

Implementing Integrated River Basin Management: Lessons from the Red River Basin, Vietnam

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Working Paper

Summary

In the last decade many southeast-Asian countries have remodeled part or all of their water policies. Development banks, notably the Asian Development Bank (ADB), and multilateral cooperation agencies have been quite influential in supporting the adoption of policies and reforms that embody principles held as modern and internationally sanctioned. This includes the drafting of national policy and laws, the creation of "apex bodies", the establishment of river basin organizations (RBOs), the privatization of public companies, and increased financial contribution from users (e.g. through water pricing and the formation of water user groups). While at a certain level of generalization these principles and reforms provide sound and useful guidelines for national water policies, their confrontation with reality has more often than not yielded disappointing results.

Vietnam has recently adopted several of these policies recommendations. A new Law on Water Resource (LWR) released in 1998 was followed by the creation of an apex body (2000) and three RBOs (2001), before the Ministry of Natural Resources and Environment (MoNRE) was set up in 2002. Although institutional changes are often gradual these few years of experience in reforming the water sector offer an opportunity to examine the implementation of these new policy frameworks. The present report focuses on the establishment of the Red River Basin Organization but expands its analysis to the wider transformations of the water sector that impinge on the formation and effectiveness of this organization. A few reflections on the policy process are drawn from this analysis, albeit in a tentative form given the relatively limited period of time considered here.

The reports shows that the promotion by donors of IWRM icons such as RBOs has been quite disconnected from the existing institutional framework. In contradiction with IWRM principles, RBOs were established under the Ministry of Agriculture and Rural Development, with little means and power, while the Office of the National Water Resources Council remained dormant. The Red River Basin Organization was set up on the premise that a RBO was needed but it was soon found that basin wide participation was both difficult and unnecessary, with the focus being shifted to lower sub-basin levels.

It is shown that if policy reforms promoted by donors and development banks have triggered some changes, these changes may have come as a result not of the reforms themselves but, rather, of the institutional confusion they have created when confronted with the emergence of the MoNRE, itself largely destined – at first – to solving land rather than water issues. For MoNRE the river basin scale became crucial for grounding its legitimacy and finding its roles among pre-existing layers of the administration, while for MARD, RBOs became a site where power over financial resources and political power might potentially be relocated at its expense. Thus the confluence of donor driven projects on establishing RBOs and of the conflict between MARD and MoNRE (which put the river basin scale as a contested issue) helped strengthen changes in the direction of a better separation of duties and of integrated planning. It is too early to assess whether this transition towards a separation of the operation and regulation roles will be sustained and whether RBOs will be endowed with substantial power but institutional change is shown to result from the interaction between endogenous processes and external pressures, in ways that are hardly predictable.

Abbreviations

2RRBSP	Second Red River Basin Water Resources Sector Project
ADB	Asian Development Bank
AFD	Agence Française de Développement
AusAID	Australian Agency for International Development
Danida	Danish International Development Assistance
DARD	Department of Agriculture and Rural Development
DWR	Department of Water Resources
DWRHWM	Department of Water Resources and Hydraulic Works Management
ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
EVN	Electricity Vietnam
GDHM	General Department of Hydrometeorology
GOV	Government of Vietnam
GWP	Global Water Partnership
ICD	International Cooperation Department, MARD
IWRM	Integrated water resources management
IWRP	Institute for Water Resources Planning, MARD
JICA	Japan International Cooperation Agency
LWR	Law on Water Resources
MARD	Ministry of Agriculture and Rural Development
MoSTE	Ministry of Science, Technology and Environment
MoNRE	Ministry of Natural Resources and Environment
NEA	National Environmental Agency, MOSTE
NWRC	National Water Resources Council
PPC	Provincial People's Committee
RBM	River Basin Management
RBO	River Basin Organization
RBPMB	River Basin Planning Management Board
RRBO	Red River Basin Organisation
SBO	Sub-basin Organization
ONWRC	Office of the National Water Resources Council
VEPA	Vietnam Environment Protection Agency
VND	Vietnamese Dong
VWRAP	Vietnam Water Resources Assistance Program, WB
WB	World Bank

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Citation: Molle, F. and Hoanh, C.T. 2008. Implementing Integrated River Basin Management: Lessons from the Red River Basin, Vietnam. Working Paper. Chiang Mai, Thailand: Mekong Program on Water, Environment and Resilience.

Acknowledgements: The authors would like to express their sincere and warm thanks to all the persons that have provided time and information to this study: Colin Steley, N.C. Cong, Ly Minh Dang, Do Hong Phan, Ha Luong Thuan, Pham Xuan Su, Nguyen Van Sinh, Nguyen Xuan Tiep, Le Van Hoc, Bui Nam Sach, Truong Trong Luat, Thai Gia Khanh, Nguyen Thuy Hang, Nguyen Thi Thu Thuy, Bui Cong Quang, Pham Quoc Hung, Tran Thi Le Anh, Nguyen Minh Son, Ta Quang Toan, Lan Anh, Pham Van Lam, Olivier Gilard.

This paper presents findings from the project 'Mekong water Governance', a part of the CGIAR Challenge Program on Water and Food

Cover Picture: Northern part of the Red River delta

1 Introduction

In the last decade, many southeast-Asian countries have remodeled part or all of their water policies. This is due to recurring crises (water shortages, flood damage, pollution, etc) but also to global initiatives and networking that have given greater public salience to water issues, and to the influence of development banks and cooperation agencies that have been pushing for reforms (Molle, 2005). In Asia, principles of Integrated Water Resource Management (IWRM) and river basin management have been fostered by ADB, the World Bank, the Global Water Partnership, ESCAP, among others, and regional events (e.g. Southeast-Asian water forums) and networks (e.g., Network of Asian River Basin Organizations).

Among other actors, the ADB has been quite active in supporting the adoption by country members of policies and reforms that embody principles held as modern and internationally sanctioned. This includes the drafting of national policy and laws, the creation of "apex bodies" (i.e. inter-ministerial councils, supported by permanent offices, that define overall guidelines and policies on water issues) (ADB, 2000b; Birch, 2004; Arriens, 2004), the establishment of river basin organizations (RBOs), the privatization of public companies, and increased financial and other contributions from users (e.g. through water pricing and the formation of water user groups).

While at a certain level of generalization these principles and reforms provide sound and useful guidelines for national water policies, their confrontation with reality has more often than not yielded disappointing results. Water reforms have been marred by physical, environmental and socio-political complexities that had generally not been anticipated (Sampath, 1992; Mollinga and Bolding, 2006); water pricing reforms have seldom if ever achieved the gains anticipated (Dinar and Saleth, 2005; Molle and Berkoff, 2007); IWRM has gained wide acceptance but has proved hard to operationalize (Biswas, 2005; Molle et al., 2007); the promotion of apex bodies and RBOs in Asia has also yielded mixed results (Newborne, 2006). Many analysts have discussed and questioned the conditions and possibility of transfers (for example the Australian experience to the Mekong River Basin (Chenoweth, 1999; Pigram, 1999, 2001; Malano et al., 1999; Birch et al., 1999), in particular the possibility to "leapfrog" from one particular situation to a model developed in another country (Shah et al., 2001).

Vietnam has recently adopted several of these policies recommendations. A new Law on Water Resource (LWR), in 1998, was followed by the creation of an apex body (2000) and three RBOs (2001) before the Ministry of Natural Resources and Environment (MoNRE) was set up in 2002. Although institutional changes are often gradual these few years of experience in reforming the water sector offer an opportunity to examine the implementation of these new policy frameworks. The present report focuses on the establishment of the Red River Basin Organization but expands its analysis to the wider transformations of the water sector that impinge on the formation and effectiveness of this organization. A few reflections on the policy process are drawn from this analysis, albeit in a tentative form given the relatively limited period of time considered here.

2 Institutional Change in the Vietnamese Water Sector

The transformations of the Vietnamese water sector have dovetailed with both historical and political events and, more recently, economic reforms. Figure 1 provides a quick bird's-eye view of its main benchmark during the past 60 years. It is interesting to note that a Red River Committee was

established in 1961, under the then Ministry of Water Resources, and that its permanent office later transformed into the Institute for Water Resources Planning and Management. The main current actor in the water sector, the Ministry of Agriculture and Rural Development (MARD), emerged in 1995 from the merging of three ministries: Agriculture-Food Industry, Forestry and Water Resources.

2.1 *The Law on Water Resources*

Work on the drafting of the Law on Water Resource began after the policy changes of 1989 (*Doi Moi* reform) and was supported by the World Bank through the provision of legal experts. As many as 17 drafts were developed before the final version was approved by the National Assembly of Vietnam in April 1998 and enacted on the 1st of January 1999 (Malano *et al.* 1999).

The principle of managing of water resources by river basin is enshrined in the law, but not prominently. Article 20 merely states that "The regulation and distribution of water resource for use purposes must be based on the planning of the river basin and the real potential of the water source and must ensure the principle of fairness, reasonability and priority in the quantity and quality of water for living." Article 64 (see appendix) enjoins the Government to make "concrete provisions for the organization and activities of the agency managing the planning of the river basin". The LWR also does not mention "integrated management" and there are only two occurrences of "Integrated use of the water resource", that is, "to make rational use of and develop the potential of a water source and limit the negative effect of water for integrated service of many purposes."

State management functions are clearly assigned to MARD, line agencies, and People's Committees of the provinces: Article 58 of Chapter 7 on State management mentions (points 2 and 5) that "The Ministry of Agriculture and Rural Development is answerable to the Government for the carrying out of the State management function on water resource", while "the system of organization and the tasks and powers of the State managing agency on water resource under the Ministry of Agriculture and Rural Development and the People's Committee at various levels shall be prescribed by the Government".

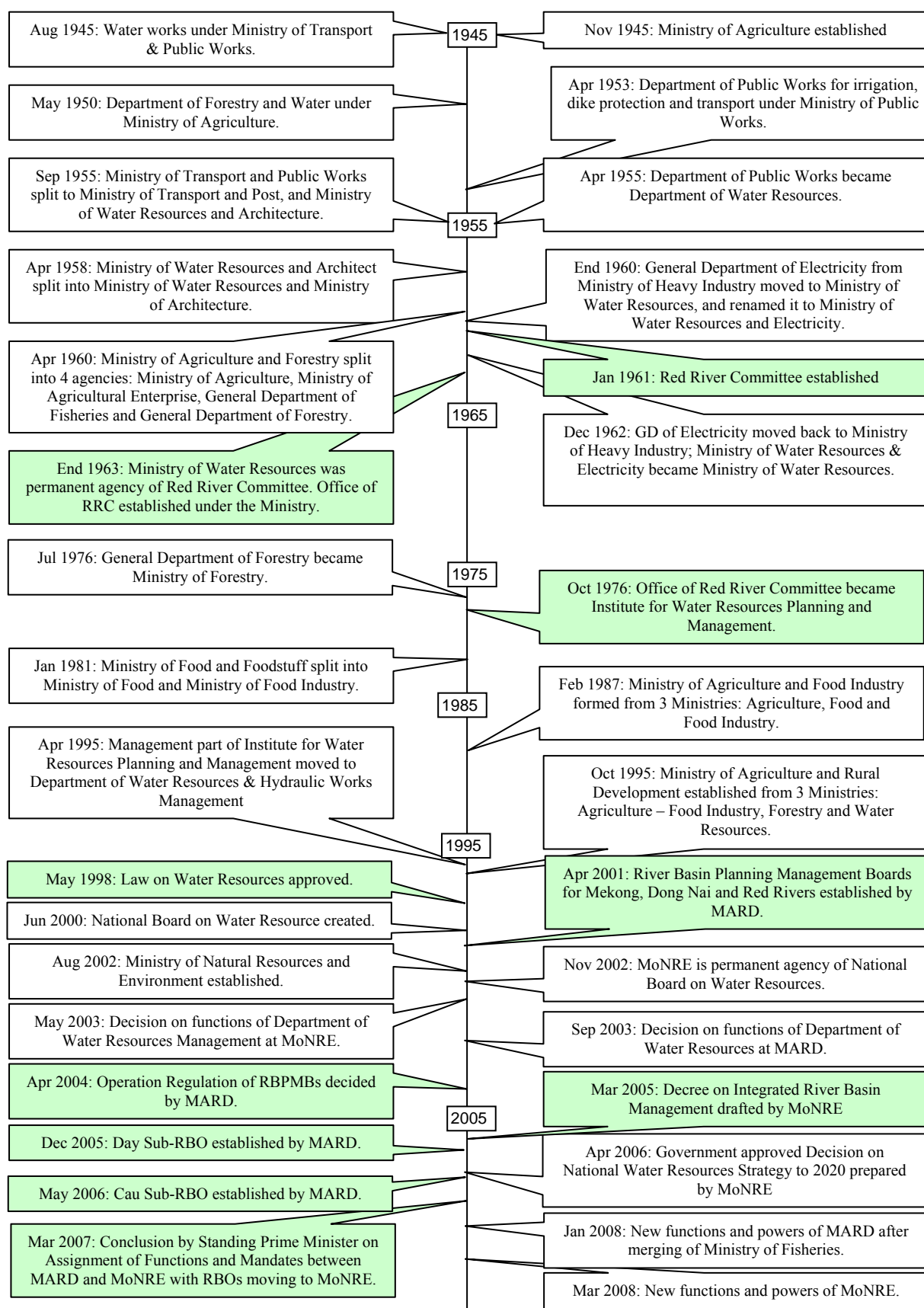
Two years after the passing of the LWR, the National Water Resources Council (NWRC) was established by Decision 67/2000/QD-TTg¹ of June 2000 as an apex body meant to advise the government on strategies and policies regarding national water resources, major river basin plans and inter-basin transfers, management of international water sources and resolution of water-related conflicts between ministries and agencies, or ministries and provinces.² It was to be chaired by the Vice Prime Minister assisted by the Minister of MARD and had 18 members belonging to the various ministries concerned. The Office of the Council (ONWRC) was established within MARD (under the Department of Water Resource and Hydraulic Work Management, DWRHWM) in June 2001 and

¹ According to the Decree 101/CP of September 23, 1997 on Details for implementation of Law on Promulgation of Legal Documents, a legal document should have a code with *number/year/agency* (e.g. 67/2000/QD-TTg). This code is different from the *number/agency* (e.g. 67/QD-TTg) of other Government documents issued for solving a concrete problem or for approving a project, giving award to a person, etc.

² The initial impetus very much originated in the ADB's policy to promote apex bodies in the region. During the Bank-financed "Red River Basin Water Resources Management Project" (TA 2871 VIE) assistance was given for the establishment of the NWRC, including drafting of the Prime Ministers' Decision (June 2000) and Regulation (June 2001) listed above. A number of national workshops and other forms of inter-ministry consultation were held to seek input and create awareness for the successful establishment and launching of the Council and its Office" (ADB, 2001).

received its annual budget from this ministry. The director of DWRHWM was appointed director of the ONWRC and given three full-time junior staff.

Figure 1. Summary of institutional change in the water sector



One year later River Basin Planning Management Boards (RBPMB) were created in three major river basins, namely the Mekong (Cuu Long), Dong Nai and Red (Thai Binh) river basins to manage, i.e. to coordinate, river basin **planning** management pursuant to Article 64 of the LWR³ (Decisions 37, 38, 39/2001/QĐ-BNN-TCCB of April 2001). The RBPMB were three-tiered RBOs with a governing Board, a managing Office or Secretariat (the Institute of Water Resource Planning, IWARP) and stakeholders. Offices received a very limited budget from MARD (CRDE and IESD, 2006). The role of RBPMB would only be defined later by a decision on their regulation issued in 2004.

2.2 *The advent of the Ministry of Natural Resources and Environment*

In 2001, in line with the 1992 Constitution, the 9th National Congress of the Communist Party of Vietnam launched a series of reforms aimed at 'modernizing' the state, separating public administrative agencies from public service delivery agencies, "continuously reforming State-owned enterprises and separating State administration from business and production management of enterprises; continuously reforming administrative procedures; formulating a clean and capable contingent of civil servants; strengthening order and discipline; and fighting red tape and corruption" (Hydrosult and Arcadis, 2005b).

The creation of MoNRE in August 2002 was an important part of these reforms and promoted the separation of regulation/management (MoNRE) from operation or construction (line agencies) (Su *et al.*, 2004; Hydrosult and Arcadis, 2005b⁴). This created a somewhat odd situation since at the same moment RBOs were being implemented under the purview of a sectoral ministry (MARD), with the support of donors who had launched the Second Red River Basin Sector Project (2RRBSP) roughly a year prior to the advent of MoNRE. This raises the question of why did MoNRE emerge in a context that was apparently not ready for it (in particular it was not envisioned in the LWR) and that made it hard to transfer to MoNRE the water resource management functions and the responsibilities for river basin management that had just been entrusted to MARD. One partial answer to this riddle is that MoNRE was established mainly to deal with the then pressing issues of integrating land administration and environmental management, especially pollution control, that were beyond the capacity of the former General Department of Land Administration; and that MoNRE's role in water management was initially not a major concern (see box). On the 11th of November 2002, Government Decree No. 91 specified the functions, responsibility, authority and the organizational structure of MoNRE as a "government body to exercise the state function of management over the land, water resources, minerals, environment, meteorology, hydro geography, measuring and mapping in the national scope..." (GoV, 2002). The Resolution 02/2002/QH11 of August 05, 2002 on regulating list of Ministries and Ministerial-level Agencies approved by the 11th National Assembly also mentioned in Article II that *"The functions, tasks and powers of some ministries or ministerial-level agencies already prescribed in the current laws or ordinances shall, due to the change in their organizational structures under this Resolution, be transferred to the corresponding ministries or ministerial-level"*

³ In the Article 64 on "Management of the river basin planning," after a list of functions in management of the river basin planning, the second point indicates that "The agency managing the planning of the river basin is a non business agency of the Ministry of Agriculture and Rural Development. The Government shall make concrete provisions for the organisation and activities of the agency managing the planning of the river basin."

