

### ANNUAL REPORT 2009

### "CAPACITY BUILDING IN ASSESSING AND MANAGING WATER RESOURCES OF VIETNAM"

VIE 07 034 11



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### List of abbreviations:

BTC Belgian Technical Cooperation/Development Agency

ADB Asian Development Bank

BGR Bundesanstalt für Gewissenschaften und Rohstoffe

BMZ Bundesministerium für wirtschaftliche Zusammenarbeit und

Entwicklung

BMBF Bundesminsterium für Bildung und Forschung

CEMDI Centre for Environmental Monitoring, Data and Information

CTA Chief Technical Adviser

CTO Communication and Training Officer

DB Database

DWRM Department of Water Resource Management

DoNRE Department of Natural Resources and Environment

DANIDA Danish International Development Assistance

FIT Financial Information Tool

IWRM Integrated Water Resource Management

Monre Ministry of Natural Resources and Environment

NEX National Execution

NTP National Target Program

NWRT National Water Resource Strategy

MARD Ministry of Agriculture and Rural Development

MoC Ministry of Construction

MPI Ministry of Planning and Investment

M&E Monitoring and Evaluation
KfW Kreditanstalt für Wiederaufbau

PC Peoples Committee

PMU Project Management Unit PSU Program Support Unit

RAME Research Association Mining and Environment in Vietnam

SC Steering Committee

TFF Technical and Financial File

VINACOMIN Vietnam National Coal and Mineral Industries Group

WR Water Resources

WRM Water Resource Management

### 1 PROJECT SHEET

FIT Title: Strengthening the capacity within Vietnam for the assessment and management of water resources as a basis for rural water supply for poverty reduction<sup>1</sup>

### Chronology and documents:

15/01/2008 Notification to BTC of the signed Implementation Agreement

20/12/2007 Signature of the Implementation Agreement

18/12/2007 Signature of the Specific Agreement

07/12/2007 Sending complete file to DGD headquarters

04/12/2007 Approbation of TFF by JLCB

13/11/2007 Approval by the Quality Control Committee (QCC)

23/05/2007 Notification of the approbation of the identification

### Finance and duration:

Belgian Contribution: Regie budget: 893.600 €; National Execution budget: 3.106.400 €

National Contribution: 400.000 Euro; Duration: 4 Years, Nov 2008 –Nov 2012

### **General Objective:**

To strengthen institutional arrangements and build capacity within MoNRE and its provincial and district bureaus in order to support the strategic investigation and management of regional water resources for efficient development so as to reach the Vietnamese Development Goals.

### Specific objectives:

- The strategic water resource planning is improved.
- The protection of water resources is improved.
- Public awareness about the protection of water resources is improved.
- Monre/Donre's staff capacity in water resources management is increased.

### Location of the Implementation national Agency:

Department of Water Resource Management (DWRM), 68 Bui Thi Xuan, Hanoi, Vietnam

### Target groups:

Ministries of Natural Recourses and Environment on central (MoNRE) and provincial (DoNRE) level, the population in the seven pilot provinces and other related stakeholders.

### **Key Contacts:**

PMU: Mr Thuan (Director), Mr Quang (Coordinator), Mr Khuyen (Secretary), Ms Huong (Chief Accounting), Ms Huyen (Accountant(); Mr Deprez (BTC Representative), Ms Van Anh (BTC PO), Mr Martin Junker (CTA)

<sup>&</sup>lt;sup>1</sup> This is not the correct program title and should be updated in FIT / PIT using title given in the SA/TFF: "Capacity Building in Assessing and Managing Water Resources of Vietnam"

### **Project description**

Due to the social-economic development, rapid urbanization and industrialization Vietnam is going through a fast increase of the demand on water resources in all sub-sectors, like irrigation, water supply, industrial and agriculture production, but also in transport and recreation, etc.

