258</sup>

MOSTE adopted a circular on EIAs concerning investment projects.<sup>259</sup> This circular applies to all types of endeavors, including

254. See LEP, supra note 168, at art. 18.

255. See Pham Huu Nghi, Nhung van da dat ra doi voi phap luat ve danh gia tac dong moi truong va cac giai phap hoan thien [Problems to be Solved in the Law Relating to EIA and Solutions for Improvement] 5 TAP CHI LUAT HOC [JURISPRUDENCE REVIEW] 35 (2000) (on file with author).

256. See id.

- 257. See id. at 36.
- 258. See id. at 36-37.

259. See Thong tu so 490/1998/TT-BKHCNMT ngay 24-4-1998 cua Bo Khoa hoc, Cong nghe va Moi truong huong dan lap va tham dinh bao cao danh gia tac dong moi truong doi voi cac du an dau tu [Circular No. 490/1998/TT-BKHCNMT

<sup>252.</sup> See LEP, supra note 168, at art. 6 (asserting "[e]nvironmental protection is the common cause of the entire population") All individuals shall have the right to observe the drafting of environmental legislation, report any breach of the environmental laws, and protect environmental legislation. *Id.* 

<sup>253.</sup> See Gov't Decree No. 175/CP, supra note 168, at art. 14(2) ("[MOSTE] shall submit to the Government the list of projects of which the Report on the evaluation of environmental effects needs to be submitted to the National Assembly.").

domestic and foreign investment projects.<sup>260</sup> While the circular mandates that in large projects, dams projects included,<sup>261</sup> EIAs are approved before the project itself is approved, the circular is not clear as to what happens if the EIA is not approved by the environmental agency concerned. Consequently, the provision provides no sanctions.

# E. LAND REGULATIONS AND COMPENSATION FOR EXPROPRIATION OF LAND

A dam project is, to a great extent, subject to land law and regulations. Under Vietnam's 1992 Constitution, land belongs to the entire populace, and is under the unified management of the state.<sup>262</sup> The state assigns land to users on a stable and long-term basis.<sup>263</sup>

Under Vietnam's centrally-planned economy preceding 1992, land was used by people on the basis of assignment by the State. With the adoption of a market economy, land became a valued commodity. Thus, under the current Land Law adopted in 1993, a Vietnamese land user has five rights attached to the parcel he uses: (1) transfer; (2) exchange: (3) inheritance; (4) mortgage; and (5) leasing.<sup>264</sup> In cases where land is appropriated for public use, or for use by any other person, the 1992 Constitution explicitly states the original land

of the Ministry of Science, Technology and Environment Issuing Guidelines for Establishment and Review of EIA Reports in Investment Projects] (Apr. 29, 1998), *reprinted in* DOCUMENTS RELATING TO ENVIRONMENTAL PROTECTION IN URBAN DEVELOPMENT, INVESTMENT AND CONSTRUCTION AREAS 165 (Hanoi Construction Publishing House, 2000) (on file with author).

<sup>260.</sup> See id.

<sup>261.</sup> See id. at 170 (providing that Vietnamese hydropower projects require EIAs).

<sup>262.</sup> Vietnamese Constitution, *supra* note 52, at art. 18 ("[t]he State manages all the land in accordance with the plan and the law, and guarantees that its use shall conform to the set objectives and yield effective results").

<sup>263.</sup> Id. ("[t]he State shall entrust land to organizations and private individuals for stable and lasting use").

<sup>264.</sup> See Luat Dat dai cua Nuoc Cong hoa xa hoi chu nghia Viet Nam [The Land Law of the Socialist Republic of Vietnam], July 14, 1993, art. 3, reprinted in INSTITUTE OF LAW RESEARCH OF VIETNAM MINISTRY OF JUSTICE, VIETNAM LAWS (Hanoi National Political Publishing House, 2000) [hereinafter Land Law].

user is entitled to compensation.<sup>265</sup> The 1993 Land Law also provides a land user the right to compensation when his land use right is revoked for public use.<sup>266</sup>

Land expropriated for construction of dams is usually located in remote areas and, therefore, is agricultural and forest land. Such land is much cheaper than that in other areas of the country. In law and in practice, a land user whose land is expropriated by the State for public purposes, including for the construction of dams, is fairly compensated. When dam construction occurs, a large number of people must be removed from the affected area. This requires a considerable amount of investment and brings about serious problems.<sup>267</sup> In most instances there are no clear criteria to determine compensation.