⁴ A government statement of July 2002 emphasized the objective of "separating the function of state unified management of natural resources from the function of state management of the exploitation and use of natural resources for economic and technical purposes ... (agriculture, industry, tourism, forestry, etc.)" (Hydrosult and Arcadis, 2005b).

agencies as from the date such agencies are re-organized" and, in Article III, "The Government shall specify the functions, tasks and powers of the ministries and ministerial-level agencies in order to raise the effectiveness and efficiency of the operation of the ministries, ministerial-level agencies and the Government".⁵

It was followed by MoNRE Decision No. 600/2003/QD-BTNMT of May 8, 2003 on the functions and responsibilities of the Department of Water Resources Management (DWRM) that readily put MoNRE on a collision course with MARD. The Decision specified that the DWRM was an agency within MoNRE with the "function to assist the Minister in **implementing state management of water resources** including rain water, surface water, groundwater, sea water in river basins, in land and sea territory of the Socialist Republic of Vietnam" (MoNRE, 2003; emphasis added). Among other things the department was made responsible for developing "legal documents, policies, strategy, long-term, 5-year, and annual plans, programs, and projects on water resources protection, exploitation, utilization and development".

Box: MoNRE and land management (adapted from Do et al., 2006)

In the aftermath of the Doi Moi policy of 1986, Vietnam took steps to introduce a market oriented land administration system. In the 1990s, it adopted a number of laws related to natural resources and environmental protection, including the Law on Protection and Development of Forest (1991), Law on Land and Territory (1993), Law on Environmental Protection (1994), Law on Minerals (1996), and Law on Water Resources (1998). Under these laws, natural resources belong to all Vietnamese people and the government exercises unified management over natural resources and environmental protection throughout the country.

The first Vietnamese land law after Doi Moi was approved by the National Assembly in 1988. After having been in operation for 5 years, some articles proved to be too restrictive for economic development and the National Assembly approved a revised Land Law in 1993. This was a fundamental legislative reform package that included: 1) enterprises and international organizations being allowed to rent land, 2) Land Use Rights Certificates (LURCs) being issued to people who had long term and stable occupation of the land, 3) Land users being able to exercise the five rights of exchange, transfer, lease, inheritance and mortgage and 5) a mechanism to assess the value of land. A number of legislative adjustments have been further made over the years since 1993 in response to identified inadequacies and a new Land Law was introduced in 2003.

The 2003 Land Law has recognized the existence of a real estate market and regulates what types of land can be traded in the market. However, it specifically prohibits land users from putting into the market land allocated/leased to them by the State to carry out investment projects. It also recognizes that the State must play a role in the development of this market and empowers the State administration in charge of land to regulate the registration of real estate transactions; establish estate investment funds; establish related-service providers and to take measures to avoid speculation and

⁵ Therefore there is an argument that this Resolution of the National Assembly and the follow-up Government Decree 91/2002/ND-CP of November 11, 2002 assigning the state management function on water resources to MoNRE amended the Article 58 of the LWR that assigned that function to the MARD. According to the Law on Promulgation of Legal Documents, each promulgator can promulgate different legal documents as presented in Appendix. The confusion usually occurs when tracking the modification of legal documents. Particularly in this case the modified one is the law, usually considered as a basic legal document after the constitution. Moreover, by the law, the amendment should be done by the same promulgator who promulgated the original legal document, i.e. the National Assembly.

protect participants in the market (JSM 2003, in Do et al., 2006). Achieving the right balance between an open market and Government control continues to be a challenge and to some extent creates a trial and error philosophy as there appears to be few successful models from other countries to follow.

Yet, distribution and privatization of land has necessarily given way to conflicts and, in some case capture or abuse by officials or people with power. Despite attempts to distinguish land by its quality, delegation of distribution power to lower level People's Committees, and the promotion of participation in land administration, several conflicts have surfaced. A clearer attribution of responsibilities for the administration and registration of land have been one of the answers. A nationwide four-level system of land administration was established; with the policy and legal framework being set by the General Department of Land Administration at the National level and the Provincial and local levels responsible to the State for land administration, survey and mapping, and land use right certificate issuance. GDLA was incorporated into the Ministry of Natural Resources and Environment (MoNRE) in November 2002 to support the Government's policy of closer alignment and integration between land administration and natural resources management. The emergence of the MoNRE was thus part of this process and, initially at least, gave little consideration to water issues.

2.3 MARD vs MoNRE: Turf battle over roles

Two months after Decision No 600/2003/QD-BTNMT, in July 2003, Government Decree 86/2003/ND-CP on the "Functions, tasks, powers and organizational structure of Ministry of Agriculture and Rural Development" confirmed MARD's duty with regard to "**state management functions** over agriculture, forestry, salt industry, **water resources** and rural development nationwide" (MARD, 2003; emphasis added). It must submit to the Government and Prime Minister drafts of laws, ordinances and other legal documents but also strategies, master plans of development, long-term and five-year-term and annual plans and key programs, projects on the domains being put under its management. With regard to water resources it must, more specifically, "unificatively (sic) manage construction, exploitation, usage and protection" of irrigation works, drainage works for rural area and flood protection works, and "unificatively manage river basin exploitation, usage and river integrated development per approved plans" (MARD, 2003).

Perhaps as a means to reposition itself within this new administrative environment and bolster its claim to a management role, MARD Minister's Decision 93/2003/QD-BNN of September 4, 2003 to specify the functions, responsibilities, authorities and organization of the Department of Water Resources (DWR), in replacement of the DWRHWM. Its state management function over water resources in the whole nation included exploration, operation and protection of water resources for hydraulic works, rural water supply and drainage, river basin management, exploration, use and integrated development of river, management of protection from water logging and drought in the whole country under MARD management.⁶ In response to donors MARD also designed operation regulations for the RBOs put under its purview (2004).

With both ministries claiming "state management functions" for water, the confusion and inter-ministerial conflict heightened and led to several strategic moves. MARD issued a Decision

⁶ This Decision was signed together with other Decisions that established or renamed other Department of MARD such as Department of Construction Management (from the Department of Investment for Construction), Department of Forestry (from the Department of Forest Development), Department of Dike Management and Flood, Storm Protection and Control (from the Department of Flood, Storm Protection and Control, and Dike Management) etc.

13/2004/QD-BNN-TCCB of April 8, 2004 which established a General Office for River Basins Planning Management with the mandate to assist the General Director of the Department of Water Resources in collaborating with ministries, agencies and provincial people's committees to implement the functions and responsibilities of the River Basin Planning Management Boards. The structure of the Office provided space for the Director of the DWRM of MoNRE on a seemingly equal footing as the DWR and the IWARP (Institute of Water Resource Planning) (see appendix 2). However the director of DWRM reportedly shunned the initiative and sent collaborators to attend the meetings.

With the confusion created by the reference to "State management functions" in both Government Decrees (No. 91/2002/ND-CP and No. 86/2003/ND-CP), MARD endeavored to establish semantic distinctions based on its legal role as the "host" of RBOs. Since water management had to be carried out at the basin level and since the Law on Water Resource provided for RBOs to be hosted by MARD, all the state functions related in particular to planning and construction would be based on basin plans prepared by that Ministry. MoNRE, in turn, would be responsible for state water management at the national, and not the river basin level. Presumably its role would be confined to designing national strategies and regulation norms, such as rules to allocate water and pollution standards. It would not be directly involved in basin-wide development plans and construction, activities which traditionally drain the largest parts of the state budget. MoNRE's perception, on the other hand, was that "the function of state management of water resources has been handed over from MARD to MoNRE" (Trang, 2005; Cong, 2007).⁷

Other arguments in this turf battle referred to the respective weaknesses of the two ministries. MARD, on the one hand, was decried as being narrowly focused on irrigation and flood issues, and heavily biased towards structural and engineering approaches (Nghia, 2004). As such its responsibility lay with agriculture and it could not pretend dealing with all the aspects of water use and with environmental issues; its involvement in regulation issues would be contrary to the principle of separation of power between regulation and operation.⁸ MoNRE, on the other hand, was held as being technically weak, without the competency needed to monitor and regulate water allocation, water quality, and environmental changes altogether. In addition, its recent establishment meant that its presence at the provincial level (DoNRE) was at best incipient, without the capacity to handle issues of river basin management, especially with regard to environmental and pollution issues. This weakness is due to the fact that MoNRE mainly stemmed from land administration and environmental protection agencies, and it only had small offices dealing with water issues. The major part of water management capacity remained with MARD under planning institutes, hydraulic work management, dike building and disaster relief, etc.

⁷ The Strategic Orientation for Sustainable Development in Vietnam (Vietnam Agenda 21) attached to the Decision 153/2004/QD-TTg of August 17, 2004 indicated a strategy to manage water at the river basin level and to protect land and water sources. On August 29, 2003 the Announcement No. 03/TB-HDQGTTNN communicated the results of the NWRC meeting chaired by the Standing Vice Prime Minister. The Chair concluded that MoNRE was, in cooperation with other ministries and provinces, to lead the formulation of the integrated water resources planning of large basins that will be used as references for sectoral and provincial development plans. In the Announcement 03/TB-HDQGTTNN of May 17, 2005 on the NWRC meeting, it was reiterated that MoNRE was to lead and cooperate with MARD and other line agencies, not only in planning, but also in identifying suitable and effective institutions, regulations and management structures for river basins (Cong, 2007).

⁸ MARD's officials reckon that the Ministry "has not yet clearly reflected its mandate for state management of water resources in a new organizational structure" (Sachs, 2004).

At the peak of these debates, in June 2003, a task force⁹ including representatives from MARD, MoNRE and several donors published its recommendations to solve the gridlock between the two ministries in a report titled "Transition of Water Resource Management from MARD to MoNRE" (GoV, 2003). The report outlined the would-be functions of the MoNRE's DWRM, with different bureaus addressing surface water management, groundwater management, resource protection, training and awareness, policy and planning, and information management. Its role is clearly regulatory and advisory but includes management of water rights. Integrated planning (basin masterplans) and operational management is left to MARD, with its RBOs and line agencies. Although the report advocated a transfer of the responsibility for supporting RBOs from IWRP to DWRM, the "degree to which a planning capability is built up in MoNRE or whether the Institute of Water Resources Planning or part of it is transferred" is left unspecified (GoV, 2003). The National Water Resources Council (NWRC) "should be re-activated as a key coordination and advisory body in the water sector" and its Office located in DWRM. The present chairmanship of Vietnam National Mekong Committee¹⁰ assigned to MARD should also be shifted to MoNRE in the long run.

The confusion on role definition was discussed in various seminars and in late 2004 the Government, through the mediation of the Ministry of Interior, requested MoNRE (in coordination with MARD) to prepare a government decree on River Basin Management (RBM) (CRDE and IESD, 2006) that would, in particular, modify Government Decree 86/2003/ND-CP and "remove the function of coordinating river basin management of MARD" (Hydrosult and Arcadis, 2005b). MoNRE, in turn, requested and received support from ADB and DANIDA to draft the decree. In March 2005, the draft Decree on "River Basin Management" (RBM) challenged MARD's "ownership" of management at the basin level (GoV, 2005). Based on the argument of the necessity to integrate water with other natural resources, the decree stated that "The management, protection, utilization and development of water resources, and the mitigation of harms caused by water, shall be integrated with the management, protection, utilization and development of other resources **in the river basin** and environment protection in a sustainable manner."

RBM is said to include the development and implementation of ten-year river basin plans which should include a "framework plan that sets the broad objectives, policies and priorities on water resources protection, exploitation, development and utilization and protection of water-related environment in the basin" ...and "plan components that set the rules, actions and processes for integrated and sustainable water resources management in a list of River Basins" to be submitted to the Prime Minister by MoNRE. River basin framework plans deal with the assessment of supply and demand, trends and projections, water quantity and quality, offer strategies and practical solutions (structural and otherwise), regulations and objectives for aquifer use, environmental flows, flood control, protection of water-related environments. MoNRE is to lead the appraisal of river basin plans, seek comments from NWRC, and submit final appraisals to the Prime Minister. The decree also dramatically reshuffles responsibilities by introducing advisory River Basin Councils, established by the Prime Minister at the request of MoNRE and assisted by permanent River Basin Management Board (Offices) set up under MoNRE and financed from its annual budget. It endorses a shift of decision-power from MARD to MoNRE, with the former remaining as an executing agency of actions

⁹ This was a MoNRE initiative supported by ADB TA 3528 – subproject 1 for support to the NWRC.

¹⁰ This national committee addresses issues pertaining to the wider Mekong basin and is the Vietnamese interlocutor of the Mekong River Commission.

defined and monitored by the latter. It must be noted, in passing, the absence of discussion on what would the role of PPCs be and in their apparent lack of demand for RBM.

2.4 Competing strategies

In 2006, MoNRE published a "National Water Resources Strategy towards the year 2020", endorsed by the Prime Minister (81/2006/QĐ-TTg) in April 2006.¹¹ The strategy acknowledges that "The Law on Water Resources... has not been effectively applied and is now not suitable to deal with new situations." It reasserts the axiomatics of Integrated Water Resource Management, notably the separation of functions (regulation and operation), integrated river basin management, licensing of water use and discharge, and the protection, efficient exploitation and sustainable development of water resources. It reckons that a "suitable model for organisation and content of integrated river basin management has not been established" and entrusts MoNRE with the task of establishing "river basin plans and water resources plans for all regions and managing the implementation of the plans". The "review, amendment and supplementation of the Law on Water Resources and other related legal documents" will be needed "to satisfy the requirements of integrated and uniform water resources management".

The strategy also includes conventional orthodox views of a change in "water management from a subsidized, supply-focused approach into a demand-focused approach that recognizes the commercial nature of water service products", emphasizes pricing, cost recovery and even trading of entitlements in a market¹², but does little to underline the intrinsic necessity of hard choices and tradeoffs in water management, sticking to a depoliticized and non conflicting view of IWRM.¹³

This strategy reasserts the prime importance of river basin planning and management as a layer of decision-making that both clearly rests with MoNRE and defines the conditions in which operational agencies will have to perform their tasks and duties. This view was, unsurprisingly, not shared by MARD which issued its own *Strategy for sustainable national water resources development and management* (MARD, 2006).

MARD strategy recapitulates past public investments in water resource development in different regions, the achievements in terms of irrigation, drainage and flood control, the staffing of water services and reviews all the projected water demand and investment needs for each region. The focus is clearly on the conventional management of supply in order to respond to new and growing needs, including the requirements induced by cities, industries, tourism, aquaculture, salt production, or agricultural diversification, and the necessity to ensure environmental flows (or at least minimum flows to downstream areas). This is what distinguishes the new approach from earlier planning studies that "were mainly implemented to meet development requirements of the agricultural sector" (MARD, 2006).

¹¹ The strategy was prepared during the years 2001-2003 as part of TA 3528.

¹² "The formation of a water service market with participation of various economic sectors; and a market for the transfer and exchange of water resources licences" features in the list of objectives.

¹³ For example: "Water resources exploitation and use should be made in an integrated and multi-purpose manner, harmoniously incorporating interests of individual sectors, localities and communities in a global inter-relationship between upstream and downstream regions and between different sectors, to ensure balanced, focused, high socio-economic efficiencies and environmental protection" (MoNRE, 2006).

Nonetheless, irrigation, drainage, flood protection and hydropower need to be mobilized, repaired, expanded, improved or modernized in order to meet overarching goals of food security, industrialization or "national security". It calls for a renewed investment policy (and financial arrangements for cost sharing) because "the development objectives of all economic social sectors are being modified to be at higher levels".

Reference to water resource management in the sense used by MoNRE is scarce. Although there are passing references to licenses for water use or waste disposal, and to water quality monitoring networks and prevention of water pollution, the strategy markedly differs from MoNRE's. It does little to enlarge MARD's scope beyond its traditional role, although it stresses the growth of non-agricultural uses and the need to cater to all. Its hypothetical willingness to appear as more than a sectoral water manager is hampered by its official mandate.

This could after all be good news. If MARD is about structural development and operation of waterworks, why would it conflict with MoNRE which conceives of management at a higher level, with more consideration to environmental health? Both also agree with the necessity to reason water resource development and management at the basin level. As discussed later, the conflict revolves around the decision-making power on planning, what is to be done or not, and the implications in terms of budget flows within the bureaucracies. Under threat to lose decisional power, the only alternative left to MARD is to expand vertically, rather than horizontally, i.e., investing at the basin level, hence the conflict with MoNRE which, on the contrary, is attempting to develop its management capacity at levels lower than the nation, also at the basin level.

In the face of such recurring contradictions, Standing Prime Minister Nguyen Sinh Hung convened a meeting on March 5, 2007 to hear the opinion of MARD and MoNRE Ministers. The Notice 43/2007/TB-VPCP on the conclusion of that meeting confirmed the intention to transfer basin planning to the latter, requesting the Ministry of Internal Affairs to prepare a modification of Government Decrees 86/2003/ND-CP (on the functions of MARD) and 91/2002/ND-CP (on MoNRE's duties), and MoNRE to prepare a new draft Decree on river basin management. It was also agreed to transfer the Vietnam National Mekong Committee from MARD to MoNRE.

2.5 Internal dissent within MARD and MoNRE

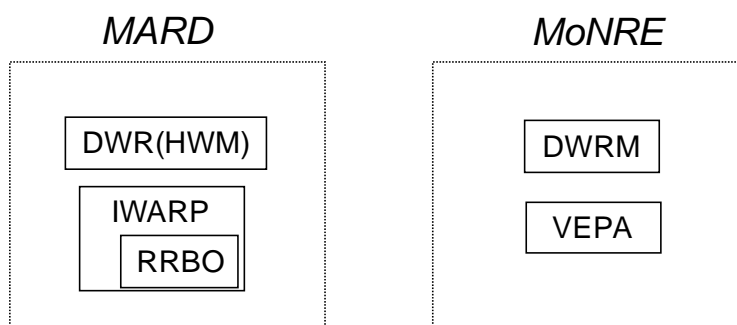
If the lack of institutional clarity severely affected the two ministries and their relationships, it also impacted the distribution of roles and duties within each of the two ministries. The responsibility for river basin management was first entrusted to the Institute of Water Resource Planning (IWRP) of MARD because the current RBO originated from the RBPMB with planning functions as requested by the 1998 law (see figure 2). While in 2003 the IWRP, in its capacity as the Office of the RRBO, had been selected as the Implementing Agency (IA) of the orientation phase of the 2RRBSP Project (see below), the (second) design phase of the project saw DWR insisting on playing its original IA role. In preparation for the third implementation phase MARD argued IWRP is not a suitable IA as it is merely a (technical) planning institute and as such did not have state management functions. This – it was argued – made the institute unfit for managing a process of designing and strengthening river basin management in the country, although it remained unclear why by the same token it had been considered an appropriate host for the RBO Offices. This move may suggest a desire to keep control

on the fringe benefits associated with TAs¹⁴ but also a more profound concern for a possible dilution of decisional power over infrastructural planning. It was eventually supported by ADB in view of the emerging consensus regarding the importance of Sub-basin Organizations (SBOs) with several PPCs sharing common water resource management interests.