The demand for water for domestic and industrial purposes is vastly increasing; surface water resources, such as rivers, lakes, streams have been polluted as industrial, agricultural, aqua-cultural and domestic waste are being discharged to the water bodies without treatment; ground water resources are affected by excessive exploitation or inadequate protection of aquifers due to the millions of poorly constructed and maintained tube wells of the last few decades.

The result is an increasing competition for water resources between all stakeholders and the conflicts of interest related to that.

At the same time, because of global warming and climatic changes the country faces numerous water related problems, such as typhoons, flooding and drought and climate-change and other environmental related effects.

For this reason the present program main targets are focused on the enhancement of an effectively management of the water resources and on the empowerment of local frameworks in IWRM; strengthening of capacity on central and local level and rising up the public awareness about the value of water.

### **Expected results of the project**

- Result 1: A comprehensive ground and surface water resource assessment carried out in 7 provinces
- Result 2: An interactive database operational at MoNRE and 7 DoNRE's
- Result 3: The IWRM concept, including decision-making protocol, developed and pilot tested in selected provinces
- Result 4: A water resource development and protection plan developed in 7 provinces
- Result 5: CEMDI's water resource and environmental monitoring system applied in 7 provinces
- Result 6: Public awareness campaigns implemented in each of the 7 provinces
- Result 7: A series of staff training courses implemented in key WRM areas

### 2 BRIEF FACTUAL OVERVIEW

The present Program started with the inception phase in November 2008 and the development was gradually. First of all, because of the uncertainty in the implementation of the National Execution (NEX) modalities, for both BTC and partner a new project plot. This slowed the processes of implementation, especially because of the lack of working instruments, tools, guidelines, etc. NEX also means, the implementation depends on the input and commitment of the national executer; less direction from BTC side and more technical assistance.

The Program Support Unit (PSU) was established in the time period from January to August 2009 with the recruitment of a National Water Resource Expert (Mr Dang), a Secretary/Translator (Ms Thuy) and a Communication and Training Officer (Ms Phuong). End of 2009 was added the position of a National Data/We Expert (Ms Lan).

The former PMU Director, Dr. Thai Lai took position as the Vice Minister in the MoNRE in August 2009, this caused a complete new structure for the PMU and some delays sin taking decision.

With all the delays, the Inception Phase was extended to more than six month and in fact the implementation on provincial level started in Q4, end of 2009.

End of 2009 was the Guideline for Implementation of the Project was approved.

Some important national activities in 2009 were: January 2009 started the National Target Program, a six month activity, supported by the ADB, who is now working in a close relation with the DWRM. This program should elaborate the strategy how to implement the new decree on river basin management.

Later on in the first Quarter of 2009 started the review of the actual water law, also financed by the ADB. This review could have an impact to some program activities, especially for the policies in the management, taxing and licenses of the water resources.

In March or April 2009 started a new Program financed by the German Ministry of Finance and Development (BMZ) and executed by the Federal Institute of Geosciences and Natural Resources (BGR) ("Improvement of Groundwater Protection in Vietnam"), which has a strong emphasis in "Strengthening the institutional capacity/capability in IWRM of the CWRPI". The national beneficed counterpart is also the MoNRE, but the executer the "Center of Water Resources Planning and Investigation" (CWRPI). Because the activities and results of both programs have a lot in common, the two programs aim a close relation to from synergies and to set up a tight cooperation in the implementation.

### 3 OVERVIEW OF ACTIVITY PLANNING 2009

Considering the smooth starting, the delays in setting up the provincial PMU's and the several changes in the configuration of central PMU, the execution of the activities in 2009 was satisfactory. In general most planned activities where implemented, except of those, which have to been postponed into 2010, because of dynamic changes and technical reasons. All activities around assessment and monitoring of WR (Results 1, 2 and 5) are slowed down by the need for the preparation and the resources in Vietnam. Important to mention is that most activities are strongly linked with the National Water Resource Strategy (2005) and approval of national guidance (Guidelines), to establish standards and the technical framework HOW to assess and monitor water considered by the MoNRE as an important support to reach the National Target Program on Water Resources.