Compensation for land expropriated for dams projects is subject to the Government's Decree 22/1998/ND-CP on compensation for land expropriated for public purposes.<sup>268</sup> In principle, only legally assigned land, or undisputed land, is compensated in cases of expropriation.<sup>269</sup> The price of land to be compensated is based on an estimate from the Chairperson of the People's Committee of the province or city where land is located, and is also negotiated between the chairperson and the land user in question.<sup>270</sup> Amenities on land,

<sup>265.</sup> Vietnamese Constitution, *supra* note 52, at art. 23 ("[i]n cases made absolutely necessary by reason of national defence, security and the national interest, the State can make forcible purchase of or can requisition pieces of property of individuals or organizations against compensation taking into account current market prices").

<sup>266.</sup> See Land Law, supra note 264, at art. 73.

<sup>267.</sup> For example, the Son La dam project has been faced with the problems of resettlement and establishing criteria to determine compensation.

<sup>268.</sup> See Nghi dinh so 22/1998/ND-CP cua Chinh phu ve viec den bu thiet hai khi Nha nuoc thu hoi dat de su dung vao muc dich quoc phong, an ninh, loi ich quoc gia, loi ich cong cong [Government Decree on Compensation for Damage Resulting from Expropriation of Land for Defense, Security, National Interests and Public Purpose, No. 22/1998/ND-CP], Apr. 24, 1998, *reprinted in* INSTITUTE OF LAW RESEARCH OF VIETNAM MINISTRY OF JUSTICE, VIETNAM LAWS (2000) [hereinafter Gov't Decree No. 22/CP] (on file with author).

<sup>269.</sup> See id. art. 6.

<sup>270.</sup> See id. art. 8.

such as houses, architectural works, trees, plants, animals, and any kind of investment, are compensated at their market price, taking into account any depreciation or damage.<sup>271</sup> In addition to the compensation, the state provides support and subsidies to the displaced people for displacement and maintenance.<sup>272</sup>

To handle expropriation matters, a Compensation Council is established at the provincial level for large projects such as dams.<sup>273</sup> The council is headed by the chairperson or deputy chairperson of the People's Committee of the province concerned, and consists of representatives from the Finance, Cadastral, and Fatherland Front Departments of the same province, owners of the investment project, and representatives of those whose land is expropriated.<sup>274</sup> There is no clear regulation concerning such a council in the case of land compensation involving more than one province, especially in large dams projects. It can be assumed that different provinces take care of compensation matters under the coordination of the owner of the project concerned, which in most cases is the Ministry of Industry. A land user whose land is revoked and who is not satisfied with the compensation has the right to lodge a complaint in accordance with the law on complaints and denunciations.<sup>275</sup>

There is a practical problem concerning compensation for expropriated land. Due to historical reasons, land titles are still not clearly provided for and regulated. While the Land Law of 1993 has undergone several amendments, further adjustment is necessary before it will adequately address the issue.<sup>276</sup> A number of land issues are governed by regulations, and in various instances, land rights and compensation for expropriation of land for public use are regulated on a case-by-case basis.<sup>277</sup>

273. See Gov't Decree No. 22/CP, supra note 268, art. 32.

- 275. See id. at art. 38.
- 276. See generally Land Law, supra note 264.

277. For example, Document 4448-TC-QLCB issued by the Ministry of Finance provides guidelines concerning compensation of certain categories of land. Most specifically, the regulation pertains to land which was used on a stable basis before January 8, 1998 which the People's Committee of the commune certified as not

<sup>271.</sup> See id. art.16.

<sup>272.</sup> See id. arts. 25-26.

<sup>274.</sup> See id.