This reaffirmation of DWR's power has also been paralleled by a claim to relocate RBOs under DWR. However, since the Department's duty is mainly to manage dams, sluices and pumps – often through the intermediary of semi-independent companies – the justification for such a move would be quite weak and would overtly come into conflict with the principle of separation of duties.

MoNRE was also affected by the unclear definition of the mandates of its different departments. Because it was mainly created based on the aggregation of various departments and agencies drawn from pre-existing ministries and agencies (see first section), the question of water quality appeared as overlapping both the attributions of DWRM and of the Vietnam Environment Protection Agency (VEPA).¹⁵ VEPA's functions are overlapping with DWRM functions on water resources because the latter is also responsible for water resources protection, basic investigation on water use, protection against water resources deterioration and pollution, protection against adverse effects caused by water. However, the conflict between these two Departments has been limited, possibly because the functions of both Departments have not been fully implemented yet.

Figure 2. Schematic summary of main government organizations involved



3 IWRM in the Red River basin: Starting a process

3.1 The First Red River Basin Organization

The Red River is the second largest river in Vietnam. It is an international river (only half of its basin lies in Vietnam) that originates in China, and traverses Vietnam before emptying into the East Sea.

¹⁴ TAs generally come with various benefits in the form of professional recognition, salary complements, training, trips abroad, or investments in additional equipment.

¹⁵ The Vietnam Environment Protection Agency (VEPA) was established as per Decision No. 14/2005/QĐ-BTNMT dated 2 December 2, 2005 by the Minister of Natural Resources and Environment. VEPA assists the Minister of Natural Resources and Environment in the execution of State management tasks regarding environmental protection including areas such as examination, supervision, prevention, mitigation and remediation of environmental pollution and incidents; improvement of environmental quality; conservation of bio-diversity; environmental monitoring; application of technologies; development of databases, statistics, information and reports on the environment; implementing integrated coastal zone management; and education to enhance the awareness of the community on environment.

Administratively, the Red River basin covers, or overlaps with, 26 provinces and its population totals 28 million (in 2002), including Hanoi city. It supports a large irrigated area (650,000 ha, mostly in the delta) and is subject to recurrent flood problems. Not surprisingly the basin was given priority in the process of establishing RBOs in the country. As seen earlier, a first Committee for Red River Water Control and Development was established in 1961 and its permanent office later became the Institute for Water Resources Planning and Management (IWRPM) and, then, the current IWRP of MARD.

During the final phase of the passing of the new Law on Water Resource,¹⁶ the ADB approached the Vietnamese Government and proposed a three year (1998-2000) TA (Technical Assistance) titled "Red River Basin Water Resource Management Project" which, according to Wright¹⁷ (1999), would "assist the government to establish a 'river basin commission' for the Red River Basin, to manage the planning of water resource management and facilitate improved stakeholder involvement and agency coordination in the process". Other goals included improved coordination between provinces, capacity building, the establishment of the Red River Basin Resources Data Directory, and the writing of a "basin profile". Reaffirming that the strong "legal backing" of the law sets the stage for river basin management, the TA tried to set things in motion.

In line with the momentum generated by the TA, on April 9, 2001 MARD created the Red–Thai Binh River Basin Planning Management Board (more simply Red River Basin Organization, or RRBO¹⁸, in what follows) through Decision No. 38/2001/QĐ-BNN-TCCB. In the same year, in 2001, another ADB TA (3528-VIE) was started dedicated to capacity building for water resource management including three sub-projects¹⁹, the first of which ("National Coordination for Water Resources Management") was meant to build the capacity of the NWRC and the incipient RBOs through study tours, awareness raising workshops, assistance in drafting official documents, and by "carrying out activities to expose key people to the meaning and benefits of IWRM" (ADB, 2001b).

Although MARD agreed to the establishment of the NWRC and of the RRBPMB, which remained under its full control, its lack of interest was manifest. After a few initial meetings in 2000, the NWRC did not meet for nearly two years. In late 2001, MARD agreed to reorganization by December 2002 that would separate water resources management from the management of irrigation and drainage services (ADB, 2001).

In 2001, another TA ("Second Red River Basin Water Resources Sector Project", or 2RRBSP) funded by the ADB and the Governments of the Netherlands and France was signed but its inception workshop was only held two years later, in October 2003. This \$156 million project was divided in two parts. Part A (7% of total) would focus on capacity building for the RRBO, public awareness and

¹⁶ According to Wright (1999) "The Government has requested the Asian Development Bank to provide support for improving water resources management in the Red River Basin, in view of its importance to the national economy."

¹⁷ ADB TA 2871-VIE Red River Basin Water Resource Management Project. "The scope of the TA covers three main areas: (a) moving towards an integrated, basin-wide planning and management framework for the Red River basin; (b) strengthening the capability of all agencies with responsibility to manage the water resources of the Basin, through the enhancement of information and decision support systems; and (c) proposing and implementing a series of studies to demonstrate the principles and effectiveness of IWRM" (Wright, 1999). Part of the TA was extended twice.

¹⁸ We should note, however, that before 2004, the name RBO was only used by donors and that Vietnamese officials would refer to agencies or boards, seen as better reflecting their Vietnamese translations (see section 4.6).

¹⁹ The other two sub-projects were devoted to a water resources investment strategy for the central region and to water resources management in the Dong Nai river basin.

a pilot water licensing and wastewater discharge permit systems (in the Cau river). Part B would include conventional infrastructural investments in irrigation, drainage, flood-protection and watershed protection.

Although the 2RRBSP was initially designed as a two-phase project (design and implementation) it was decided to start with an initial orientation phase that would clarify the issues at stake and their perception by, and level of priority for, stakeholders in the basin's provinces (Shearwater, 2003b). From August 2003 to December 2003, the Office of RRBO organized 25 workshops involving the participation of key staff in water relevant sectors and decision-makers from the 26 provinces intersecting the Red River basin. Three top priority issues with regard to water resource management in the entire Red River basin emerged from these workshops: 1) irrigated agriculture; 2) water supply and sanitation combined with pollution; 3) flood control together with reforestation and protection (Nghĩa, 2004a).

Activities of the RRBO during the 2001-2003 period included conventional activities²⁰ already carried out by MARD, but also the coordination of, and support to, the provinces in the organization of the 2RRBSP workshops. The lack of funding, office facilities, and operational guidelines for the RRBO, were held as the main constraints to proper data management and communication, and to field investigations of the current exploitation of the basin (Nghĩa, 2004b).

The operation regulation of the first three RBOs (including the RRBO) was specified by a ministerial decision (No. 14/2004/QĐ-BNN-TCCB) in April 2004 (MARD, 2004). The RBOs' role is unambiguously to serve as technical coordinating and advisory bodies to MARD, "assessing planning alternatives, basic investigation projects, inventory and assessment of water resources in the river basin; [and] submitting to MARD and authorized state agencies follow-up recommendations and proposals". Other missions include data exchange and management, coordination with other ministries and agencies, capacity building and awareness raising. RBOs are to meet twice a year, and are chaired by a Vice Minister of MARD, assisted by the General Director of the DWR and a department level leader of MoNRE. Members include leaders of PPCs from provinces located in the basin, leaders of DWR, IWARP, DWRM, and other water-related departments from other ministries (Industries, Fishery, Construction, Transport, Health, National Defense, and General Services of Hydrometeorology,...) as well as from their provincial affiliates.

The first phase of 2RRBSP had served as a screening process which had made clear that the 25 provinces had few issues in common (aside from those already taken care of such as flood or dam operations) and that IWRM should be implemented to tackle actual problems at a lower scale. It was also hoped that the institutional conflict around the role of RBOs would be minimized when moving to a lower scale where agreements and arrangements among smaller groups would perhaps be easier. The Cau and the Day sub-basins emerged as strong candidates for pilot testing river basin management. In October 2004, phase 2 started with five different components addressing: IWRM in the Cau River Sub-basin, strategic flood management in the Red River Delta, IWRM at sub-basin level in selected

²⁰ Such as data collection and management, field investigations on the exploitation of floodplains between Nam Dinh and Ninh Binh, assisting the state regarding the construction of large scale hydropower works in Son La and Tuyen Quang, examining the Red River flood corridor and the embankment of the Red River in Ha Noi, assessing the scope for water supply schemes and hydropower projects, commenting on the strategic plan of national aquaculture development and extension, etc. (Nghia 2003).

Upland provinces, IRWM in the Day-Nhue River Sub-basin (focused on water quality issues), and support to the Office of the Red River Basin Organization (RRBO)²¹ (2RRBSP, 2006).

3.2 The Cau sub-RBO

As early as 1997, and therefore much before talks about river basin organizations, the six provinces traversed by the Cau river decided to form a committee in order to jointly tackle the issue of water pollution in the basin. This initiative was undertaken by the then provincial DoSTEs (Ministry of Science and Technology), under the Environment Programme, but did not catch the interest of the RRBO when this was later established (CRDE and IESD, 2006). It resulted in the formulation of a Masterplan on Environmental and Landscape Protection and the government subsequently gave the green light to the creation of a Cau River Committee chaired by the PPC chairmen.

Figure 3. Location of six provinces in Cau river basin (source 2RRBSP, 2006).



In May 2006 MARD Decision 1363/QĐ-BNN/TCCB established the Cau sub-basin organization (CSBO) as an advisory body under direct control of the RRBO chaired by MARD. The CSBO is to be

²¹ A second part (part B) deals with infrastructural investments.

chaired permanently by the Vice-chairmen of Thai Nguyen PPC.²² In September 2006 the RRBO issued Decision No 7 that defined the "Organization and Working Regulation for the Cau River Sub-basin Organization (CSBO)". The CSBO appears to be a mere appendix of the RRBO. Its main tasks are to advise the RRBO in water resource assessments, planning options, monitoring of implementation, definition of priorities. The CSBO is expected to meet twice a year and its permanent office is located within the DARD (MARD, 2006). This Decision was passed rather hastily, so that the third phase of the 2RRBSP would not be further delayed, and involved limited deliberation on the degree of autonomy of the CSBO and on its relationship with line agencies.

As mentioned above, the Cau river basin was selected because it presented a "real IWRM challenge" (ADB, 2006) identified during the initial phase of the second phase of the 2RRBSP. These challenges include water scarcity shared among the four lower provinces, allocation conflicts in the water from the Nui Coc reservoir which is used for a) irrigation, b) supplying water to Thai Nguyen city, c) diluting pollution in the Cau river and d) supporting recreational and tourist uses in the reservoir itself. The project thus included several components that looked at varied issues such as water balance, storage potential, irrigation performance in the Song Cau system, aquaculture potential and crop diversification.

However conventional they may appear, these issues proved to be more intractable than expected. Land left fallow in the dry season or field crops like soya bean being grown instead of rice in the Nui Coc and Song Cau irrigation systems suggest a lack of water; but there seems to be no consensus on the respective importance of factors such as inadequate water management, lack of market, soil texture or opportunity cost of labor. Better understanding of these issues was hindered by the lack of data on water flows and land use, and the limited time and means available to carry out extensive field work.

Likewise, pollution issues were not fully captured because of patchy data and inadequate regulation framework. The polluter-pays principle enshrined in the Law on Water Resource clearly appears insufficient to solve the problems, not only because of confusion over standard definitions and with monitoring but also due to inadequate enforcement. Most polluting factories in the area are State enterprises, allegedly old and inefficient, which would be bankrupt overnight if they had to treat their effluents. This contributes to explaining why the effective definition and implementation of allocation rules, water quality monitoring, improvement of irrigation management or reservoir operation were left to the third phase due to start in early 2007.²³

The objectives of the Cau river component of 2RRBSP's Phase 3 are defined as follows (Shearwater 2007):

- estimate pollution releases, apply them to available streamflow data, to estimate present ambient water quality, and assess the associated environmental health impacts/risks;
- provide: (i) objective assessment of options, (ii) facilitate informed inclusive decision-making and (iii) support implementation by PPCs;

²² MARD Decision of 4 July 4, 2006 subsequently appointed: (i) the Vice-chairman of Thai Nguyen PPC as Chairman of the CSBO, (ii) the Deputy Directors of the six provincial Departments of Agriculture and Rural Development (DARDs), as Vice-chairmen and (iii) the Deputy Directors of Thai Nguyen DARD as the head of the CSBO Office.

²³ The difficulties experienced by the project are discussed in passing for two reasons: first because the establishment of the CSBO was a direct outcome of the project; second because the difficulties faced in implementing it illuminates the strategies displayed by the different ministries and the overlap of roles and responsibilities.

- assist in the periodic review of the mandate, functions, organization structure, membership and operation of the CSBO and the relationships between: (i) the RRBO and CSBO, (iii) CSBO and its Office and (iii) CSBO and its stakeholders;
- facilitate strategic planning to help the CSBO Office progressively develop and implement an organization and staff development plan; and support PPC implementation of agreed IWRM activities and help the CSBO design and implement a simple participatory monitoring and evaluation (M&E) system covering: (i) CSBO capacity, (ii) stakeholder participation and (iii) the economic, social/poverty and environmental impacts of IWRM activities.

Phase 3 thus includes technical issues and governance challenges. The CSBO is so far heavily dominated by Thai Nguyen province and this might prove to be a weakness for solving inter-provincial issues. The strong subordination of the CSBO to the central level of MARD, through the RRBO, is also likely to annihilate any sense of ownership by the provinces concerned. While ADB's TA sees the active participation of the CSBO and other stakeholders in the sub-basin as essential in the resolution of problems such as the inventory of main water users and the definition of water use licenses, or the identification of major environmental assets (protected areas, wetlands, etc.), it is not clear who is going to participate and how.

Other issues are linked to the conflict in duties at the ministerial level. With the establishment of the CSBO, the existing Environmental Committee, for example, should ideally merge with the CSBO and incorporate its environmental master plan with the future general basin plan. Although preconditions for the starting of TA's phase 3 included the adequate staffing of the CSBO with six dedicated staff, with three from DoNRE for environmental issues (plus two from DARD for irrigation²⁴ and one with NGO background for participatory irrigation policies), this composition does not reflect the effective balance of power and the functioning of the CSBO. But since both DARD and DONRE report to their PPCs that are responsible for state management within their jurisdictions, including resolutions between competing sub-sectors, ministerial conflicts might have less incidence at the provincial level.

The Cau river basin does face problems of water allocation, pollution control and inter-provincial coordination. Whether these problems call for a Sub-RBO with a permanent role or not is unsure. The fact that provinces have not been able to solve coordination problems in the past might indicate a need for some kind of intervention by the central government, at least to enable, and assist in, resolution mechanisms. But such an intervention may also meet with the passivity of provinces that feel subjected to central power.

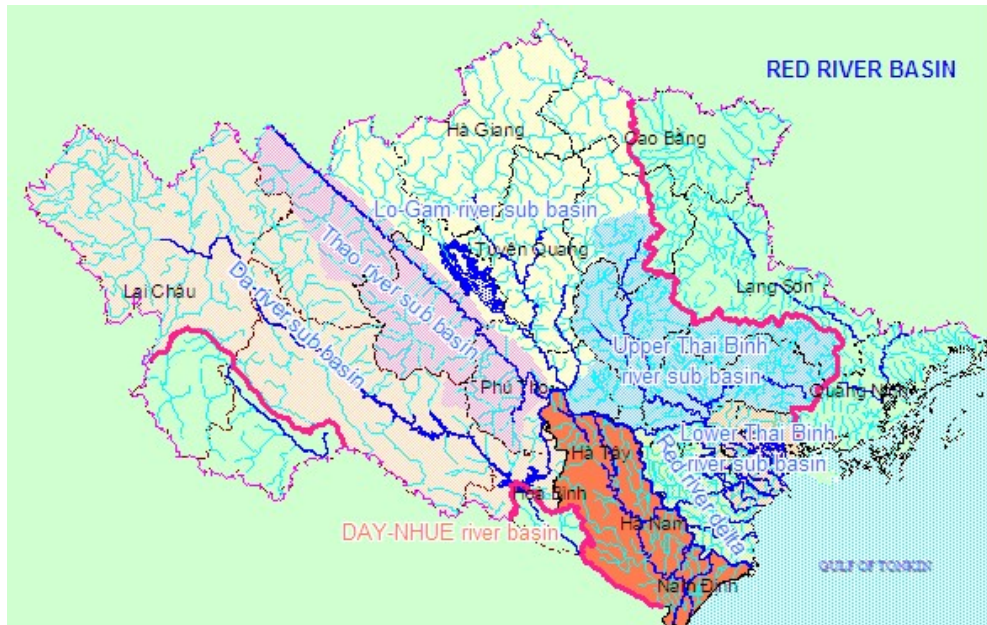
3.3 *The Day sub-RBO*

In 2003, following the example of the Cau river, the six chairmen of the PPCs concerned with the Day River met in an attempt to solve water quality and environmental problems in the basin. The Day River branches off the Red River upstream of Hanoi, although this natural connection was later sealed, transforming the river into the receptacle of Hanoi's main drain, the Nhue River. The Nhue and the Day Rivers are thus the most polluted waterways in Northern Vietnam. Domestic and industrial pollution combines with agrochemicals used in agriculture. One of the polders traversed by these rivers (the Bac Nam Ha polder) is also subject to water shortages during the winter-spring crop season.

²⁴ The difficulty encountered in identifying staff with this qualification and at least ten years of experience illustrates how recent emergence of environmental concerns at a political level is.

A gate is therefore under construction at the head of the river in order to admit around 30-40 m³/s from the Red River into the Day²⁵. Likewise, it is proposed to abstract water from the Red River at the level of the Chau Giang river (see figure 4). It is striking to see that the gate system that was once designed to control flood in the delta must now be altered in order to increase flow in the dry season, for both irrigation and dilution of pollution.