The following table gives an overview about the implementation of activities in 2009:

A 1	Comprehensive ground- and surface assessment carried out in 7 provinces
A 1.1.1	Prepare detailed plans and guidelines for ground- and surface water assessment in 7 provinces
A 1.1.2	Agree on proposed criteria, parameters and procedures
A 1.2	Conduct comprehensive ground- and surface water assessment in 7 provinces
A1.2.1.1	Purchase office equipment
A1.2.1.2	Identify existing WR related data in the province (types of data, quantities, time, etc.)
A1.2.1.3	Prepare background information system (detailed catalogue) of the WR data sources Collect some basic data
A1.2.1.4	Classify and initially evaluate preliminary information and data
A1.2.1.5	Analyze and assess data needs for IWRM of the province ( quantity and quality of GW and SW)
A1.2.1.6	Prepare "Data collection plan" including both existing data and new data (including ToRs and detailed cost
A 1.2.2	Prepare assessment plan for each province
A 2/3	Development of interactive WR Information System and IWRM Concept
A 2.1.1	Contract Database and Web Design National Expert
A 2.1.2	Contract GIS and Database International Specialist
A 2.1.3	Organize workshop to define contents of the database (software/licenses, data sharing)
A 3.1	Review and documentation on IWRM and prepare plan for pilot implementation
В	Improve the development and protection of water resources
B 1.1	Elaborate guidelines on protection for water resources
B 2.1.1.1	Review river system and parameters and data related to quality and quantity of GW + SW of existing
B 2.1.1.3	Develop Monitoring plan for each province
ပ	To improve public awareness about the protection of water resources
C 1.1	Assist Communication and Training Officer in the preparation of: 1) Overall Communication strategy and
C1.2	Implementation of Communication & Public awareness Campaign
D	To increase MoNRE/DoNREs staff capacity in water resources management
D 1.1	Assess training needs of WRM staff of MoNRE/DoNREs and prepare training action plan
D 1.2	Study tour to Europe
D1.3.1	Workshop for provincial senior officers on water resources related issues of the province
D1.3.2	Workshop för provindal senior officers on water resources management legislations of Viet Nam
D.1.4.1	Steering Committee Meetings
D.1.4.2	Inception Workshop

### 3.1 Overview of completed activities

2009 was the starting year after inception phase. Following Activities have been completed in 2009:

- Internal Guideline on Program Implementation
- Baseline study on Water Resources on provincial level
- Training Need Assessment for Capacity Building on WRM (DoNRE's/MoNRE)
- Communication and Public Awareness Strategy and Action Plan 2010-2012
- Prototype of Database for Hydrogeological Data

### 3.2 Analysis of activity planning

Result 1: Comprehensive ground- and surface water assessment carried out in 7 provinces

The first step towards this comprehensive activity was to analyze the existing data landscape in each province. For this reason was executed by each DoNRE the so called 'Baseline Study", to get an overview about the existing information, gabs and needs and prepare a baseline for the following data-assessment plan in 2010.

The planned purchase of the program-car was postponed from 2009 to 2010.

Result 2: An interactive water resource database operational in MoNRE and 7 DoNRE's Following activities in this result where implemented in 2009:

- Recruit an international expert on database and GIS (after taking decision in first SC that this additional expert is necessary) and a national counterpart
  - Analyse of the existing database in the DWRM, and related agencies in the MoNRE
  - Assessment of commercial WR management software (HYDSTRA)
- Development of hydrogeological database (prototype) and digitize historical groundwater information, available in the DWRM
  - Execution of a WR database workshop with all relevant stakeholders (MoNRE)

Analyzing the outcome of the database workshop in 2009, the Vice Ministry of the MoNRE had decided that the development of the "interactive database" is from crucial **national importance** and should not assist only the pilot provinces. MoNRE insists to involucrate all important stakeholders for the definition of the DB-structure and taking participative decision on the WR-System building and data exchange.