A general difficulty relating to compensation of land for public use is that the compensation is too low. <sup>278</sup> Understandably, landowners are rarely cooperative and reluctant to have their land expropriated.<sup>279</sup> Certain individuals are of the view that since land belongs to the entire populace, and determination of price is an administrative action of the state, the state should have the right to compensate at the price fixed by the state.<sup>280</sup> On the other hand, others believe that compensation at a fixed frame by the state is only acceptable in cases where the state assigns land, after collecting land use fees, and not acceptable in cases where land is expropriated and transferred from one user to another at the market price.<sup>281</sup>

# F. POPULATION RESETTLEMENT

Resettlement is also an acute problem in dam projects. Important and complicated questions, such as, where to move people to, and how to aid them in the maintenance of their normal way of life, are at the core of the resettlement issue.

Population resettlement is no longer considered merely an auxiliary issue. In the past, however, as with the cases of the Hoa Binh and Yaly projects, attention was given to only four matters: (1) electricity supply; (2) roads; (3) schools; and (4) hospitals. Other issues, including resettlement matters, received scant attention.

In contrast to the traditional trend, the case of the Son La hydropower project initiated a separate sub-project on population resettlement.<sup>282</sup> A difficulty with the Son La case is that the planning

278. See Nguyen Thi Mai, Tai Sao Viec Den Bu Khi Nha Nuoc Thu Hoi Dat Kho Thuc Hien? [Why is it Difficult To Compensate for Land Expropriated by the State] 3 DAN CHU & PHAP LUAT [DEMOCRACY & LAW] 8 (2001) (on file with author).

- 279. See id.
- 280. See id.
- 281. See id. at 9.

282. See Le Quang Dien, Cong Trinh Thuy Dien Son La Tren Song Da [Son La Hydropower Project on Da River] 6 TAP CHI NANG LUONG [ENERGY REVIEW] 13, at 13-15, 25 (1991) (discussing the details of the Son La dam project).

violative of planning guidelines nor illegally possessed. Land transferred in accordance with the regulations on land shall be compensated in cases of expropriation. In addition to the price of land, investment values shall be calculated by a council on compensation established for this purpose.

was often *ad hoc.*<sup>283</sup> The Son La case presents many difficult issues because of the large number of people that were relocated.<sup>2×4</sup> Resettlement work began in the early 1990s, but the effort lacked a central plan.<sup>285</sup> Not enough land area was allocated for resettlement and significant retraining will be necessary in order to ensure that the population can support itself.<sup>286</sup>

# IV. THE WORLD COMMISSION ON DAMS' RECOMMENDATIONS AND VIETNAMESE WATER RESOURCES LEGISLATION AND REGULATIONS OF DAMS

### A. COMPREHENSIVE OPTIONS ASSESSMENT

One of the seven strategic priorities suggested by the WCD in Chapter 8 of its Report on "Dams and Development,"<sup>2</sup>" namely, the "comprehensive options assessment," recommends that the state thoroughly identify and examine its proposed policy objectives before deciding whether to construct a dam.<sup>2×8</sup> In light of the WCD's recommendations, it is vital that Vietnam formulate an energy strategy representative of the state's policy objectives. It is not clear whether such a strategy exists presently. Naturally, such a strategy should identify major guidelines for the development of the energy sector in Vietnam for years to come. Policy makers must also carefully ponder whether hydropower should continue as the preferred source of energy for the future. At present, hydropower

<sup>283.</sup> See Nguyen Ngoc Khanh & Le My Phong, Mot var y kien ve nghien cuu di dan tai dinh cu vung ho thuy dien son la [Views on Studies of Population Displacement in Son La Hydropower Reservoir], at 87-91 (1997) (on file with author).

<sup>284.</sup> See id.

<sup>285.</sup> See id.

<sup>286.</sup> See id.

<sup>287.</sup> See supra notes 28-35 and accompanying text (discussing the seven strategic priorities suggested by the WCD).