Figure 4. Location of the Day river basin (source 2RRBSP, 2006).



The Day sub-basin organization (DSBO) was officially set up in December 2005. Like for CSBO the chair is rotated (every two years) among the chairs/vice-chairs of the six PPCs concerned. Members include the Department of Planning and Investment of the provinces, DARD, DoNRE, Department of Science and Technology, etc. totaling 60 persons. The DSBO has its main office in Ha Nam and sub-offices in each province. The regulation for the DSBO was approved in September 2006 and followed by a meeting to review priorities for 2007.

A legitimate question is what is the added value of the DSBO, compared with the earlier inter-provincial committee? Is there a need to create new and permanent offices or would a more informal mechanism be sufficient? Officers in the DSBO reported several advantages of the new setting: first the DSBO is officially recognized and carries more weight when requesting interventions such as the opening of the head reach of the Day River. Second, it allows coordination of actions and decisions. For example the interdiction of floating vegetables (which block the flow of water) in one province would be circumvented by people growing them in other provinces, if the interdiction was not taken jointly. Third, the DSBO offers better opportunities for officers from each province to be aware of what the other provinces plan in terms of water management structures (e.g. gates or flood control structures) and thus to anticipate and flag possible impacts on their own province.

The DSBO also illustrates the limited power of provincial offices vis à vis the central ministries. Since the Bac Nam Ha polder overlaps with several provinces, the Bac Nam Ha Irrigation Company comes

²⁵ This, of course, will be to the detriment of those depending on the Red River itself, downstream of the confluence.

under the direct jurisdiction of MARD. Local provincial officers resent the lack of decision power that prevents them from imposing their own priorities; for example when MARD decides to build a particular structure for reasons that are seen as dubious by local people who have their own opinion on the usefulness of possible planned structures or interventions. Yet, at the moment and probably also as a consequence of the DSBO being newly established, the actions proposed by the DSBO for 2007 look more like a wish-list and still carry little weight. Achieving their own prioritization is also dependent upon setting rules for decision-making and joint deliberation, which are yet to be defined.

It remains that the main problem of the river is pollution and that its causes lie mainly with Hanoi city itself. Obviously, the improvement of water disposal and treatment in the capital depends on the establishment of regulations and their enforcement but, more crucially, on the financial layout that the state will decide to devote to solving the problem (building treatment stations, upgrading obsolete industrial units, etc). Although the DSBO may contribute to stressing the urgency of such actions its clout is probably marginal at the moment. The DSBO remains an advisory body and carries little weight in the decision to move huge public funds to tackle water pollution problems. It is thus a legitimate question to ask whether water quality management demands an integrated inter-sectoral approach requiring formation of a permanent S-RBO (sub-RBO) or if it is primarily a question of investment in treatment facilities around Hanoi.

While the DWRM of MoNRE functioned as the executive agency of 2RRBSP's Phase 2 Day river component (that was focused on water quality issues), plans to include in Phase 3 activities such as river basin planning and water allocation functions are problematic; so is the role to be played by the DSBO now formally convened under MARD: these difficulties are symptomatic of the actual situation where roles and responsibilities between the two ministries remain confused.

3.4 Who wants RBOs? Reformulating the project

With all these plans for phase 3 under discussion, the project suddenly took an abrupt turn in course²⁶. The ADB and the Embassy of the Netherlands cancelled two of the four components planned for component A. The Cau component was cancelled because of MARD's delay in defining an operating budget and appointing staff for the CSBO, lack of demand by provinces, and lasting confusion on whether responsibility for integrated river basin management would eventually rest with MARD or MoNRE. The Notice 43/TB-VPCP of March 15, 2007 expressed Government intention to follow these responsibilities from MARD to MoNRE, requiring revision of Government Decrees defining the ministerial mandates (Shearwater 2007b). However, on 24 May, the Office of the Government issued a communiqué advising that this issue would only be resolved as part of a wider process of reducing the number of ministries and rationalizing their mandates/functions. At the same time the Ministry of Finance recommended abolition of irrigation service fees, signaling that major policy shifts might be on the way.

The Day component is going to be carried out by MoNRE, independently of the DSBO chaired by MARD which, again, stands in total contradiction with the idea of IWRM, as expressed by RBOs.

²⁶ These new developments unfolded as we were finishing the writing of this report and are therefore not fully analyzed.

4 Analysis and lessons learned

4.1 *The RRBO: A blueprint or an endogenous solution?*

The earlier chronology of reforms and ADB TAs leading to the establishment of the first three RBOs in 2001 and to the launching of the 2RRBSP project showed that the relevance of RBOs in general²⁷, and of the RRBO in particular, was largely unquestioned and said to be anchored in provisions of the water law: the objectives of the project focused on capacity building for the RRBO, public awareness and education programs for water resource management, and a pilot water licensing and wastewater discharge permit systems that would demonstrate the benefits of IWRM. Project consultants found themselves in a situation where the RRBO would have to be trained without having first asserted its legitimacy with regard to the ministries concerned and to the provinces. They were also unsure of what were the main issues that the RRBO would have to address, aside from water quality in the Cau and Day rivers. As mentioned earlier, a first and quite successful Diagnostic and Orientation phase allowed to scope out what were the perceptions of line agencies and provincial representatives regarding water challenges in the Red River basin.

Phase 1 found that the Red River basin is not short of water and "demonstrated that basin wide participation is both difficult and unnecessary as the 26 provinces and 25 million people do not share common IWRM challenges" (Shearwater, 2005b). This timely realization helped put the project on a new track and the focus shifted from conventional basin master planning to "doing a few important water management things well", and from the whole river basin to the sub-basin level. At this stage the risk arose that IWRM might appear as a solution looking for a problem and ADB expressed its concern that the participants of the initial phase "hadn't identified a "real" IWRM issue" (Shearwater, 2005b). The issue of allocation of the water from the Nui Coc reservoir was singled out as a "real" IWRM challenge that combined issues of water quality and quantity, allocation (between pollution dilution/environmental flows, irrigation and tourism) and concerned two or three provinces.

This reformulation of the project raises some more general questions on the nature of the policy process. It suggests that the weight of external actors in this process, most particularly development banks and bilateral cooperation agencies, is quite significant, prompting two different questions: 1) are the concepts put forward, proposed or sometimes imposed,²⁸ relevant to the problems experienced in Vietnam? and 2) if these concepts are sound, is their introduction timely and consistent with the actual bureaucratic and political configuration in the country?

It is apparent that many of the driving concepts pushed forward heavily draw on "best practices" supposedly sanctioned at the international level. River basin management, for example, is introduced as "an internationally accepted approach providing the required levels of stakeholder involvement in water resource management decisions, and coordination across the many government agencies with responsibilities and functions in the water sector in a large river basin" (Wright, 1999). Similarly, there is intense and repeated borrowing from overarching consensual concepts like sustainable development, IWRM, or participatory management that tend to sound hollow when decontextualized. These concepts are promoted as internationally valid emblems of a "modern" water policy framework that is implicitly presented as desirable. The LWR, for example, although it was soon to appear to be

²⁷ "RBOs need to be formed in major river basins" (ADB, 2001a).

²⁸ A number of policy reforms are frequently considered as prerequisites for particular loans or grants (NGO Forum, 2005).

obsolete in the wake of the establishment of MoNRE and RBOs, was presented as providing "a modern, dynamic, and realistic legal framework in accordance with current international principles" (MARD and DANIDA, 2000). This discourse percolated into national policy documents²⁹ but often sounded more like a rhetorical concession than a reflection of a change in mindsets. Although there are incentives for national decision-makers, as well as for international consultants³⁰, to rely heavily on these general concepts, they run the risk to generate proposals that will later – if implemented – find themselves at odds with reality. The nature of short-term projects and TAs, with rigid time frames and disbursement schedules, also contributes to creating such situations. For example, the initial drive to distil IWRM and river basin management principles for the Red River foundered on its later confrontation with reality, with a shift towards sub-basin issues.

It may also be the case that concepts are proposed or applied in an untimely fashion. Management regimes require bureaucratic configurations, legal frameworks and governance patterns that are consistent with these regimes. Pushing for a particular regime when these conditions are not met may just be wishful thinking with little chance of success. The first Red River Basin Water Resource Management Project was planned to assist the government in establishing a "river basin commission" for the Red River Basin to manage the planning of water resource management and facilitate improved stakeholder involvement and agency coordination in the process" (Wright, 1999). These intentions, with hindsight, conflict with the fact that the RRBO was to be set up under the control of MARD and that basin planning, notably water infrastructure development, would remain its prerogative. In that sense, the institutional setting was not suitable, and probably adverse, to the implementation of IWRM principles in general and RBOs in particular. This contradiction, that was to be made explicit later by the creation of MoNRE and by its very claim to a division of roles and responsibilities, was also painfully clear to consultants of the Red River Basin Water Resource Management Project.³¹ Yet, such evidence did not warrant an early reconsideration or a revision of the project.

A similar disjuncture between intended goals and reality was apparent in DANIDA's 2000-2005 program aimed at supporting the implementation of the water law. The program stated that the law "provides a modern, dynamic, and realistic legal framework... [and] defines new responsibilities and functions which have potential to bring water resource management in Vietnam in line with proven international principles and practices" (MARD and DANIDA, 2000). Yet the same document reports that much concern has been raised over the dual role of MARD as both custodian of national resources and the providers of services (irrigation, drainage, flood control, etc). Other analysts also noted that with the application of the law "more institutional fragmentation happened" because this division was neither translated into legal pieces nor accepted by many officials. These have had only few

²⁹ For example the National Water Resources Council website states that "The Law on Water Resources has reflected almost world-wide concepts and principles on integrated water resources management" (NWRC, 2007).

³⁰ National decision-makers understand that a degree of acceptance of these concepts (irrespective of whether they believe in them) is the oil that lubricates relationships with donors and the international level; experts and consultants, who often have very little time to do project feasibility studies, also ground a part of their legitimacy in the manipulation of these concepts whose hegemonic nature provides a degree of protection against criticism.

³¹ "Although the government, most particularly MARD, made it clear from the start that the RBO would only have an advisory role on planning issues and would coordinate water resources information, even that advisory role, however, needed to be curtailed, in order to obtain the acceptance of MARD. One irony is that the RBO was not to undertake activities which the Ministry is not yet undertaking, but which (i) are now recognised as needed, and (ii) the Ministry does not have the capacity to do at present. Water allocation is one such function" (Taylor and Wright, 2001). Consultants also expressed scepticism at staffing and funding of the RBO and at its lack of independence from MARD.

opportunities to discuss or to learn about new conceptions and this has "created unnecessary disputes" (CRDE and IESD, 2006).

4.2 Vertical and Sectoral integration

Core aspects of IWRM include the defragmentation and integration of water management, the coordination of actions, but also the distribution of decision-making power, across:

- the administration (state, province (or municipality), district, and commune), each level being represented by the Council of State at central level and People's Councils at lower levels;
- Central Government and three nested parallel levels of People's Committees at province, district and commune levels that perform administrative functions and are elected by the Councils;
- the ministries and their line agencies (and their representation at the central, province and sometimes district or communal level)

These nested levels must be integrated vertically but also horizontally: for example provinces need to collaborate to tackle the issues they have in common; while within a same province (just as at the ministerial level) line agencies must also harmonize their actions.

With specific problems identified at the sub-basin level, institutional concerns shifted to establishing S-RBOs and defining their role and position vis-à-vis the Red River parent organization. The role of the RRBO itself, for lack of major issues that would justify its existence, was redefined as one of supporting S-RBOs, since it also became clear that these new organizations would not have the technical capacity to address inter-provincial issues; the position of MoNRE, in particular, appeared to be very weak because it could only count with a recently established DoNRE, unqualified staff, and no data collection network that could give an idea of what the situation was.

Under present arrangements, the S-RBO is therefore subject to several lines of control and accountability, as sketched out in figure 5. The S-RBO is first strongly under the control of MARD, because it is an appendix of the RRBO, and also because of the central contribution of DARD to its staff. But it is also partly controlled by PPCs, first because they chair it, second because the heads of the provincial departments that staff it are reputed to be more accountable to their provincial leaders than to their ministries.

The role of the S-RBO remains advisory but it clearly created a space in the governance structure which could offer opportunities for shifts in the distribution of power. At the moment both MARD and the provinces are somehow worried about the possible emergence of an intermediate level of decision; MARD is concerned by a dilution of its power to plan infrastructural development, while provinces are concerned by the transfer of powers from the provinces to an inter-provincial body with discretionary and overriding power. The draft document on the establishment of RBOs first presented to the assembly was modified by members of parliament who were weary of a reduction of provincial power and who barely accepted a role in coordination and conflict solving (CRDE and IESD, 2006).

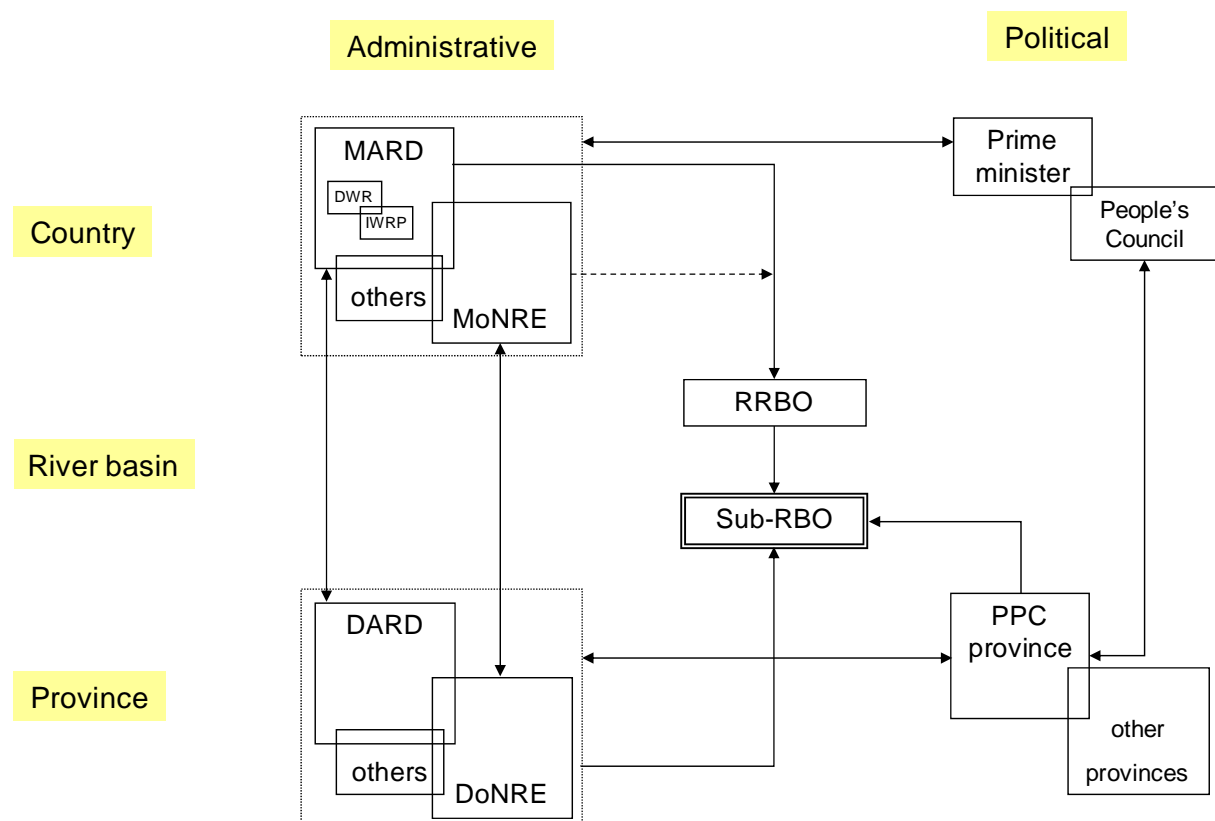
It may well be that the current *status quo* includes a tacit shared preference for keeping S-RBOs with a limited power. Yet, as it stands, the S-RBO also constitutes a window of opportunity for provinces to assert a larger independence from the central government. In that, they may benefit from the dynamic of the 2RRBSP project which tends to promote the ownership of the S-RBO by the provinces. The

LWR granted state management powers to the provinces for issues that are confined to the provincial scale. It is also possible that with due strengthening of the technical capacity of their technical department (and/or with the freedom to resort contractually to the expertise of central departments such as IWARP for specific studies) they might seize the opportunity to manage their own interprovincial water issues by themselves.

This application of the principle of subsidiarity (RBOs should be governed by their own constituents), however, may not entirely fits the prevailing situation. Although provinces have state management functions within their boundaries, it is clear that such a definition is unsatisfactory because many interventions in the water cycle do have impact on downstream or other areas. Problems that clearly travel across provinces are supposed to be handled by MARD or by other relevant ministries. It is not clear whether this way of internalizing externalities by going one level up to the ministry should be replaced by resorting to a S-RBO at an intermediate level. If so, the S-RBO's prerogatives have to be defined and there is potential for replicating at that level the infighting that is currently occurring at the ministerial level. The benefits of such a move are also not very clear for the provinces themselves. First they are aware of their limited technical capacity but they may also be concerned with the access to central government subsidies since at present most inter-provincial issues are generally not only taken care of – but also funded – at the national level.

The eventual cancellation of the Cau SBO sub-component of the 2RRBSP may thus be a reflection of the fact that without clear redistribution of bureaucratic power and prerogatives the *status quo* is the option that is likely to prevail. RBOs might be accepted – or tolerated – as long as they are associated with TAs, Projects and benefits from external funding, and as long as they are kept under MARD's control; but their durability is dubious as soon as this support wanes.

Figure 5: Articulation of governance levels in the Red River basin



4.3 Separation of power ... without power shift

It has become a standard policy recommendation of "modern water management arrangements" to separate as much as possible the roles of water resources manager and operators (Wright, 1999; Millington *et al.*, 2000; Arriens, 2004). While the former ensures *regulation* of the water sector by setting standards, allocating and monitoring water use, establishing environmental protection rules, and coordinating river basin development planning, the latter operates structures or reservoirs according to the rules set (and may also be involved in construction and/or maintenance). This separation is deemed necessary to ensure that powerful line agencies in charge of hydropower or irrigation, to name the most obvious, do not pursue sectoral (over-)development, with little consideration for economic soundness or social/environmental impacts. The *regulation* functions are best decentralized to the river basin level and encapsulated in a RBO. Above these two levels, apex bodies, in the form of inter-ministerial councils that meet two or three times a year, are also expected to give overall policy guidance and to review adequate legislations.