On one hand this shows a high consciousness on the importance of the program activities, on the other hand it changes scopes, resources and target groups.

### Result 3: The IWRM concept, including decision-making protocol, developed and applied in selected provinces

Based on exiting toolboxes (GWP, UNICEF, etc) where selected a documentation of IWRM concepts to translated and transform (editing) in Vietnamese context.

### Result 4: A Water Resource Development and Protection Plan developed in 7 provinces

In 2009 was the draft Guideline for Water Protection elaborated in presented in an event, to gather comments and inputs form different stakeholders. Based on these observations will be adjusted the Guideline, which is considered by the MoNRE as the future national guidance on water resource protection.

Result 5: CEMDI's water resource and environmental monitoring system applied in 7 provinces

Like mentioned before "CEMDI" in this constellation is not exiting anymore and expected support form DANIDA not executed so far. For this reason MoNRE decided to install the monitoring network on provincial level for the DoNRE's, in cooperation with the relevant Agencies.

First step in 2009 was to start the preparation of a provincial monitoring plan, to elaborate an overview about the exiting WR monitoring station, which will be finished in Q1/2 2010.

Result 6: Public awareness campaigns implemented in each of the 7 provinces

The elaboration of the Communication and Public Awareness Action Plan for the whole project life (2009-2012), is one of the main product in 2009 and will be the basis for the implantation. This C&PA Action plan was developed with many participation workshops on provincial level, by program CTO (Communication and Training Officer).

Result 7: A series of staff training courses implemented in key WRM areas

Main product for this result was the Training Need Assessment and the draft Training Action/Budget Plan with the Implementation Calendar (2010-2012). Also a series of staff training where hold to improve knowledge in project planning, and about legislation and protection of water resources.

### FINANCIAL OVERVIEW 2009 4

The original allocated budget and planned activities (TTF) where adjusted, with respect to the actual demand and under technical criteria, with the carefully consideration by the MoNRE and approval from the Program Steering Committee.

# Overview of expenditure versus financial planning (National Execution Budget) 4.1

Act Code	Activity	Planned	Disbursed Difference	Difference	%
A 1	Comprehensive ground- and surface assessment carried out in 7 provinces	88.000€	79.405€		
A 1.1.1	Prepare detailed plans and guidelines for ground- and surface water assessment in 7 provinces	25.000 €	24.498€	502 €	%86
A 1.1.2	Agree on proposed criteria, parameters and procedures	2.000 €	1.893€	107 €	95%
A1.2.1.1	Purchase office equipment	10.500 €	10.228€	272 €	%26
A1.2.1.2	Identify existing WR related data in the province (types of data, quantities, time, etc.)	7.000€	9.687€	313 €	<mark>%96</mark>
A1.2.1.3	Prepare background information system (detailed catalogue) of the WR data sources Collect some basic data	11.200 €	10.682€	518 €	95%
A1.2.1.4	Classify and initially evaluate preliminary information and data	9.800 €	8.941€	859 €	91%
A1.2.1.5	Analyze and assess data needs for IWRM of the province ( quantity and quality of GW and SW)	10.500 €	9.798€	702 €	93%
A1.2.1.6	Prepare "Data collection plan" including both existing data and new data (including ToRs and detailed cost	7.000 €	98299	322 €	% <del>2</del> 6
A 1.2.2	Prepare assessment plan for each province	5.000€	∋0	5.000 €	%0
A 2/3	Development of interactive WR Information System and IWRM Concept	58.500 €	42.088€		
A 2.1.1	Contract Database and Web Design National Expert	10.000 €	1.727€	8.273 €	17%
A 2.1.2	Contract GIS and Database International Specialist	36.500 €	35.778€	722 €	%86
A 2.1.3	Organize workshop to define contents of the database (software/licenses, data sharing)	7.000 €	∋0	7.000 €	%0
A 3.1	Review and documentation on IWRM and prepare plan for pilot implementation	5.000 €	4.584 €	416 €	95%
В	Improve the development and protection of water resources	12.000 €	7.000€		
B 1.1	Elaborate guidelines on protection for water resources	5.000€	∋0	5.000 €	%0
B 2.1.1.1	Review river system and parameters and data related to quality and quantity of GW + SW of existing	2.800 €	2.800€	9 0	100%
B 2.1.1.3	Develop Monitoring plan for each province	4.200€	4.200€	9 0	100%
၁	To improve public awareness about the protection of water resources	37.100 €	34.268€		
C 1.1	Assist Communication and Training Officer in the preparation of: 1) Overall Communication strategy and Public	3.500 €	3.078€	422 €	88%
C 1.2	Implementation of Communication & Public awareness Campaign	26.600€	25.717€	883 €	%26
C 1.3	Recruit Communication and Training Officer	7.000 €	5.473€	1.527 €	78%
۵	To increase MoNRE/DoNREs staff capacity in water resources management	51.400€	43.765€		
D 1.1	Assess training needs of WRM staff of MoNRE/DoNREs and prepare training action plan	7.000 €	7.156€	-156 €	102%
D 1.2	Study tour to Europe	17.500 €	17.463€	37 €	100%
D 1.3	Staff Training	11.900 €	7.264€	4.636 €	61%
D.1.4	Workshops and Meetings	15.000 €	11.882€	3.118 €	79%
×	Contingency Costs	1.300€	996€		
	Accountant	1.300 €		334 €	74%
	Total (NEX Budget) 248.300 €	248.300 €	207.492€	40.808 €	84%