<sup>288.</sup> See WCD REPORT, supra note 1, at 221 (explaining that the success of the comprehensive options assessment depends upon the application of five primary policy principles).

enjoys "the right of first refusal" in Vietnam's energy sector, and it appears that it will continue to do so for the foreseeable future.<sup>289</sup>

The construction of more dams would benefit Vietnam in many ways. The functioning five hundred kV trasmission line, which connects the whole country, is proof that the current electricity supply is not going to be localized soon. Undoubtedly, the national electricity grid would benefit from large-scale projects like the Son La hydropower plant, which is almost underway. In addition, officials often argue that such projects would create more jobs, and assist poor communities to overcome drought, energy shortages, and devastating floods.<sup>290</sup>

Despite the promise of jobs and a sustainable energy supply provided by dams, alternatives to hydropower are now being considered in Vietnam. Solar and wind energy are gaining increasing recognition in areas that do not have access to the national electricity grid.<sup>291</sup> In addition, power plants fueled by natural gas are also used to produce energy.<sup>292</sup>

## **B. PUBLIC PARTICIPATION AND ACCEPTANCE**

At the policy level, public support exists for the strategic priorities

<sup>289.</sup> See Thai Minh Dao, Van de tai dinh cu khi xay dung cac cong trinh thuy dien [Population Resettlement in Construction of Hydropower Works], 10 TAP CHI NANG LUONG [ENERGY REVIEW] 17 (1993) (on file with author).

<sup>290.</sup> See WCD Regional Consultation for East/Southeast Asia: Personal Observations (Feb. 2000) (statement of Ngan T. Nguyen) at 2, available at http://www.nextcity.com/ProbeInternational/Mekong/worldcommission.html (last visited June 10, 2001).

<sup>291.</sup> See New Energy Potential, NHAN DAN [VIETNAM NEWS], May 13, 2001, at Economy Page, available at www.nhandan.org.vn/english/20010512/baieco1.html. Currently, there are about 600 small solar energy systems in the north of Vietnam "used by households, frontiers stations and communal cultural houses each with a capacity of 40-200W." See id.

<sup>292.</sup> See Phu My Complex Ready to Give More Power to National Grid, NHAN DAN [VIETNAM NEWS], Apr. 28, 2001, at Economy Page, available at www.vietnamnews.vnagency.com.vn/2001-04/27/Stories/02.htm ("[t]he Phu My complex is located in the southern province of Ba Ria-Vung Tau so that it can use the abundant supply of natural gas reserves in Viet Nam's offshore oil fields, the Nam Con Son Gas Field in particular.").

suggested by the WCD report.<sup>293</sup> In practice, however, the current legal scheme for managing water resources in Vietnam may make it difficult to implement a strategy consistent with those priorities. The current legal structure is inadequate for three primary reasons.

First, participation of the public and affected persons in decisionmaking or advisory bodies is rather weak.<sup>294</sup> For example, Vietnam's environmental laws and regulations contain no provisions concerning public participation in an EIA hearing for a dam project. Nor do existing provisions grant the public a right to access information on dam projects. Moreover, the sponsor of a dam project is under no obligation to consult with the public. Public participation at large is only dealt with in the "Rules on the Exercise of Democratic Rights at the Commune Level,"<sup>295</sup> which are adopted by the executive branch of the Vietnamese government. These rules, however, are so general they are difficult to implement in practice.<sup>296</sup>

Second, the decision making for dams is a typical top-down process where an initiative for a dam often originates at the highest echelons of Vietnam's bureaucracy. At these high levels, a proposed project is considered, and once deemed economically viable, the National Assembly approves it. It should be noted that some input from affected people is solicited, but not about the project in general.

To be socially legitimate and produce positive and lasting outcomes, development projects should provide for greater involvement of all interest parties. A fair, informed and transparent decision-making process, based on the acknowledgment and protection of existing rights and entitlements, will give all stakeholders the opportunity to fully and actively participate in the decision-making process.

WCD REPORT, *supra* note 1, at 215. *See generally supra* notes 88-95 and accompanying text (discussing the general make-up of the NWRC; public representation on the council is non-existent).

295. Rules on the Exercise of Democratic Rights of the People at the Commune Level (1998) (enacted), *reprinted in* INSTITUTE OF LAW RESEARCH OF VIETNAM MINISTRY OF JUSTICE, VIETNAM LAWS (2000) (on file with author).

296. See generally id.

<sup>293.</sup> See generally WCD REPORT, supra note 1, at 214-57 (elaborating on the seven strategic priorities proposed by the WCD).