When the regulation and operating roles are held by the same ministry (MARD³²) separating these roles means that substantial decision-making power will have to be shifted from that ministry to the (new) regulating body (MoNRE in the present case). Such a shift therefore requires the new distribution of roles and duties to be reflected in new legislation (formal level) but also to build-up a regulator endowed with sufficient human power and technical expertise (practical level). Designing new formal rules without simultaneously reshaping the distribution of power that underlies prior institutional arrangements is unlikely to be effective (Evans, 2004).

However, even MARD (like other Ministries) may reduce its operation activities and increase those on regulation. This is the trend observed with current policies that seek to separate state enterprises from their parent ministries: state enterprises (like the food industry under MARD) are to be moved out of the Ministries to become independent joint-stock enterprises acting as private companies dissociated from the ministries in order to reduce the scope for corruption.

The wording of the decisions on river basin organizations has therefore been the object of much scrutiny and debate. Taylor and Wright (2001) recall that "Within the bureaucracy and among associated experts in Vietnam, there have been arguments as to the meaning of the words in the Law, and these arguments have hinged on the degree of autonomy that any river basin organization is permitted to have under the Law." At the time the profile of the RRBO was being outlined it was clear, in particular, that the RRBO should be a coordinating agency (since it was widely accepted that coordination was needed) "which could not adopt any *state management* power or function. If it did, this would conflict with the powers of the MARD and other agencies. Thus, a central issue became: what the RBO was permitted to do without infringing on the existing system of powers and institutions" (Taylor and Wright, 2001). It is safe to assume that MARD accepted the idea of setting RBOs after making sure that it would not threaten its established role and that it would be confined to a coordinating role. Since MoNRE had not been created at the time of establishing the first three RBPMBs (2001), these were set up under MARD. The limited importance and power entrusted to the RBPMB is also reflected in the limited budget given to them, at least initially.

³² Referred to as "*vua da bong vua thoi coi*" in Vietnamese, i.e. being both player and referee in a soccer match.

The challenge only emerged with the setting up of MoNRE, which claimed the river basin level as the scale where it should exercise its state management function (see earlier). The contradiction between the very role of MoNRE and its lack of power over river basin management is obvious. Its weakness is also apparent in the limited number of staff that have been transferred from MARD to DWRM³³ of MoNRE as well as in its insufficient means to monitor the status of the environment.

If we compare official mandates, strategies, workplans, and actual activities of MARD and MoNRE, especially in their claim to manage water at the basin level, it is clear that the overlap is limited to a few issues. MoNRE does not dispute MARD's prerogatives centered on structural planning, water resource development, irrigation and drainage; on the other hand, MARD shows limited interest in regulation at the national level, water policy (it is hampered by its own mandate) and above all environmental issues. It mentions its occasional activities in water quality monitoring but perhaps more as a means to emphasize MoNRE's weakness and lack of adequate measurement network; it does not pretend to get into water use licensing though it underlines that it does sectoral water allocation in order to satisfy all needs. The core of the conflict is eventually quite circumscribed and lies with planning.

4.4 Who holds the rubber stamp?

It is apparent from MARD's documents, including from its recent strategy document for the Red River basin (see section 2.2), that its main concern remains focused on structural issues, on matching demand and supply, and on flood control and mitigation. MARD remains very much engineering oriented and one may wonder why it would strive to control regulatory issues such as the allocation of permits, the definition of dam rule curves, pollution standards and control of effluents, or the identification and protection of wetlands and other fragile ecosystems, even if carried out at the basin level.

Analysis of various documents and interviews with officials suggest that the Gordian knot lies with planning, taken in the old sense of identifying structural interventions that will allow increased or improved use of water by society, or a better protection from floods and droughts. In continuing planning, and subsequent construction activities, lies the professional gratification of planners and technicians and resides the assurance of sustained budgets. Sustained budgets, especially in a context where both design and construction works are increasingly outsourced, open the way for people with decision-making power to benefit from investment flows. With structural investments constituting 64% of the MARD's budget the stakes are high since realignment of decisional power necessarily entails a redistribution of benefits. In 2006, total budget of MARD was 3,154 billion VND (197 mil US\$) of which 2,018 billion VND (126 mil US\$) was allocated to development investment.³⁴ The corresponding figures of MoNRE were 880 billion VND (55 mil US\$) and 157 billion (10 mil US\$, equivalent to 17.8% of total budget), respectively (GoV, 2007).

Since RBOs are potentially endowed with the power to draw basin plans and, possibly, to screen them before final approval, it is not surprising to observe a dual strategy of a) maintaining them as symbolic advisory bodies with reduced autonomous technical capacity; and b) controlling them in case their

³³ In 2003, it was "understood that up to 20 positions [would] be transferred from MARD to DWRM, out of an expected total Department staff of 50 to 60" (GoV, 2003).

³⁴ MARD ranks second in terms of budget, behind the Ministry of Transport

screening power would be strengthened. Furthermore, since RBOs are largely promoted by foreign partners and thus likely to be associated with the future delivery of loans and projects, they may also "attract" more investments, which makes their control even more desirable. In other words RBOs' legitimacy as "registration chambers" for projects – rubber-stamped with the seal of IWRM – can be attractive for the departments traditionally involved in structural interventions (and perhaps for investment banks alike).

Government Decree 91/2002/ND-CP in 2002 established MoNRE as the manager of water resource, with functions clearly those of a management agency, focused on assessment, forecasting, regulation and standard setting. The crucial point of infrastructural planning (and effective decision-making power in that matter) was not specified. With the 2005 draft Decree on RBM (see section 2.2) "development and implementation of the river basin plans" is included as part of RBM and entrusted to MoNRE. These basin plans are further defined in ways that emphasize assessment, forecast, rules, standards or water quality objectives but also "solutions for water resources protection, development, exploitation and utilization" that indicate a control on what interventions are planned (GoV, 2005)³⁵. This may help explain why the Decree remained in a draft form.

It is thus the struggle for conserving both autonomy in planning and the current procedures of financial decision-making that is at the core of inter-ministerial infighting. This is not an uncommon situation as illustrated in the case of Thailand. Experience in other countries also shows that with the decline of irrigation and drainage works and dam construction and the concomitant rise of environmental issues, investments in both studies and infrastructure tend to shift towards environmental studies and treatment stations, with a corresponding shift in money flows within the administration. This shift, from MARD to MoNRE, does not occur without frictions and provides a good background for explaining the present situation.

4.5 A narrow definition of participation

Emphasis on participation has become a major feature of development projects in general and ADB's policy in particular (ADB, 2000b; Molle, 2006). Since the early involvement of foreign and multilateral donors particularly in northern Vietnam, participatory approaches have been central to water projects. In 1999, for example, Wright (1999) announced that "a major feature of the proposed RRBO is that it will provide a forum for all major stakeholders (including those representing irrigation interests) to discuss, negotiate and agree upon recommendations for planning decisions to be submitted to government... irrigators will have an increased say in planning decisions which impact on their sub-sector under the proposed arrangements". IWRM, too, is supposed to incorporate a healthy dose of participation from stakeholders. The concept is based on "an expectation that interested groups and organizations will coordinate and participate directly as far as possible" (Taylor and Wright, 2001).

The LWR, however, is parsimonious with regard to participation (Molle, 2006). It contains 71 occurrences of "state," 49 of "Government," but none of "participation" or "participatory." This can be perhaps attributed to the particular conception that people are effectively represented by local People's Committees and other official organizations. This may appear as a way to sideline civil society but

³⁵ "Solutions for water resources protection, development, exploitation and utilisation to meet water demands of water users, environment protection and aquatic ecosystem in the basin; solutions for prevention, combat and remedy of water-caused adverse impacts; solution for protection of water-related environment in the basin".

such conception is also genuinely ingrained in local political discourse and culture; in that sense, participation strangely resonates with socialist ideology, and the notion of “civil society” may seem redundant. It is abundantly clear from official documents that the statement: “involvement of stakeholders is important for integrated water resources management” (Lai, 2002), refers to the involvement of all ministries and provinces concerned.³⁶

Likewise, ADB's consultants continue to put emphasis on participation (Sach, 2004) and to use the term stakeholder, while (implicitly) understanding it as the people's committees, at the provincial level and below. Their main hope is to support a process whereby local stakeholders (mostly provincial authorities) would contribute to the elaboration of priority IWRM issues, to the identification and assessment of a wide range of options to address them, and to the selection of preferred IWRM options and modalities for practical interventions (Shearwater, 2004a).³⁷

Commenting on the TORs of phase 2, IWARP recalls that “community participation is not new but has many variations. Cultural approach is distinctly different from technical one. In IWRM it is the technically trained/experienced staff that is required” (Shearwater, 2004a). It makes it clear that the dominant expert and state-driven approach should expect little from the opinion of laymen. Others reckon that “Socialization and participatory methods is a new trend in water resources management and service in Vietnam”. However, “what activities could be and should be socialized” is a question that needs more studies and discussions. Local staffs have been working long time with old styles and methods. They are afraid of change” (Trang, 2005).

Regarding non-government organizations (NGOs), Taylor and Wright (2001) reckon that there are few groups in Vietnam which could easily participate in a consultative role and, although NGOs do exist, they “would not be considered eligible to take a formal role in an RBO”. In August 2003, ADB wrote to MARD requesting advice regarding an appropriate mechanism for involving NGOs in IWRM under Part A (Shearwater, 2004a). MARD agreed to consider a proposal for NGO involvement but it seems that this did not arouse particular interest from the NGO Resource Centre or from individual NGOs (Steely, 2007). Thus, whether it is because of lack of interest, preparedness or political space, NGOs are marginally represented, if at all, and participation – although ubiquitous at a rhetorical level – remains a concept that applies to the relative contributions and distribution of decision-making power between administrative levels.

4.6 The power of words

Words, and their meanings, are resources in policy debates. General, ill-defined, or multi-meaning terms may be appropriated and used strategically by different parties. Translations, in the present case between English and Vietnamese, also offer some opportunity for hijacking terms as well as fertile ground for confusion.

³⁶ Civil society is supposed to be organized in corporative associations under the Fatherland Front, a constitutional body established to represent the mass organizations’ part of the political system. There are six major mass organizations under the Fatherland Front; the Communist Party, the Women’s Union, the Youth Association, the National Federation of Trade Union (workers), the Farmers Association and the Veterans Association (MARD and DANIDA, 2000).

³⁷ In that sense, “capacity building & participatory IWRM are essentially synonymous” (Shearwater, 2004a) because capacity building is done through tackling IWRM challenges; it is thus a learning process.

In the past many Vietnamese as well as government authorities considered the words *thuy loi*, derived from a Chinese term for water resource, as equivalent to irrigation (or “*thuy nong*” in Vietnamese, i.e. water use for agriculture). This was partly due to irrigation being the most important water use in Vietnam. After the advent of MoNRE, MARD stressed that *thuy loi* should be translated as water resources, not irrigation, as a means to bolster its legitimacy for water resource management. MoNRE, consequently, avoids using the term *thuy loi* and prefers *tai nguyen nuoc*, a more literal term introduced by the LWR for water resource (CRDE and IESD, 2006).

Another important semantic feature is the term used for organization when talking of RBOs. The LWR first talked of “**agencies** managing the planning of the river basin”. Agency (*co quan* in Vietnamese), is a general term for government bodies or offices, except in a few special cases such as National Environmental Agency (NEA) or Vietnam Environment Protection Agency (VEPA). The use of a general term thus left the RBOs rather unspecified. The first three RBOs were subsequently referred to as River Basin Planning Management **Boards** (RBPMB), when they were established in 2001. Boards or councils (*hoi dong* in Vietnamese) usually make or orient decisions for specific functions but do not implement these decisions. The RBPMB were thus meant to be advisory and take only general decisions. In 2004 the basin boards started to be called “RBOs”. Organization is generally translated as *to chuc*, when used for independent associations as NGOs, but in the case of RBO it is translated as *ban* and is meant to implement certain functions or actions decided by committee or boards. It signals that RBOs are now construed as more than boards or committees, or permanent secretariats to these committees.

The debate around “state management functions” also has implications on which government bodies may claim a particular role. The degree of state power is embedded in the name of its bureaucratic level: *Vien* (generally translated as Institute) have no state management functions, but only research and capacity building functions, whereas *Cuc* and *Vu* (both translated as Departments³⁸) have. This is why it makes it difficult for the IWARP, a *vien*, to host RBOs if these are to exercise state management functions, unlike for the DWR which is a *cuc*.

Translations from and to English also offer opportunities for confusions, whether that is used purposefully or not. Donors and consultants constantly made the point that RBOs were enshrined in the LWR despite evidence that their conception of such organizations was quite distinct from that which had been defined. Some words are also ambiguous: the English term “management” may apply to an irrigation canal, a dam, an organization. Recently the term has been used as an equivalent of regulation; the water manager establishes the rules, may monitor their application, and has the final say on planning options. Day-to-day “management” comes under the word “operation”. A similar multi-meaning word in Vietnamese is *quan ly*. It applies to dam operation and supervision as well as to regulation and legal framework setting and is part of the translation of “state management function”. It also applies in “management of planning” (*quan ly quy hoach*) (supervision of the execution in terms of activities, funding, etc), which is an unclear function linking management and planning (*quy hoach*).

It is striking to see that the concept of river basin management and the need for RBOs have been readily embraced by all sides. Irrespective of their own merit, this is perhaps a tribute to the power of

³⁸ However, *vu* is reserved to internal and administrative duties. *Cuc* implement state management functions by dealing directly with individuals or organizations who have activities related to the ministry, and it has its stamp and own account, and may have sub-departments or supporting offices.

internationally sanctioned concepts that come embedded into loans, TAs and bilateral cooperation projects. If it is anticipated that for these or other reasons RBOs are to be established then the various constituencies within the administration may have a strategic interest in supporting the move.³⁹ For EVN or MARD the concept of river basin resonates with the former integrated or multi-use of river basins that underpinned dam design, expansion of irrigation and drainage, and flood protection measures. For MoNRE these concepts are clearly seen as constitutive of its role and legitimacy. They are, of course, consistent with an objective of integrated management in which the environment is put center stage, but they are also – and more profoundly – the new layer of responsibility which could enable MoNRE to win decisive decision-power over the more well-established line agencies and ministries.

5 Ways forward and conclusions

Water management problems at the basin level are not new in the Red River basin. As early as 1961 a committee, the Hong (Red) River Committee was formed to address issues of basin planning, floods, and dam management. At that moment, flood control, either by dike or reservoirs, was the most important objective. The office of the Committee was placed under the then-Ministry of Water Resources with members from various ministries and is considered to have been quite effective (CRDE and IESD, 2006). In contrast, the establishment of the RRBO in 2001 owed a lot to the promotion of apex bodies, IWRM, and river basin organizations by development banks and cooperation agencies. For lack of other acceptable options, but somewhat inconsistently and in contradiction with its mandate, the RRBO was set up under MARD, with little staff and budget, and remained three years without internal official regulation. The orientation phase of the Second Red River Basin Water Resources Sector Project undertook to convene authorities and technical officials from relevant ministries and from the 25 provinces intersecting the basin to identify priority issues; it found basin-wide participation "both difficult and unnecessary", leaving the RRBO with little more than a role overseeing its offspring at the sub-basin level.

The emergence of the MoNRE in the institutional landscape created conditions for RBOs, once a concession to donors fully controlled by MARD, to become an object of internal struggle and as such a valuable asset. For MoNRE the river basin-level was a new layer of administration it could legitimately claim and that would allow the new ministry to assert its role and authority amid traditional administrative layers. RBOs opened a political space for a possible reorganization of responsibilities and reshuffling of power. Not surprisingly, this prompted MARD to do its utmost to keep control over RBOs resulting in a confrontation – through antagonistic decrees and strategies – between the two ministries.⁴⁰

³⁹ One Vietnamese official reckoned that the RBO concept is influenced by international organizations such as ADB or other donors. According to him "Conflicts among Department only arise when the subject is paid attention to by international donors and funded projects are available to support these activities".

⁴⁰ The RBO problem was only one of many cases of management overlaps and gaps in the Government structures. Therefore in the Government Resolution No. 49/2007/NQ-CP of September 04, 2007 requested a new decree to replace the Decree 86/2002/ND-CP to identify clearer functions, tasks and powers of ministries, with the principle that one task should be ascribed to only one agency. Following this Resolution, the Decree 178/2007/ND-CP of December 03, 2007 provided guidelines to standardize the functions, tasks, powers and organizational structure of all ministries and their departments. Then, from the end of 2007 to the beginning of 2008, a series of Decrees were approved to identify functions, tasks, powers and organization structures of all ministries, including MARD and MoNRE.

The confusion created begs for some clear-cut arbitration. Several options have, and are, being discussed. The first option, probably favored by international partners, would be a clear revision or amendment of Decrees 91/2002/ND-CP and 86/2003/ND-CP,⁴¹ a transfer of the mandate for RBM and RBO from MARD to MoNRE, accompanied by adequate staffing and funding. However, a Decree such as the 2005 draft on RBM prepared by MoNRE would not accord with the LWR. Although amended by the Resolution No. 02/2002/QH11 of the National Assembly, a revision of the LWR is probably needed to definitely transfer decision-making power over planning to MoNRE. This option would be consistent with the policy of separating the management of natural resources from its exploitation and use (Cong, 2007). This shift, however, would take time to materialize at the provincial level where MARD is likely to remain firmly dominant – and the reaction of provinces would remain uncertain. Moreover, since MoNRE at present does not have state management functions on forestry and flood control (still under MARD), its role in river basin management is somehow limited (Cong, 2007).