### 4.2 Overview of expenditure versus financial planning (REGIE)

cDisplayDesc	BudLineFinMet	Budget	Expenses 2009	Planned 2009	Differences	Dif%	cBalTtYAvailable
Z General means		893,60	191,73	175,90	-15,83	109%	701,87
01 Personnel		560,40	176,20	155,00	-21,20	114%	384,20
01 CTA	REGIE	450,00	164,60	132,00	-32,60	125%	285,40
02 National Technical Avisor	REGIE	86,40	9,20	18,00	8,80	51%	77,20
03 Translator / Sectorectary	REGIE	24,00	2,40	5,00	2,60	48%	21,60
02 Office Equipment		15,00	5,00	7,00	2,00	71%	10,00
01 Equipment IT	REGIE	15,00	5,00	7,00	2,00	71%	10,00
03 Operational means		43,20	10,53	13,90	3,37	76%	32,67
01 Local transportation	REGIE	24,00	1,90	6,50	4,60	29%	22,10
02 Communication	REGIE	9,60	0,72	1,90	1,18	38%	8,88
03 Office stationary	REGIE	9,60	7,91	5,50	-2,41	144%	1,69
04 Monitoring and evaluation		275,00	0,00				275,00
01 Mid-term review and final evaluation	REGIE	75,00	0,00				75,00
02 External Auditing	REGIE	200,00	0,00	10,00	10,00	0%	200,00

### 4.3 Analysis of financial planning

The financial planning 2009 was designed to take in consideration the quite long inception phase, that National Execution (NEX) is a new modality for both sides, and knowing that the DWRM staff is quite overloaded. A smooth start was the target and for this reason the program has a good disbursement rate in 2009, in total of 84 % which assign a "low risk" class.

Furthermore several activities have been started or are in progress, however there was no disbursement accounted, e.g. A 1.2 "Conduct Assessment on provincial level" or B1.1. "Elaboration guideline for protection". Both activities were supported/executed by the PSU without additional costs.

Other activities slowed down because of difficulties in recruiting appreciate local staff in time (e.g. Act. A 2.1.1., for the National Web Expert), and the integration of the seven provincial PMU's took also longer than expected. This caused a late implementation phase on provincial level, staring in Q3.

Especially the elaboration of budget and activity plans on provincial level caused some problems for several provinces and the central PMU/PSU executed a series of planning workshops to encounter this debility and assist the DoNRE's in the enhancement of their project planning.