<sup>294.</sup> The WCD Report expounds upon the importance of "gaining public acceptance" when undertaking the construction of a dam:

Affected people are approached with respect to piecemeal issues of the project such as compensation, or electricity supply. With increasing democratization in Vietnam, however, it would be remiss to suggest that no progress has been made. Those responsible for the construction of the Son La hydropower project, for example, took into consideration the needs and concerns of those affected by the dam project.<sup>297</sup>

Third, public awareness about the implications of dam projects is lacking. Two conditions must be met before the public can play a role in the decision-making process for dam projects. First, people need to be made aware of their rights, including the right to accept or reject a project that will radically affect their lives. While the Ministry of Justice and its local departments make an effort to inform the public of their rights, the effort is insufficient and greater dissemination of legal information is necessary. In this effort, the media should assume a more active role. Secondly, the administration should adopt a more progressive stance with regard to dam project decision-making, and reject the traditional top-down process that excludes public participation. Any positive change in this respect must be fixed in an act of high legal force adopted by the National Assembly, instead of by mere executive regulation.

# C. Addressing Existing Dams

The WCD recommends those considering a new dam project to first examine existing projects and assess whether the efficiency or sustainability of these projects could be increased prior to building a new dam.<sup>298</sup> There are presently seven large dams in Vietnam, and all are run at full capacity.<sup>299</sup> The primary purposes of the dams are to

<sup>297.</sup> It is expected the proposed Son La project will "produce similar disastrous consequences" experienced by the Hoa Binh hydropower project of a decade earlier, which inundated 440 square kilometers and forcibly resettled approximately 103,000 people, mostly ethnic minorities. *See* Aviva Imhof, *Vietnam Dam to Cause Hardship for Ethnic Minorities*, 13 WORLD RIVERS REV. 5, Oct. 1998, at 3, *available at* http://www.irn.org/pubs/wrr (noting that the "project has been shunned by the World Bank and other multilateral bodies" due to the deleterious impact on the local populace and the environment).

<sup>298.</sup> See generally WCD REPORT, supra note 1, at 225-33 (discussing the WCD's third proposed strategic priority relating to dam construction).

<sup>299.</sup> See WORLD BANK & KEIDANREN, supra note 10, at 10.

generate electricity, maintain flood control, and to a lesser degree, facilitate downstream navigation.<sup>300</sup> Since most of the existing dams are located in mountainous areas, upgrading and adapting them for an additional purpose, such as irrigation in the delta, is not cost effective.

## D. SUSTAINING RIVERS AND LIVELIHOODS

In developing a dam project, the WCD further recommends that protective measures be taken to ensure the health and integrity of the river system as well as the livelihoods it supports.<sup>301</sup> The principle of integrated water use, or the utilization of natural resources in a sustainable manner, as outlined in the LWR,<sup>302</sup> the EIA for a dam project enshrined in Vietnamese environmental law,<sup>303</sup> and the development of construction and investment regulations<sup>304</sup> are evidence that Vietnam is heading in the right direction environmentally. However, the practical implementation of the substantive provisions of the law remains uncertain. This is part of a bigger problem: the general implementation of law in Vietnam. While substantive provisions of the LWR and the LEP look rather progressive, and no less modern than those of other environmentally

<sup>300.</sup> See Nguyen Bang, Cong trinh thuy dien Hoa Binh Nhung buoc di vung chac va tu hao [The Hoa Binh Hydropower Work: Firm and Proud Steps] 9 TAP CHI NANG LUONG [ENERGY REVIEW] 1, at 1-2 (1992) (asserting that the Hoa Binh dam serves these exact three purposes); Truong Chi Tan, Vai tro cua Thuy dien Son La doi voi su phat trien cua Chau tho song Hong [Role of the Son La Hydropower Project in the Development of the Red River Delta] 6 TAP CHI HOAT DONG KHOA HOC [JOURNAL OF SCIENTIFIC ACTIVITIES] 7, at 7-8 (1997) (explaining that the proposed mega-dam in Son La is being built specifically to serve these three primary functions).

<sup>301.</sup> See generally WCD REPORT, supra note 1, at 234-39 (explaining environmentally sounds steps must be taken to guarantee the vitality of the river system; in this respect, those dependent upon that river system must enter into the equation).