Therefore a second option is to shift the state function of water resources management from MoNRE to MARD to combine with other related functions of MARD as forest management and flood control. An advantage of this option is the availability of staff under MARD with experiences in water resources planning. However, this would ascribe overall management functions to the MARD (agriculture, forestry and fisheries) which is the largest water "user", with little likelihood of moving away from past problems of poor management and over exploitation, especially because other water users are not well represented in the existing RBOs (Cong, 2007). A third option would be MARD indirectly reasserting control through the re-formation of a Ministry of Water Resources in which MARD and MoNRE would be merged. This would signal a return to the situation of the early 1990s. Proponents of this option claim that integration should be done through a concentration of all water-related issues and powers under a same Ministry, allowing sectoral conflicts to be internalized. This is a common counter-proposal of irrigation agencies seeking to counter weakening of their power (see Thailand, for example); this, of course, would not separate regulatory and operation functions and would be a major setback for those who see the actual confusion as the price to be paid for such a separation.⁴² This option seems to have been discarded during the July 2007 session of the newly elected 12th National Assembly, which defined the 22 new ministries and a total of 26 ministerial level agencies, although MARD was strengthened by its merging with the former Ministry of Fisheries.

A fourth option, perhaps, would be to address the excess control of the center on basin issues by devolving more power to RBOs and promoting ownership of the provinces concerned. Yet, provinces still do not have the technical capacity to handle many technical issues and are financially dependent on the center for large-scale and inter-basin investments.

At the beginning of 2008 the situation remains unclear. RBOs are not mentioned in either of the new Decrees 01/2008/ND-CP of January 03, 2008 and 28/2008/ND-CP of March 04, 2008 that specify the

⁴¹ The contradictions in the Government Decrees No. 91/2002/ND-CP and 86 signed by the Prime Minister/2003/ND-CP also raise questions on the relationships between cooperation of Ministries and the Prime Minister in the Government and on the reasons – deliberate or otherwise – for letting these contradictions emerge. The Standing Prime-Minister (Mr Nguyen Sinh Hung) used to be chairman of the NWRC in his quality of Vice Prime-Minister and is credited with a good understanding of water issues.

⁴² As stated by Biswas (2004) "The consolidation of institutions, in the name of integration, is likely to produce more centralization and reduced responsiveness of such institutions to the needs of the different stakeholders, which is not an objective that the present societies and international institutions prefer at present".

functions, tasks, powers and structure of MARD and MoNRE, respectively. In the Decree relative to MARD, only functions of management of irrigation systems and disaster are indicated, while in the Decree relative to MoNRE, only functions of water resources management, standing member of National Water Resources Council and National Mekong Committee are mentioned. Instead, RBOs are the subject of a Decree drafted by MoNRE (on the model of the 2005 Decree) and posted on a Government website for public comments between the end of 2007 and March 2008.⁴³ In this draft Decree, MoNRE is to play a major role in river basin management and the structure of the RBOs depends on basin size:

a) Large river basins (Red, Thai Binh, Bang Giang, Ky Cung, Ma, Ca, Vu Gia - Thu Bon, Ba, Dong Nai, Mekong): RBOs are comprised of representatives from related Ministries, PPC leaders and some large water users (if any) in the basin. RBO is chaired by a Vice Minister of MoNRE. S-RBO can be established if the large basin includes interprovincial basins (see below). The Prime Minister decides the establishment of RBO for large basins based on a proposal by MoNRE Minister.

b) Interprovincial river basins located in at least two provinces: RBOs (or S-RBOs of a large basin) are comprised of representatives of PPC leaders, MoNRE, related ministries and large water users (if any). The chair of the RBO is a leader of one of the provinces in the basin with a rotated term of 2 years. The Minister of MoNRE is responsible for the establishment of interprovincial RBOs.

c) Provincial river basins located within one province: the Chair of PPC directly coordinates and manages the water resources development in the basin.

What lessons can be drawn from the interactions between endogenous and exogenous factors in the institutional process observed? Despite the efforts deployed by several TAs, attempts at grafting attributes of "modern" water policies in the Vietnamese bureaucratic configuration were at first not very successful. This was largely due to the lack of buy-in from Vietnamese officials and to the bundling of various reforms with TAs. For example, NWRC's influence has been negligible and, after a few meetings, the Council discontinued its activities between 2001 and 2003; RBOs in the country were supported by foreign partners and largely ceased activities as soon as donor assistance ended; and the Law on Water Resource, once deemed a modern and solid basis for IWRM, was soon candidate to revision. Some Vietnamese officials feel that TAs were prepared by international consultants without taking into account the complexity of Vietnamese institutional structure and its weak legislation, echoing Evans' (2004) critique of "the presumption that the most advanced countries have already discovered the one best institutional blueprint for development and that its applicability transcends national cultures and circumstances."

The operation mode seems to be to establish institutions that fit international models and comply with regional ADB policies, even if other aspects of the administrative and political configuration are lacking, or are even in contradiction with them. Not surprisingly, once these institutions are established they need substantial "assistance" to become effective, or in some cases simply active, in particular if these are new and do not fit into the existing government structure. Thus the Law on Water Resource "gives a great deal of valuable guidance... but further work will be required to develop both policy and legislation on important topics coming under the LWR" (ADB, 2001), newly-hatched RBOs "need to be activated and strengthened... and their functions and mode of operation

⁴³ See http://www.chinhphu.vn/portal/page?_pageid=33,2091855&_dad=portal&_schema=PORTAL. Unfortunately, unlike other Decrees posted during the same period, no public comment on this RBO draft Decree was found on this website.

need to be clarified" (ADB, 2001), the NWRC and ONWRC "now need to become fully functional", and to be "assisted through the early stages of formation and growth to become sustainable, capable and respected bodies in the water sector", while "MARD should do as much as possible to create the necessary conditions for successful strategic planning".

Critics will point to a variant of top-down and untimely imposition of concepts and reforms by foreign experts and development banks (see Bandaragoda, 2006), a new version of the Model-T (or copycat) syndrome in development described by Chambers (1997); and to the decontextualized promotion of general principles that generates the need for what these actors are precisely ready to offer, be it loans, technical assistance or projects that are meant to produce draft legislations, sector reviews, profiles, strategies, or master plans and to "strengthen" participation by various forms of capacity building.

An important point that needs to be emphasized is the gap between the formal mandate of newly established institutions and the way these operate in practice. There is pervasive over-enthusiasm on the expected performances of these institutions. For example, in 2001 a report of the ADB president to the board of directors (ADB, 2001b) stated that the RRBO was "expected to be fully operational by June 2002 and to convene the first meeting of the [Red River basin] council". Yet, even if apex bodies or RBOs are active there is no assurance that they will fulfill their coordination and negotiation roles as expected. In contrast with conventional IWRM principles, which tend to see the balancing of objectives of equity, efficiency and environmental sustainability as resulting from well-meaning and informed negotiation, new arenas of interaction do not necessarily lead to desirable outcomes. In Thailand, for example, the apex body was decried by some as a forum for ministries to engage in turf battles or horse-trading rather than for optimizing coordination (Newborne, 2006). Likewise, RBOs do not necessarily optimize decisions because outcomes depend on the distribution of power (horizontally and vertically) rather than from the mere existence of an institution supposed to ensure coordination.

More positively, others will consider this process as a variant of the muddling-through type of policy planning (Lindblom, 1970), where it is important to do small and incremental steps towards a general desirable blueprint whenever that is possible; hoping that contradictions will gradually solve themselves out. MoNRE, or RBOs, for example, have been created in adverse environments but their principle may be activated by a few champions who, with time and the sustained influence of donors, will work to achieve increased consistency. The LWR may be rewritten to enshrine a new division of roles between MARD and MoNRE.

Of course there is no assurance that this will happen. Policy reforms may abort, be discontinued, or be simply rejected (as happened in many countries like Pakistan, Thailand or Sri Lanka, to take Asian examples; Bandaragoda, 2006). Processes can revert themselves, especially when they have gone too far in too little time: MoNRE could be swallowed by a MARD that would reincarnate into an all powerful Water Ministry (as floated by officials in 2006; see Olszak, 2006). But the alternative is to dismiss possible external influence and wait for things to sort themselves out; with equal uncertainty about whether something is going to happen at all.

With hindsight, it seems that the policy reforms on RBOs promoted by donors and development banks have triggered some changes. Surprisingly, these changes may have come as a result not of the reforms themselves but, rather, of the institutional confusion they have created when confronted with the emergence of the MoNRE. MoNRE was itself largely destined at first, to help solve land and environmental rather than water issues, and owed little to external influence. The confluence of donor driven projects on establishing RBOs and of the conflict between MARD and MoNRE that put the river basin scale as a contested issue helped strengthen changes in the direction of a better separation

of duties and of integrated planning. The river basin scale is crucial for defining legitimacy and roles but is also a level at which power over financial resources and political power could be defined. In a context where state enterprises are moved out of ministries and where most consultancy work is being outsourced, power will reside in planning and in the decision-making on what shall receive priority, where and when, and on who shall do the job. It is too early to assess if, and how, MoNRE and RBOs will eventually firmly reshape the institutional landscape but such evolutions can only be slow.

The question of what is the best way forward for external partners – somewhere between mechanical interventionism and a wait-and-see attitude – is likely to remain. In practice institutional change is linked to political evolutions, to the ever changing power configuration of individuals within the state and the administration who carry varied projects, sometimes enlightened sometimes not, with an uncertain mix of endogenous and exogenous influences. It may be always possible, with hindsight, to opt for one or another path. Whether the rather indiscriminate grafting of IWRM's formal attributes will bear fruits may eventually depend on internal processes whereby different individuals and groups will use the space created to push for their agendas.

6 Appendices

6.1 Retrospective on changes in the Vietnamese water sector

Sector	Date	Event	Remarks – Implications
Water	August 28, 1945	Ministry of Transport and Public Works was established based on the declaration of Interim Government of Democratic Republic of Vietnam. Water works, transportation and post are under this Ministry.	
Agriculture	November 14, 1945	Government Decree on establishment of Minister of Agriculture (two months after independent day)	
Agriculture	Dec 01, 1945	Decree No. 69 by the President to merge into Ministry of Agriculture all agencies for agriculture, animal husbandry, fisheries, forestry and agricultural credit.	
Water	April 13, 1946	Decree No. 50-SL by the President on structure of Ministry of Transport and Public Works. Water works are responsible by the Provincial Department of Public Works under this Ministry.	
Water in agriculture	May 14, 1950	Decree No. 69 by the President on converting Department of Forestry Administration under the Ministry of Agriculture to Department of Water and Forestry.	
Water in agriculture	9/2/1952	Decision No. 1 CN/QT/ND on structure of Ministry of Agriculture and Decision 2 CN/QT/ND on Agricultural District and Sub-District. According to these two decisions, Department of Water and Forestry became one in the 7 advisory departments of the Ministry.	
Water	July 14, 1952	Government Decree No. 117-ND on new structure of Ministry of Transport and Public Works.	Unclear what is the modification in the new structure.
Water	April 30, 1953	Government Decree No. 156/SL on establishing Department of Public Works at the Ministry of Public Works responsible for irrigation, diking, transport and other public works.	
Agriculture	February 04, 1955	Government Decision on renaming Ministry of Agriculture to Ministry of Agriculture and Forestry.	Forest management is emphasized.
Water	April 6, 1955	Decision No. 507-TTg by Prime Minister to convert Department of Public Works at the Ministry of Public Works to Department of Water Resources responsible for irrigation and dike management.	
Water	April 13, 1955	Decree No. 164-ND by the Minister of Public Works to assign the functions to Department of Water Resources: flood control, irrigation and salinity control.	
Water	September 20, 1955	The 1 st National Assembly approved the proposal by the President to split the Ministry of Transport and Public Works into two Ministries: Ministry of Transport and Post, and Ministry of Water Resources and Architect.	
Water	April 29, 1958	Decision by Permanent Committee of the 1 st National Assembly on splitting Ministry of Water Resources and Architect into Ministry of Water Resources and Ministry of Architect. Ministry of Water Resources is responsible for all activities relating to water, including irrigation, hydropower, and urban and industry water supply.	Water management was paid more attention.
Water	End of 1960	Government Decision on moving General Department of Electricity from Ministry of Heavy Industry to Ministry of Water Resources, and renaming the Ministry to Ministry of Water Resources and Electricity.	Hydropower was considered the main source of electricity.

Agriculture	April 28, 1960	Permanent Committee of National Assembly approved the proposal by the Government on splitting Ministry of Agriculture and Forestry into 4 agencies: Ministry of Agriculture, Ministry of Agricultural Enterprise, General Department of Fisheries and General Department of Forestry.	
RRBO	January 16, 1961	Government Decree No. 02-CP to establish Red River Committee for Flood Control and Water Resources Development.	
Water	December 28, 1962	Government Decision No. 216-CP on moving back the General Department of Electricity to Ministry of Heavy Industry, and renaming the Ministry of Water Resources and Electricity to Ministry of Water Resources.	
RBBO	End of 1963	Ministry of Water Resources was assigned the permanent agency of Committee for Red River Water Control and Development. The Red River Office became the Office of Red River Committee located at the Ministry.	The importance of Red River Organization was recognized.
RBBO	October 02, 1976	Decision No. 1428 QD/TC by the Ministry of Water Resources to convert the Office of Red River Committee for Flood Control and Water Resources Development to the Institute for Water Resources Planning and Management (IWRPM).	
Agriculture	October 08, 1977	Government Decree No. 275-CP on the government structure for agricultural management and assigning this function to Ministry of Agriculture.	
Forestry	July 03, 1976	The 6 th National Assembly approved the new Government structure with the Ministry of Forestry established from the General Department of Forestry.	
Food	January 22, 1981	Approval of Permanent Committee of National Assembly on splitting Ministry of Food and Foodstuff into Ministry of Food and Ministry of Food Industry.	
Agriculture	February 16, 1987	Government Decision No. 782 NQ HDNN on establishing the Ministry of Agriculture and Food Industry from 3 Ministries: Agriculture, Food and Food Industry.	For management from production to processing and consumption.
Water	April 17, 1995	Decision No. 36 QD/TCCB by Ministry of Water Resources to rename the Institute for Water Resources Planning and Management (IWRPM) to the Institute for Water Resources Planning (IWARP) because the management function was moved to the Department of Water Resources & Hydraulic Works Management (DWRHWM).	
MARD	October 28, 1995	The 9 th National Assembly approved the Decision on establishment of the Ministry of Agriculture and Rural Development (MARD) from 3 Ministries: Agriculture - Food Industry, Forestry and Water Resources.	More attention was given to conservation of resources, and linking production with rural development.
MARD	November 1, 1995	Government Decree No. 73/CP on the mandate, tasks, powers and organizational structure of the Ministry of Agriculture and Rural Development.	
Water	May 20, 1998	Law on Water Resources No.8/1998/QH10 approved by the National Assembly.	
Water	December 30, 1999	Government Decree 179/1999/ND-CP regulating the implementation of the Law on Water Resources.	
Water	June 15, 2000	Decision No. 67/2000/QD-TTg by Prime Minister on the setting up of the National Board on Water Resource.	
RBO	April 9, 2001	Decision No. 37 /2001/QD-BNN-TCCB by the Minister of Agriculture and Rural Development on Establishment of the Mekong River Basin Planning Management Board.	

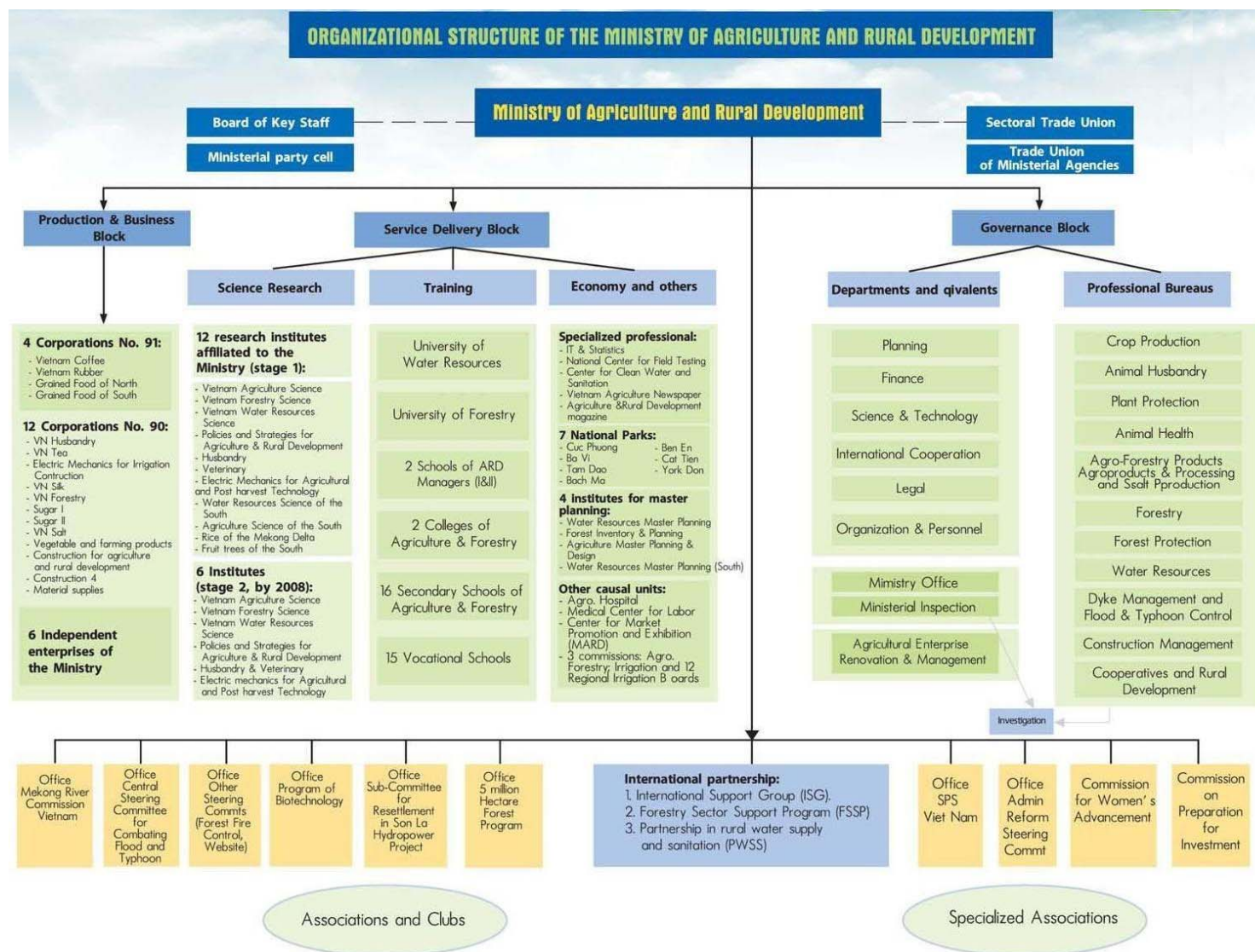
RBO	April 9, 2001	Decision No. 38 /2001/QD-BNN-TCCB by the Minister of Agriculture and Rural Development on Establishment of the Dong Nai River Basin Planning Management Board.	
RRBO	April 9, 2001	<p>Decision No. 39 /2001/QD-BNN-TCCB by the Minister of Agriculture and Rural Development on Establishment of the Red – Thai Binh River Basin Planning Management Board.</p> <ul style="list-style-type: none"> Chairman: A Vice Minister of Agriculture and Rural Development Vice Chairman: Director of the Department for Water Resources (Ministry of Agriculture and Rural Development) Members: <ul style="list-style-type: none"> Leaders of departments for Water Resources, Dike Management and Flood Control and leader of the Institute of Water Resources Planning Leaders of provincial departments of Agriculture and Rural Development of provinces and cities in the Red – Thai Binh river basin Leaders of water-related departments of ministries for Science, Technology and Environment, Industry, Fishery, Construction, Transport, Health, National Defense, General Services for Meteorology and Hydrology are invited to be members 	
Water	June 28, 2001	Decision No. 99/2001/QD-TTg by Prime Ministry promulgating of the Regulation on the Organization and Operation of the National Board on Water Resource.	After an organization was established, it took about 1 year for the government to decide the operation of that organization.
MoNRE	August 5, 2002	<p>Resolution No. 02/2002/QH11 by the 11th National Assembly of the Socialist Republic of Vietnam prescribing the list of the Government's ministries and ministerial level organizations, including the new Ministry of Natural Resources and Environment (MoNRE).</p> <p>This Ministry is established from the General Department of Cadastre, General Department of Meteorology and Hydrology, Department of Environment from Ministry of Science, Technology and Environment, Department of Geology and Minerals of Vietnam, and Institute of Geology and Minerals of Ministry of Industry, and the section of water management of the Department of Water Management and Hydraulic Works of Ministry of Agriculture and Rural Development (MARD) (MoNRE Website).</p>	
Government	November 05, 2002	Government Decree No. 86/2002/ND-CP on functions, tasks, powers and organization structure of the ministries, ministerial level bodies.	
MoNRE	November 11, 2002	<p>Government Decree 91/2002/ND-CP on functions, tasks, powers and organizational structure of the Ministry of Natural Resources and Environment.</p> <p>The Decree assigns accountabilities to the Ministry (MoNRE) to take over responsibilities of state management of natural resources as well as other natural resources and environment.</p> <p>The Decree separates state water management functions</p>	