The total disbursement performance in 2009 on Regie is calculated by 109 %, which shows a good relation between planning and expenditures.

### 5 MONITORING OF THE INDICATORS

Important to mention is, that until present time no M&E tool is available to measure indicators or activity progresses in the program. The defined "sources of information" are basically long term reports (annual or 5 years), which are not suitable for a dynamic measurement of the program performance.

### 5.1 Specific objective

Specific object	tive by Components	Indicators	Source of Verification	Risk and Assumptions		
A	Strategic water resources management is improved.	Aspect of water resources integrated in Five Year Plan 2011-2015 in each province.  Reports extracted from the interactive water resource data base are used for social economic development planning.	Five Year Plan 2011- 2015 of each province.	Legal framework will be adapted early 2008 to abolish current misunderstandings about tasks and responsibilities in the sector;     Improving the		
В	To improve the development and protection of water resources.	Policy measures to improve water resource conditions in the province; Provincial five years social economic development plan includes surface and ground water resources development and protection plans.	Provincial Five Year Plan 2011-2015.	Water resources protection is on the agenda of the PPC.		
С	To improve public awareness about the protection of water resources.	Communities understand different measures for water resources protection;      measured by number of the public awareness campaigns conducted annually in the Program provinces;	Campaign Impact assessment reports; Annual reports of Urban Environment Companies, Provincial Center for rural water supply and environmental	na		
D	To increase MoNRE/DoNRE's staff capacity in water resources management.	Visibility of DoNRE increased in the provinces;     Number of professional staff working on water resource management at DoNRE increased, be able to enter data, information into interactive data base and making report on water resource conditions.	Reports with recommended WR measures and policies.	Adequate number of staff with WR management responsibilities deployed and available for training.		

The most indicators for the defined specific objectives can be measured after finalizing of the activities (e.g. the reports "extracted from the interactive database" can just be produced when db and system is finalized). So these are no progress indicators, just final evaluation measurements.

Exact data (baseline) are missing (e.g. about the "visibility of each DoNRE", before the program started) to measure several of the defined indicators.

### 5.2 Results

Results		Indicators	Source of Verification	Risk and Assumptions			
	Comprehensive ground- and surface water assessment carried out in 7 provinces.	Ground- & surface water assessment carried out.	Report on outcomes of assessment in each province.	Provinces show commitment to conduct assessments; Existing data adequate and accurate for assessments; Provincial teams ready to work under guidance from MoNRE and TA team.			
7.1.1.2	An interactive WR system operational at MoNRE and 7 DoNRE's.	The use of the interactive water ressource databases and system.	Documented WR analyses using data from different data bases.	Willingness to share data and cooperate to create an interactive database/system.			
	The IWRM concept, including decision-making protocol, developed and pilot tested in selected provinces.	IWRM decisions taken by the IWRM Council.	Meeting reports of IWRM Council.	Readiness in each province to cooperate in a IWRM Committee; Readiness of the selected provinces to strategically cooperate in the IWRM Council; Adequate funds available for the institutions represented in the Council to implement the measures that are being agreed.			
	A Water Resources Development and Protection Plan developed in 7 provinces.	Water resources development and protection plan	Report for each province.	Adequate and accurate data available;     Provincial institutions ready to participate, deliver and cooperate.			
	CEMDI's water resource and environmental monitoring system applied in 7 provinces.	Water resources and environmental monitoring data available;     More discharging fees collected.	Reports on environmental and water resources conditions; Number of payments made.	Mandates, tasks and responsibilities of the institutions concerned clear;     Environmental monitoring system developed by CEMDI ready for water resource monitoring.			
	Public awareness campaigns implemented in 7 provinces.	Implemented public awareness campaigns.	Campaign materials. B2) Informes del Proyecto.	Civic society and professional organizations with sufficient experience in the field available in the province to assist with implementing the campaigns;     Provinces have adequate funds to implement professional awareness campaigns.			
	A series of staff training courses implemented in key WRM areas.	Implemented staff training programs.	Training evaluation reports.	Suitable trainers available incountry;     Training providers available for training in the provinces.			