<sup>302.</sup> LWR, *supra* note 6, at art. 1, para. 2 ("[0]rganizations and individuals are entitled to exploit and use the water resources for life and production. At the same time they have the responsibility to protect the water resource, prevent, combat and overcome the harmful effect caused by water as prescribed by law").

<sup>303.</sup> See LEP, supra note 168, at art. 18 (requiring the production of an EIA for most types of large scale development projects).

<sup>304.</sup> See Government Decree No. 52/CP, supra note 157.

conscious countries, they are not buttressed by the necessary socioeconomic and financial considerations, thus making their practical realization suspect. In light of its meager budget, the state is unable to assume responsibility for works concerning the development and conservation of water resources. Revenues from water charges may help to ease the problem. However, there is currently no mechanism in place to raise such revenues.

With respect to dams, the law requires a project be designed, managed, and operated in such a manner as to be environmentally sound and in line with the integrated approach of water use.<sup>305</sup> The use of a dam in a river for electricity should be placed in the overall context of other uses of the river basin. Environmental aspects of the dam should be given special attention. While strict environmental standards are set for dam projects, and meeting those standards is one of the prerequisites for approval of a project, the standards are often not met in practice. Vietnam has remained one of the poorest countries in the world, and, as a result, economic pressures are always present. Due to the difficult economic situation, the environmental impact of dam receives get inadequate attention.

# E. RECOGNIZING ENTITLEMENTS AND SHARING BENEFITS

While progress has been made, practical difficulties related to "recognizing entitlements and sharing benefits"<sup>306</sup> exist in Vietnam. Due to historical reasons and the unitary system of the state structure, in which power is centralized at the top level of government, negotiating agreements between the central and local authorities, and between the authorities and affected people, is not a common practice is Vietnam. Part II of this article regarding the legislative process indicates the manner in which the law is made and administered uniformly nationwide.<sup>307</sup> Under this process, the state retains the sole authority to decide whether to engage in an activity

<sup>305.</sup> See generally LWR, supra note 6, at chs. II-III.

<sup>306.</sup> See WCD REPORT, supra note 1, at 240 (explaining the rationale behind the WCD's proposal for a fifth strategic priority with regard to dam construction).

<sup>307.</sup> See supra note 45 and accompanying text (providing a general overview of Vietnam's legislative process).

which could benefit the entire nation. It is commonplace for the interests of a small group of people affected by a proposed project to be overlooked so that energy sources can be generated for the greater good.

Even if negotiations occur, state authorities have greater bargaining power than the affected people do. In dam construction, the biggest issue is often the amount of compensation for expropriated land.<sup>308</sup> Though both the Constitution and land law provide for adequate compensation when land is appropriated for public purposes,<sup>309</sup> in practice the compensation is often minimal.<sup>310</sup> The system of public land ownership unfavorably tilts the balance of power in favor of State authorities that decide the level of compensation. One of the chief reasons for delays during project construction is inadequate land compensation.<sup>311</sup>

# F. ENSURING COMPLIANCE

Ensuring compliance simply means that the agreements reached during the stage termed "recognizing entitlements and sharing benefits" are honored.<sup>312</sup> Again, both at the policy level and in substantive law and regulation, this doctrine is followed. However, practical implementation falls far short of the WCD's recommendation. An example of this is the Hoa Binh case, where many displaced people gave their homes to the government for the creation of an energy generating reservoir, yet after twenty years are still waiting to receive energy from the plant.<sup>313</sup>

<sup>308.</sup> See supra notes 262-85 and accompanying text (discussing general issues associated with the expropriation of land and compensation).

<sup>309.</sup> See supra notes 265-67 and accompanying text (explaining that under both the 1992 Constitution and the 1993 Land Law displaced individuals are entitled to compensation).

<sup>310.</sup> See supra notes 281-83 and accompanying text (noting the general dissatisfaction among displaced persons due to insufficient compensation).

<sup>311.</sup> See id.

<sup>312.</sup> See WCD REPORT, supra note 1, at 244-51 (asserting that in order to cultivate public trust and confidence, the government must comply with all commitments made to the public).