		<p>under MoNRE from public water services delivery which will be carried out by MARD and other ministries with water-related responsibilities.</p> <p>MoNRE is permanent agency of National Board on Water Resource, National Board on Mineral Resource Evaluation, National Committee on Clean Water Supply and Sanitation.</p>	
MoNRE	April 02, 2003	Decision No. 45/2003/QD-TTg by Prime Minister on establishment of Department of Natural Resources and Environment in each province and city.	
MoNRE	May 8, 2003	Decision No. 600/2003/QD-BTNMT by the Ministry of Natural Resources and Environment on the functions, tasks, powers and organizational structure of the Department of Water Resources Management at the Ministry.	
MARD	July 18, 2003	Government Decree 86/2003/ND-CP on the functions, tasks, powers and organizational structure of the Ministry of Agriculture and Rural Development.	
MARD	September 4, 2003	Decision 93/2003/QD-BNN by the Minister of Agriculture and Rural Development to specify the functions, responsibilities, authorities and apparatus organization of the Department of Water Resources of the Minister of Agriculture and Rural Development.	
RBO	April 8, 2004	Decision No. 13/2004/QD-BNN-TCCB by The Minister of Agriculture and Rural Development to establish the General Office for River Basins Planning Management (called General Office for RBOs) to assist the General Director of the Department of Water Resources to implement the standing role and management of the Office of River Basin Planning Management Board	
RBO	April 8, 2004	<p>Decision No. 14/2004/QD-BNN-TCCB by The Minister of Agriculture and Rural Development on The Issuance of the Operation Regulation of River Basin Planning Management Boards.</p> <ul style="list-style-type: none"> • The Chairman of the RBOs is a Vice Minister of MARD; • The Standing Vice Chairman of the RBO is the General Director of the Water Resources Department – MARD; • The Vice Chairman of the RBOs is a Leader at Department level of the Ministry of Natural Resources and Environment. • RRBO has its office based at Institute of Water Resources Planning (IWARP). Director of IWARP is also Head of the RRBO Office. 	
RRBO	July 20, 2004	<p>1st meeting in 2004 of RRBO held at Do Son, Hai Phong with financial assistance of ADB.</p> <p>Participated in the meeting were 59 delegates including 36 out of 52 members of RRBO, 15 representatives of relevant ministries, sectors and agencies and 8 international representatives. Dr, Pham Xuan Su, Vice Chairman of RRBO, Director of Irrigation Department chaired the meeting.</p>	
Water	July 27, 2004	Government Decree No. 149/2004/ND-CP regarding the issuance of permission for exploring, exploiting and use of water resources and discharging waste water into water sources.	
RRBO	December 20, 2004	General meeting of RRBO in 2004 organized at the RRBO Office.	

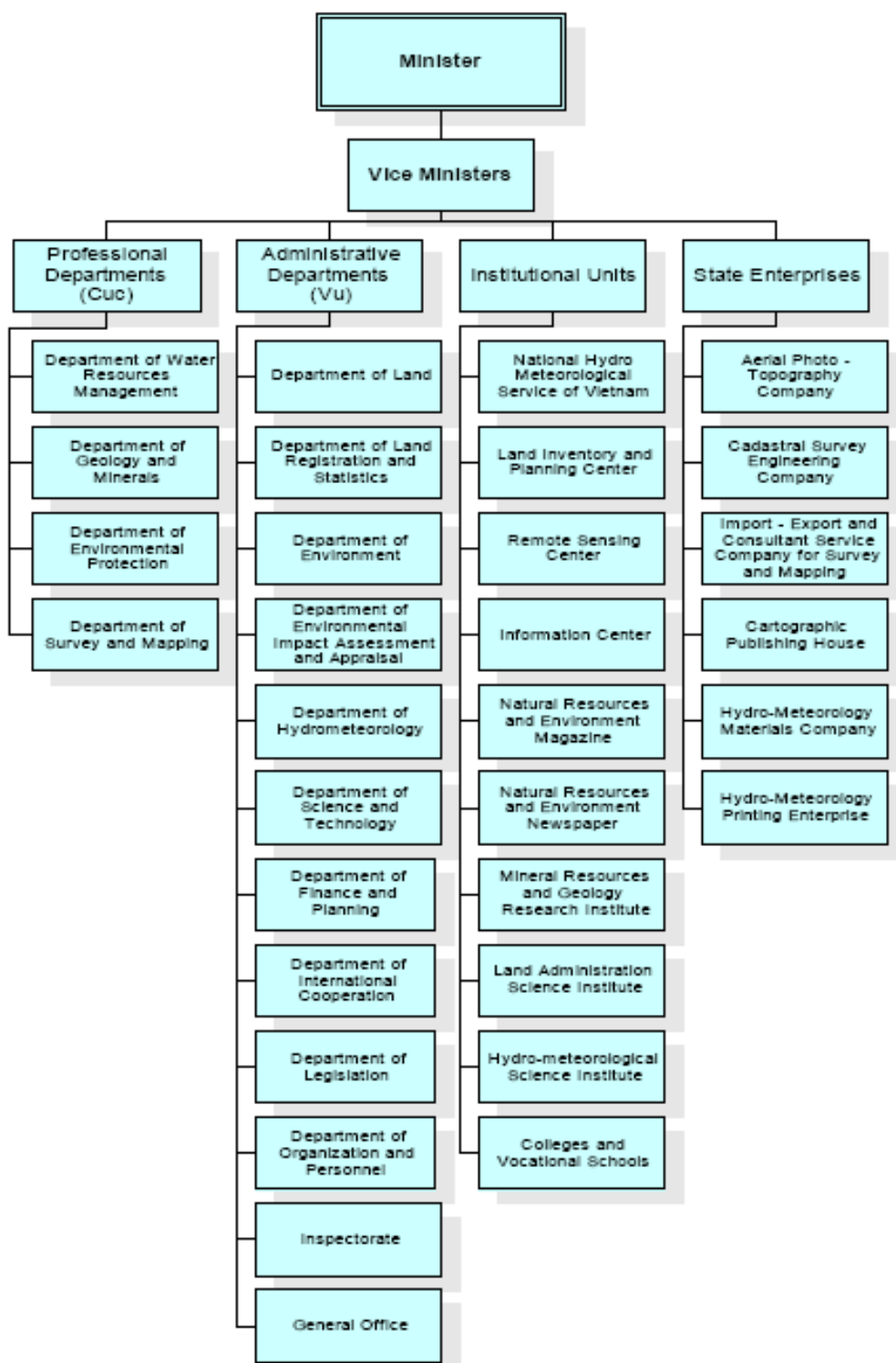
		Participants were 65 including members of RRBO, representatives of relevant ministries, sectors and agencies, provincial DARDs, DONREs of 21 provinces of the Red-Thai Binh river basin. Dr, Pham Hong Giang, Vice Minister of Agriculture and Rural Development, Chairman of RRBO chaired the meeting.	
MARD	End of 2004	MARD issued Rules on license granting for activities inside the protected areas of hydraulic works and Rules on jurisdiction and licensing on wastewater discharge into hydraulic works in order to promote effective water resources management.	
MoNRE	March 29, 2005	<p>Draft Government Decree No...../2005/ND-CP on Integrated River Basin Management.</p> <p>Based on the needs for integrated river basin management, the Ministry of Natural Resources and Environment shall develop river basin lists and submit it to the Prime Minister for approval after consultation with other related Ministries, Provincial Peoples Committees, and the National Water Resources Council.</p> <p>A River Basin Council is an agency that is in charge of integrated river basin management. The River Basin Council shall be established by the Prime Minister at the request of the Minister of Natural Resources and Environment, have the responsibility for regulating and coordinating integrated river basin management activities.</p> <p>A River Basin Council shall constitute of representatives from the Ministry of Natural Resources and Environment, the Ministry of Agriculture and Rural Development, related Ministries, Provincial People's Committees of provinces and municipalities, and agencies that manage large-scale water resources exploitation, utilization and protection structures (if any) located in the river basin.</p> <p>The River Basin Management Board is partly self-financed agency operating under the Ministry of Natural Resources and Environment, subject to the management and regulation of the Ministry of Natural Resources and Environment and direct responsible for assisting the River Basin Councils to implement integrated river basin management.</p>	
Sub-RRBO	December 1, 2005	Decision No. 3365/QD-BNN/TCCB by the Minister of Agriculture and Rural Development on establishment of Day Sub-RBO under the RRBO.	
MoNRE	April 14, 2006	Decision No. 81/2006/QD-TTg by Prime Minister on National Water Resources Strategy up to 2020 prepared by the Ministry of Natural Resources and Environment.	
Sub-RRBO	May 11, 2006	Decision No. 1363/QD-BNN/TCCB by the Minister of Agriculture and Rural Development on the establishment of the Cau Sub-RBO, under RRBO.	
	July 4, 2006	Decision No. 1951/QD-BNN/TCCB approved the CSBO membership.	
MARD vs MoNRE	March 15, 2007	<p>Notice No. 43/TB-VPCP by the Central Government Office on Conclusion by Deputy Prime Minister Nguyen Sinh Hung at the Meeting relating to the Assignment of Functions and Mandates between MARD and MoNRE:</p> <p>1. River basin management is one of the main aspect of water resources management. MoNRE carries out functions of state management for water resources</p>	

		<p>(including river basin) with below key responsibilities:</p> <ul style="list-style-type: none"> ○ Investigate, survey, inventory and evaluate water resources of river basins; regulate the integrated exploitation of water resources to meet socio-economic development requirements and sustainable development. ○ Prepare and issue criteria and regulations on use and protection of water resources in river basins; the ministry will be a focal point for international cooperation in terms of water resources and river basin ○ Coordinate with related ministries and sectors to prepare list of river basins in Vietnamese territory; study and build exploitation plans; ensure IWRM in large river basins; submit to PM for approval of water resources management plans or approve river basin plans. <p>2. MoNRE as a lead will coordinate with related ministries and sectors to complete the Draft Decree of the Government on river basin management to submit for approval of the government in second quarter of 2007.</p> <p>3. Agree on the shift of Mekong River Committee from MARD to MoNRE.</p> <p>4. MARD, Ministries of Transport, Construction, Industry, Fishery, Tourism General Department and others, each will prepare its plan for exploitation and use water resources and submit to MoNRE for appraisal before submission to Government.</p>	
MARD & MonRE	December 03, 2007	Decree No. 178/2007/ND-CP on common functions, tasks, powers and organizational structure of all ministries and ministerial level agencies.	
MARD	January 01, 2008	Decree No. 01/2008/ND-CP on functions, tasks, powers and organizational structure of MARD.	
MoNRE	March 04, 2008	Decree No. 28/2008/ND-CP on functions, tasks, powers and organizational structure of MoNRE.	

APPENDIX 2: MARD structure (Vietnam Ministry of Agriculture and Rural Development : An Introduction – MARD Brochure 2007)



MoNRE structure (GoV, 2003)



6.2 Law on Water Resource (selected articles)

Article 4-Management of water resource

1. The State adopts the policy of managing, protecting and rationally, economically and efficiently exploiting the water resource. Prevent, combat and overcome the harmful effect caused by water with a view to ensuring water for living of the people, the economic branches, ensure national defense and security, protect the environment and serve the sustainable development of the country.
2. The Government exercises unified State management of the water resource and all activities in the protection, exploitation and use of the water resource, the prevention, combat against and overcoming of the harmful effect caused by water throughout the country.
3. The People's Councils and the People's Committees at all levels shall, within the scope of their tasks and powers, take measures to manage, protect, exploit and use the water resource. Prevent, combat and overcome the harmful effect caused by water, supervise and inspect the implementation of legislation on water resource in the localities.
4. The Vietnam Fatherland Front and its member organizations shall within the scope of their tasks and powers have to popularize legislation on water resource and mobilize the population to carry out and supervise its implementation.
5. State agencies, economic organizations, political organizations, socio-political organizations, social organizations, People's Armed Forces units and all individuals have the responsibility to implement legislation on water resource.

Article 14-Protection of the quality of the source of water for living

1. All organizations and individuals have the duty to carry out measures of environmental sanitation in order to protect the source of water for living.
2. It is forbidden to discharge wastewater or to introduce pollution-generated substance into the sanitary protection zones of the living water providing areas.

The People's Committees at all levels shall define the sanitation protecting zones of the living water providing within the locality.

Article 20-Regulating and distributing water resource

1. The regulation and distribution of water resource for use purposes must be based on the planning of the river basin and the real potential of the water source and must ensure the principle of fairness, reasonability and priority in the quantity and quality of water for living.
2. In case of water shortage, the regulation and distribution must give priority to the living purpose. For other use purposes, the regulation and distribution shall be made according to the percentage defined in the planning of the river basin and the principle of ensuring fairness and reasonability.

The Government shall make concrete provisions on the regulation and distribution of water resource.

Article 58-Management competence of the State on water resource

1. The Government exercises unified State management of the water resource
2. The Ministry of Agriculture and Rural Development is answerable to the Government for the carrying out of the State management function on water resource
3. The Ministries, ministerial level agencies and the agencies attached to the Government shall carry out the function of State management over water resource as assigned by the Government.
4. The People's Committees of the provinces and cities directly under the Central Government shall take responsibility for conducting State management over water resources within their localities as prescribed by this Law, other regulations of law and as assigned by the Government.

5. The system of organization and the tasks and powers of the State managing agency on water resource under the Ministry of Agriculture and Rural Development and the People's Committees at various levels shall be prescribed by the Government.

Article 59-Competence in ratifying the general planning and projects on water resource

1. The National Assembly shall decide on the policy of investing in important national works on water resource.
2. The Government shall ratify the list and general planning of the major river basins and important projects on water resource.
3. The Ministry of Agriculture and Rural Development shall ratify the general planning on river basins, the general planning on water conservancy on assignment from the Government.
4. The Ministries, ministerial-level agencies, the agencies attached to the Government, the People's Committees of the provinces and cities directly under the Central Government, basing themselves on the planning on water resource shall ratify the draft projects on water resource on assignment of powers and allocation of responsibilities from the Government.
5. The Government shall provide for the assignment of powers and the allocation of responsibilities to ratify the plans and draft projects stipulated in Item 2, 3 and 4 of this Article.

Article 63-National Water Resources Council

1. The Government shall set up the National Water Resource Council to provide consultancy for the Government in the important decisions on water resource that come under the tasks and powers of the Government.
2. The National Water Resources Council shall be composed of a President of the Council who is a Deputy Prime Minister, a standing member who is the Minister of Agriculture and Rural Development and other members who represent a number of Ministries, branches and localities together with a number of scientists and specialists.
3. The concrete tasks and powers of the National Water Resources Council shall be defined by the Government.

Article 64-Management of the river basin planning

1. The management of the river basin planning comprises the following:
 - a. To elaborate, submit for approval and follow the implementation of the planning of the river basin, to ensure the unified management of the planning combined with the administrative zoning.
 - b. To conduct the coordination with the concerned agencies of the Ministries, branches and localities in the basic survey, inventory and evaluation of the water resource of the river basin, and in the elaboration, submission for approval and monitoring of the implementation of the planning of the basins of the tributaries.
 - c. To suggest the settlement of disputes on water resource in the river basin.
2. The agency managing the planning of the river basin is a non-business agency of the Ministry of Agriculture and Rural Development.

The Government shall make concrete provisions for the organization and activities of the agency managing the planning of the river basin.