<sup>313.</sup> See President Urges More Help for Locals Near Hoa Binh Reservoir, NHAN DAN [VIET NAM NEWS], Mar. 13, 2001, at Social & Culture Page, available at http://vietnamnews.vnagency.com.vn/2001-03/12/Stories 03.htm. (reporting

### G. SHARING RIVERS FOR PEACE, DEVELOPMENT, AND SECURITY

Vietnam actively cooperates with other countries with respect to its internationally shared rivers. There are two such rivers in Vietnam: the Red and the Mekong Rivers.<sup>314</sup> At present, there is no cooperative arrangement related to the Red River,<sup>315</sup> but a cooperative agreement on the Mekong has been in existence since 1957.<sup>316</sup> As a downstream country, Vietnam, more than any other members of the Mekong River Commission ("MRC"),<sup>317</sup> is sensitive to any change in the upper reaches of the river. Accordingly, Vietnam plays a very active role in MRC.<sup>318</sup>

In 1995, a new agreement was drafted and ratified by the member countries.<sup>319</sup> The 1995 Agreement differs from previous arrangements in that it allows upstream countries, after consulting and notifying other members to the Agreement, to divert water, thus possibly harming downstream countries such as Vietnam.<sup>320</sup> While

statements by Vietnam's President, in which he ordered the Electricity of Vietnam, the national agency responsible for the country's energy supply, to make urgent efforts to supply the homes of the displaced individuals).

314. See supra Part II(H) (discussing Vietnam's legal arrangements with other countries with regard to the Red and Mekong Rivers).

315. See supra note 120 and accompanying text (explaining that due to the river's natural characteristics, as well as a lack of investment from the countries, no international agreement exists).

316. See supra note 122 and accompanying text (discussing the establishment and development of the Committee for Coordination and Investigations of the Lower Mekong Basin).

317. See generally Mekong River Commission for Sustainable Development, About MRC, at http://www.mrcmekong.org/about\_mrc/about001.htm (discussing the origins of the MRC).

318. See generally Press Release, Mekong River Commission for Sustainable Development, Mekong Governments Meet on Joint River Management (July 5, 2001), *at* http://www.mrcmekong.org/media/press2001/press005.htm.

319. See generally supra notes 128-138 and accompanying text (discussing the general provisions of the 1995 Agreement, focusing on the environmental aspects of the document).

320. Of the legal arrangements on the Mekong prior to 1995, the most important one for downstream Vietnam was the Joint Declaration adopted by the member countries of the Mekong Committee in 1995, the immediate predecessor of the present MRC. The Declaration reserved the right for a member of the Committee to disprove any proposed activity on the Mekong if the activity was to cause harm to such member. Once the 1995 Agreement was adopted, however, the Declaration the Agreement may be unfair in some respects, thus deserving of criticism, it can be said that it is responsible for rescuing Mekong cooperation from complete dissolution during the 1990s.<sup>321</sup> The carefully formulated purpose of the Agreement—namely, the "sustainable development of Mekong River Basin water and related resources"—and the sophisticated structuring of the principle of equitable and reasonable utilization in the Agreement are not ready-to-use recipes.<sup>322</sup> Ambitious plans to dam the mainstream of the river still exist, thus causing the rise of potential conflicts over the possibility of a chronic shortage of water in the dry season. Given the importance of the Mekong for its Cuu Long Delta, Vietnam, through the existing MRC, must keep a close eye on every activity affecting the river in order to ensure that its resources are shared equitably and reasonably. In this sense, the recommendation of the WCD, "sharing rivers for peace, development and security,"<sup>323</sup> is of great relevance.

# V. RECOMMENDATIONS

In its Report, the WCD identified five key stages for the energy and water sector: (1) needs assessment; (2) selecting alternatives; (3) project preparation; (4) project implementation; and (5) project operation.<sup>324</sup> The Report maintains that adherence to these stages will lower risks to livelihoods and cost escalation, reduce the number of

322. See 1995 Agreement, supra note 125, at ch. 1 (reaffirming the basic principles upon which the MRC was originally founded).

323. See WCD REPORT, supra note 1, at 251.

324. See id. at 262 (listing the five key stages and associated decision points for the energy and water sector).

ceased to be effective. See Joint Declaration of Principles for Utilization of the Waters of the Lower Mekong Basin, Jan. 31, 1957 (text on file with Mekong Secretariat) [hereinafter Mekong Declaration].

<sup>321.</sup> See Phan Sy Ky, Tai nguyen va Hop tac Mekong [Mekong Resources and Cooperation] 296 TAP CHI THUY LOI [WATER RESOURCES REVIEW], at 4 (1994) (explaining the various views on Mekong River resources and cooperation, and discussing the near fatal deadlock of the Mekong Committee, leading to the 1995 Agreement and the Mekong River Commission); Le Thanh Long, The Canada – United States International Joint Commission: Possible Lessons for an Institutional Mechanism in the Lower Mekong River Basin, at 36-7, 209-33 (1995)(unpublished L.L.M. thesis, University of Calgary Law School) (on file with University of Calgary Law School Library).

disputes, and encourage local ownership.<sup>325</sup> Each of the recommended five stages can be found in the substantive regulations that apply to construction works in general, and dams in particular, in Vietnam.<sup>326</sup>

Every proposed project must pass the test of needs assessment to be singled out from a variety of development plans, and to go through the different stages of preparation, implementation, and operation. There are, however, a few specific problems that are noteworthy.

As mentioned in the beginning of Part III, there are, at present, no specific regulations on dams in Vietnam. 327 Instead, they are inferred from a rather wide range of general laws and regulations with those on construction and investment in the forefront. Construction of dams is undoubtedly special. A large dam has huge economic, technical, environmental, social, and even political impacts. In the present situation in Vietnam, all types of construction are regulated by a single normative legal document: Decree No. 52/CP.<sup>328</sup> While the decree is detailed, it does not, and cannot, cover the specific characteristics of dam construction. It is therefore suggested that separate regulations on dams be adopted, at least in the form of a governmental decree. The proposed decree naturally cannot address every aspect of dams, and accordingly, should refer to existing laws and regulations. What the Decree must cover, however, are the unique technicalities and procedures pertaining to dams not covered by existing general laws and regulations.

The decision whether a dam is the most beneficial and preferred alternative to other options, must not be entrusted with the bureaucracy alone. More active participation of the public is required. The public should be given the opportunity to participate in the process and weigh different options, taking into account the

<sup>325.</sup> See id. at 263 (noting, however, that compliance with these principles will require additional financial resources in the short term).

<sup>326.</sup> See supra Part IV (applying the strategic priorities to Vietnam's current structure).

<sup>327.</sup> See supra Part III (maintaining that dam construction is currently subject to numerous different laws; however, no single law exists that specifically addresses and regulates dams).

<sup>328.</sup> Gov't Decree 52/CP, supra note 157.

different economic, social, environmental, and recreational benefits of a proposed dam. The existing laws and regulations do not seem to support public engagement. The absence of a public representative on NWRC, and the very vague function of the public in EIAs, demonstrate the public's current non-existent role in the process. A stronger, more feasible, and enforceable environmental law that explicitly addresses the public's role in all environmental processes is therefore needed.

While the existing regulations project on preparation. implementation, and operation are fairly detailed and consistent with WCD's suggested standards, a problem remains with respect to the weak role of the private sector in the development of water resources. Given the meager budget of the state, participation of the private sector in both the development and protection of water resources is a necessity. Implementation of the integrated approach in water management cannot be carried out without the joint efforts of both the state and the private sector. A realistic and feasible mechanism must be developed, encouraging participation by the private sector through competitive bidding in the different aspects of the dam project. Given the increasing role and stronger development of the private sector, state-owned enterprises should no longer be the sole actors in water resource projects, including dams.

# CONCLUSION

Generally, the WCD's recommendations for a new policy framework are in one degree or another already reflected in Vietnam's laws and policy. Through an emerging legal framework, Vietnam has attempted to regulate the exploitation, use, and protection of water resources. To date, Vietnam's framework has not yet succeeded. The delay of the implementation of regulations considerably limits the effect of the framework. In addition, quick and effective implementation of many regulations is impossible due to insufficient economic and financial resources.

The problems associated with the existing framework can be alleviated in part with the creation of a single, comprehensive regulation specifically addressing dam projects. In addition, the public, including the private sector, should play an increased role in the dam decision-making process. Finally, the traditional top-down approach to decision-making must be modified to account for the needs and concerns of all those affected by the development of dams.