6.3 Promulgation of legal documents

The system of promulgation of legal documents by different promulgators (according to Law Amending and Supplementing a Number of Articles of the Law on Promulgation of Legal Documents No. 02/2002/QH11 of December 16, 2002)

Promulgator	Constitution (Hien phap)	Laws (Luat)	Resolutions (Nghì quyêt)	Ordinances (Phap lenh)	Orders (Lenh)	Decrees (Nghì dinh)	Decisions (Quyêt dinh)	Directives (Chi thi)	Circulars (Thong tu)
National Assembly	X	X	X						
Standing Committee of National Assembly			X	X					
State President					X	X			
Government			X			X			
Prime Minister							X	X	
Ministers							X	X	X
Joint State Agencies			X						X
People's Councils			X						
People's Committees							X	X	

7 References

- 2RRBSP (2nd Red River Basin Sector Project). 2006. Website. <http://www.2rrbsp.org/ProjectInfo.html>
- ADB (Asian Development Bank), TA No 2871-VIE, Red River Basin Water Resources Management Project: Report on Extended Strategy Committee Workshop on Design of the River Basin Organisation, 23 April 2000 www.adbta2871.vnn.vn
- ADB (Asian Development Bank), TA No 2871-VIE, Red River Basin Water Resources Management Project: Discussion Paper on Policy Framework for Integrated Water Resources Management in the Red River Basin, August, 1998. www.adbta2871.vnn.vn
- ADB (Asian Development Bank). 2001b. Report and recommendation of the president to the board of directors on a proposed loan to the Socialist Republic of Viet Nam for the Second Red River Basin Sector Project. RRP: VIE 30292. October 2001, Manila: ADB.
- ADB. 2000. Proposed technical assistance cluster to Viet Nam for capacity building for water resources management project (financed from the Japan special fund and the government of the Netherlands). ADB, Board of Directors. Manila.
- ADB. 2000b. Water for all. The water policy of the Asian Development Bank. ADB, Manila.
- ADB. 2000c. Proposed technical assistance cluster to Vietnam for capacity building for water resources management project (financed from the Japan special fund and the government of the Netherlands). 9 October 2000. R216-00. Manila: ADB. www.asiandevbank.org/Documents/TARs/VIE/R216-00.pdf
- ADB. 2001a. Inception Report. National Coordination for Water Resources Management. ADB TA 3528-VIE, Subproject 1 Vietnam.
- ADB. 2002. Technical Assistance to the Socialist Republic of Vietnam for National Coordination for Water Resources Management. ADB TA 3528 VIE, Subproject 1. Progress Report. November 2001- January 2002. MARD, Hanoi.
- ADB. 2006. Helping to Introduce IWRM in 25 River Basins in the Asia-Pacific Region. ADB Water Financing Program 2006-2010.
- ADB. 2006. IWRM Challenges in the Cau basin
- ADB. 2006. Technical Assistance to Viet Nam for TA 3892/ loan 1855-VIE (sf) Second Red River Basin Sector Project. Phase 3 of Component 1. Capacity building for the Cau River Sub-Basin Organisation.

Arriens, W.T. 2004. ADB's water policy and the needs for national water sector apex bodies. Asian Development Bank. www.adb.org/Water/NWSAB/2004/Arriens_Paper2.pdf

AUSAID. 2003. Decentralisation in Vietnam – Working effectively at provincial and local government level – a comparative analysis of long an and Quang Ngai provinces. Report prepared by Adam Fforde and Associates Pty Ltd for the Australian Agency of International Development.

Bandaragoda, D.J. 2006. Limits to donor-driven water sector reforms insight and evidence from Pakistan and Sri Lanka. *Water Policy* 8 (2006) 51–67.

Birch, A. 2004. Direction and experience in water sector apex body development. Paper presented at the Regional Meeting of National Water Sector Apex Bodies (Hanoi, 18-21 May 2004).

Bird, J.; Arriens, W.L.; Custodio, D.V. 2007. Water Rights and Water Allocation: Issues and Challenges for the Asian Region. Promoting Effective Water Management Policies and Practices (Phase 4). ADB TA 6219 (REG). Technical Report. Working Draft. 11 May 2007. Prepared for the Network of Asian River Basin Organizations and the Asian Development Bank

Biswas, A. K. 2004. Integrated water resources management: A reassessment. *Water International*, 29(2):248-256.

Cantor, J. 2003. Setting up a river basin organization in the Cuu Long delta in Vietnam. Paper prepared for the First Southeast Asian Water Forum, Chiang Mai, December 2003.

Cash, D.; Clark, W.; Alcock, F.; Dickson, N.; Eckley, N.; Jäger, J. 2002. Salience, Credibility, Legitimacy and Boundaries: Linking Research, Assessment and Decision Making. John F. Kennedy School of Government Harvard University. Faculty Research Working Papers Series, RWP02-046.

Chambers, R. 1997. *Whose reality counts? Putting the first last*. ITDG Publishing, London, UK.

Cleary, D. 2007. Personal communications. By email, June 2007.

Cong, N.C., 2007. River basin management: Who are responsible? Thesis prepared at training course on state management functions. Vietnam National Academy of Public Administration (NAPA). Ministry of Ministry Of Home Affairs (in Vietnamese).

CRDE (Center for Resource Development and Environment) and IESD (Institute for Environment and Sustainable Development). 2006. Integrated management of river basins in Vietnam for sustainable development. Ministry of Plan and Investment, Vietnam Agenda 21, pp.71.

Dao Trong Tu, Mr. To Trung Nghia, and Nguyen Tien Dat. 2000. Planning Process in Vietnam: Responding to Competing Needs. Ministry of Agriculture and Rural Development, Vietnam (MARD). Submission to the World Commission on Dams, presented at the Commission's East / South-East Asia Regional Consultation.

Davidson, Malano and George (2004) Assessing the financial viability of irrigation management companies: a case study at Cu Chi, Vietnam. In Improving the management of irrigation schemes in Vietnam, ACIAR proceedings no. 118,

Decision No. 37/2001/QD/BNN-TCCB by the Minister of Ministry of Agriculture & Rural Development (MARD) on establishment of the Cuu Long River Basin Planning Management Board signed on 9 April 2001.

Decision No. 38/2001/QD/BNN-TCCB by the Minister of Ministry of Agriculture & Rural Development (MARD) on establishment of the Red – Thai Binh River Basin Planning Management Board signed on 9 April 2001.

Decision No. 67/2000/QD/TTg of the Prime Minister on the establishment of the National Water Resources Council signed on 15 June 2000.

Decision No. 99/2001/QD/TTg by the Prime Minister on the Regulation on organization and operation of the National Water Resources Council signed on 28 June 2001.

Decision of Minister of Ministry of Natural Resources & Environment on functions, responsibilities, power and organization structure of Water Resources Management Department. Decision No. 600/2003/QD-BTNMT 8 May 2003

Decree of the Government on defining the implementation of the Water Resources Law (No. 179/199/ND-CP) signed by the Prime Minister on 30 December 1999 and came into effective from 15 January 2000.

Dinar, A., Saleth, R.M., 2005. Issues in water pricing reforms: From getting correct prices to setting appropriate institutions. In: Folmer, H., Tietenberg, T. (Eds.) *The International Yearbook of Environmental and Resource Economics* 2005/2006. Edward Elgar, Cheltenham, UK.

Doi Duc Do, Chinh Trung Dao and Ian Hyde, 2006. Vietnam's Legal and Policy Reform Agenda: Achieving the Right Balance. Paper presented at the XXIII International Federation of Surveyors (FIG) Congress, Munich, Germany, October 8-13, 2006.

Evans, P. 2004. Development as institutional change: The pitfalls of monocropping and the potentials of deliberation. *Studies in Comparative International Development* 38(4): 30-52.

GoV (Government of Vietnam). 2003. Transition of Water Resource Management from MARD to MONRE. Final Report. Joint Task Force: Ministry of Natural Resources and Environment, Ministry of Agriculture and Rural Development, Asian Development Bank, Vietnam Resident Mission, Australian Agency for International Development (AusAID), Hanoi; Danish International Development Agency (Danida), Hanoi; Royal Netherlands Embassy, Hanoi.

GoV (Government of Vietnam). 2003. Transition of Water Resource Management from MARD to MoNRE. Final Report. Joint Task Force: Ministry of Natural Resources and Environment, Ministry of Agriculture and Rural Development, Asian Development Bank, Vietnam Resident Mission, Australian Agency for International Development (AusAID), Hanoi; Danish International Development Agency (Danida), Hanoi; Royal Netherlands Embassy, Hanoi.

GoV (Government of Vietnam). 2007. The Government Website.

http://www.chinhphu.vn/portal/page?_pageid=33,202654&_dad=portal&_schema=PORTAL

GoV. 1999. Decree No. 179/1999/ND-CP of December 30, 1999 stipulating the implementation of the law on water resources.

GoV. 2002. No. 91/2002/ND-CP. 11th November 2002 Government Decree. Specifying the functions, responsibility, authority and the organizational structure of the Ministry of Natural Resources and Environment (see end of "transition" document)

GoV. 2003. Decision no. 64/2003/qd- TTG of April 22, 2003 approving the plan for thoroughly handling establishments which cause serious environmental pollution.

GoV. 2007. Notice No. 43/2007/TB-VPCP. Conclusion of Standing Prime Minister Nguyen Sinh Hung at the meeting on the assignment of functions and tasks between MoNRE and MARD on river basin management. Hanoi, 15 March 2007

<http://www.2rrbsp.org/IndexCau.html>

Hydrosult and Arcadis. 2005a. International practice for integrated river basin management. National Water Resources Strategy. Working paper. ADB TA 3528-vie, subproject 1, Hanoi.

Hydrosult and Arcadis. 2005b. Working paper on water related legal and institutional & economic and financial arrangements. National Water Resources Strategy. ADB TA 3528-vie, subproject 1, Hanoi.

Kingdon, J.W. 2002. Agendas, Alternatives, and Public Policies. New York: Longman Classics Edition. 2nd Edition.

Law on Water Resources (No. 08/1998/QH) passed by the National Assembly on 20 May 1998 and came into effective from 1 January 1999.

Lindblom, C. 1970. The science of "muddling through". *Public Administration Review* 19: 79-88.

Luc, Vu Tien. n.d. Legal framework for water resources management. Draft. 5p.

Malano, H. M.; Bryant, M.J.; Turral, H.N. 1999. Management of water resources: Can Australian experiences be transferred to Vietnam? *Water International* 24(4): 307-315.

MARD and DANIDA. 2000. Sector programme support document. Water sector. Vietnam. (inception), Hanoi.

MARD. 2004. Operation regulation of the river basin planning management board. Enclosure to Decision 14/2004/QĐ-BNN-TCCB dated 8th April 2004 of the Minister of Agriculture and Rural Development.

MARD. 2006. The Organization and Working Regulation for the Cau River Sub-basin Organization (CSBO). Attached with Decision 07/2006/QĐ-QĐ-BQLQH LVS, dated 5 September 2006 signed by the Chairman of RRBOB.

MARD. 2006. Water resources management & development strategy. Main report. Hanoi.

MARD. 2007. The Red River Basin Organization. <http://www.rrbo.org.vn>

Molle, F. 2005. Irrigation and Water Policies in the Mekong Region: Current Discourses and Practice. IWMI Research Report No 95. Colombo, Sri Lanka: IWMI.

- Molle, F., Wester, P.; Hirsch, P. 2007. River basin development and management. In *Water for food, water for life: A Comprehensive Assessment of Water Management in Agriculture*, Chapter 16. edited by David Molden. London: EarthScan, pp. 585-624.
- Molle, F., Berkoff, J., 2007. Water pricing in irrigation: Mapping the debate in the light of experience. In Molle, F., Berkoff, J. (Eds.). *Irrigation water pricing: The gap between theory and practice*, Chapter 2. *Comprehensive Assessment of Water Management in Agriculture*. IWMI/CABI. Forthcoming.
- MoNRE. 2006. National Water Resources Strategy towards the year 2020. Ministry of Natural Resources and Environment. Culture-Information Publishing House: Hanoi. Promulgated by Decision 81/2006/QĐ-TTg dated April 14th 2006.
- Newborne, P. 2006. Study of National Water Sector ‘Apex Bodies’ and Civil Society Involvement in Asia. Case studies of Thailand, Bangladesh and Sri Lanka. WaterAid.
- Nghĩa, T. 2005. The Red River basin Organization. Powerpoint presentation at the Thematic Workshop on Water Allocation and Water Rights, December 2005.
- Nghĩa, T.T. 2004a. Report on the workshop results at 25 provinces in RRB. Priority issues in Red River water resource management. Meeting on Priority Integrated Water Resources Management Issues in Vietnamese River Basins. Février 2004.
- Nghĩa, T.T. 2004b. Report on Red River basin organization. Workshop on the Operation of the Offices of River Basin Organizations, held 3 March 2004 by the Department of Water Resources of MARD.
- NGO Forum. 2005. Running Dry. Does the ADB stand for “Water for all”? Synthesis Report of the civil society organisations to the Implementation Review of the Asian Development Bank Water.
- Nguyen Thai Lai. 2002. Notes for Report on “National Water Resources Council and River Basin Organizations, Lessons and Issues” Meeting of ISG TAG2, 11 September 2002. Duplicated. 4p.
- Nguyen Thai Lai. 2004. Viet Nam: National Water Resources Council. Country Paper on National Water Sector Apex Body. Regional Meeting of National Water Sector Apex Bodies (18-21 May 2004, Hanoi, Vietnam). Body. www.adb.org/Water/NWSAB/2004/Vietnam_Country_Paper.pdf
- NWRC (National Water Resource Council). 2007. <http://www.nwrc.org.vn/index.htm> [accessed in May 2007]
- Olszak, C., Le H, T., Phi Q, H. (2005) Understanding water demand, water allocation and the economics of water resources in the Nhue Day Basin: Case Study - Vietnam. Prepared for the USAEP, Hanoi, November, 2005.
- Ordinance on Dyke Management (No. 26/2000/PL-UBTVQH10) passed by the Standing Committee of National Assembly on 24 August 2000 and came into effective from 1 January 2001
- Ordinance on exploitation and protection of the hydraulic works (No. 32/2002/PL-UBTVQH10) passed by the Standing Committee of National Assembly on 4 April 2001 and came into effective from 1 July 2001.
- Pham Xuan Su and Vu Tien Luc. 2003. Water rights in Vietnam. International working conference on water rights: institutional options for improving water allocation. Hanoi, Vietnam, February 12-15, 2003.
- Pham Xuan Su, Le Duc Nam, M.E Le Quang Tuan. 2004. River basin organization in Vietnam and its contribution to water resources development in the future. Presentation in the 1st General Meeting of the NARBO, Batu-Malang, Indonesia, 23-26 Feb, 2004. Department of Water Resources - Ministry of Agriculture and Rural Development (MARD – Vietnam).
- Phan, Do Hong. 2003. Towards an effective organization for river basin management in Vietnam. Paper prepared for the First Southeast Asian Water Forum, Chiang Mai, December 2003.
- Sach, Bui Nam. 2004. *Red river basin planning management organization. Country /organizational report*. Hanoi: Ministry of Agriculture and Rural Development, Institute of Water Resources Planning. www.adb.org/Water/NARBO/2004/Training-Program/country-report-VIE-Red-River-Basin.pdf
- Sanyu Consultants Inc. 2003. Sector Study for Agriculture and Rural Development Sector in the Socialist Republic of Viet Nam. Final Report (Draft). Main Report. July, 2003. For Japan Bank for International Cooperation. JBIC Sector Study Series 2002 – No.9.
- Schlager, E; and Blomquist, W. 2000. Local communities, policy prescriptions, and watershed management in Arizona, California, and Colorado. Paper presented at "Constituting the Commons: Crafting Sustainable Commons in the New Millenium", the Eighth Conference of the International Association for the Study of Common Property, Bloomington, Indiana, USA, May 31-June 4.
- Shah, T.; Makin, I.; Sakthivadivel, R. 2001. Limits to leapfrogging: Issues in transposing successful river basin management institutions in the developing world. In *Intersectoral management of river basins*, ed. C. Abernethy,

89-114. Colombo, Sri Lanka: International Water Management Institute; Deutsche Stiftung für Internationale Entwicklung.

Shearwater. 2003a. Progress report 1. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2003b. Progress report 2. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2004a. Progress report 3. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2004b. Progress report 4. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2005a. Progress report 5. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2005b. Progress report 6. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2006a. Progress report 7. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2006b. Progress report 8. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2007a. Progress report 9. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Shearwater. 2007b. Progress report 10. Second Red River Basin Sector Project. Part A: Water Resources Management. Project Management Support, ADB TA 3892-VIE. Hanoi.

Situation Analysis Report on Management of “Hot Spots” (“Decision 64” entities). Prepared by Dr. Dang Kim Chi, INEST, for SEMLA Programme November 2005. Vietnam - Sweden Cooperation Programme on Strengthening Environmental Management and Land Administration (SEMLA)

Su, Pham Xuan ; Nam, Le Duc; Tuan, Le Quang. 2004. River basin organization in Vietnam and its contribution to water resources development in the future. Presentation in the 1st General Meeting of the NARBO, Batu-Malang, Indonesia, 23-26 Feb, 2004. Department of Water Resources - Ministry of Agriculture and Rural Development (MARD – Vietnam).

Taylor, P.; Wright, G. 2001. Establishing river basin organisations in Vietnam: Red River, Dong Nai River and Lower Mekong Delta. *Water Science & Technology* 43(9): 273–281.

Tiep, Nguyen Xuan. 2002. Water resources and food security in Vietnam. Paper presented at the national workshop on “Water, Food and Environment.”

Truong Thi Quynh Trang. 2005. Water resources management in Vietnam. Workshop on the Water in Mainland Southeast Asia, Siem Reap, Cambodia, Nov.30-Dec.2, 2005.

VNWP (Vietnam Water Partnership) and IUCN. 2007. Synthesis report on “Forum on sustainable utilization of Red River’s water resources in IWRM context”.

Warren Martins and Associates. 2004. Working paper on the development of a draft decree on integrated river basin management. National Water Resources Strategy. ADB TA 3528-VIE, subproject 1, DANIDA, Hanoi.

Wright, G. 1999. River basin management and irrigation in the Red river basin of Viet Nam. Paper presented to the Workshop "Irrigators' Organisations", March 1999, Vientiane.