### 5.3 Indicator evolution (chart)

Almost all Indicators are: a) not measurable (in present time scope), or b) no data resource available, or c) still in "0", except the "Data Assessment" and "Public Awareness Campaign", which indicate around 5 % of fulfill task.

	Indicators	% Progress
1	Reports extracted from the interactive water resource data base are used for social economic development planning.	0
2	Aspect of water resources integrated in Five Year Plan 2011-2015 in each province.	0
3	Provincial five years social economic development plan includes surface and ground water resources development and protection plans.	0
4	Policy measures to improve water resource conditions in the province.	0
5	Communities understand different measures for water resources protection.	0
6	Number of professional staff working on water resource management at DoNRE increased, be able to enter data, information into interactive data base and making report on water resource conditions.	0
7	Visibility of DoNRE increased in the provinces.	0
8	Ground- & surface water assessment carried out.	5
9	The use of the interactive water ressource databases and system.	0
10	IWRM decisions taken by the IWRM Council.	0
11	Water resources development and protection plan elaborated.	0
12	More discharging fees collected.	0
13	Implemented public awareness campaigns.	5
14	Implemented staff training programs.	0
15	Water resources and environmental monitoring data available	0

### 6 ASSESSMENT OF MONITORING CRITERIA

### 6.1 Efficiency

The most activities had delayed by several reasons.

First the internal procedures of the MoNRE, (National Execution) are complicate and slow. The order structure in the Vietnamese public service is strictly "top-down" and for almost all decisions the PMU have to ask the signature of the Vice Minister, even very small expenses (less 1.000 US\$).

The set-up of the 7 provincial PMU's was time consuming and the quantity and quality of assigned local staff is very diverse. In some DoNRE's the PPMU counts with more than 10 servants and other just 1-2 members.

The management skills of the 8 PMU's (1 central and 7 provincial) is quite distinct and the communication, the adjustment's and harmonization of working-and budget plans between all PMU's is slow, not always clear and time consuming; this shows a very low efficiency.

Once budget transferred from central PMU to the 7 provincial PMU's, the activities where implemented fluently, that shows the efficiency on implementation is in general good, but the planning and management skills of the PMU's for the execution need to be improved.

The resource, where used efficient, so far possible to supervise.

The achievement of the results was disperse, depending on each PMU. In some cases the product (studies or assessment's) did not fully acquire the expectation, in other cases the introduced products where exactable.

The program aims for "Capacity Building" and enhancement of the staff performance (MoNRE/DoNRE's), in future several trainings also on the management skills should encounter these difficulties and improve the efficiency of the program implementation.

### 6.2 Effectiveness-Suitability

That planned products should deliver a suitable solution to reach all planed results and put the MoNRE and other related target groups in the position, for changes and better management on the Water Resources.

### 6.3 Sustainability

The present program shows a very strong ownership by the national counterpart (MoNRE) and is seriously considered as an important support to the development of national policies, tools, capacity building and awareness on the WRM sector in Viet Nam.

Many activities (e.g. "creation of the interactive database", or "development of water protection plans") are not longer considered to implement only on provincial level (in the seven pilot provinces). The MoNRE use the program to accomplish the national WR-

Targets and to harmonize with the NWRS (National Water Resource Strategy). This indicates a good future sustainability.

However its cause side effects in extension of time scope and bigger target group for some activities.

Especially those activities, which are linked to national policies and NWRS (database and data exchange, monitoring and assessment of WR and Water Protection), the MoNRE is carrying out very careful and with a high participation of the related stakeholder the guidance o these actions and try to set up a legal and national framework, before starting implementation.

The integration of the program activities in the national strategy archives a high sustainability, but may also slow down the progress, on the other hand "Capacity Building", "Public Awareness Rising" and changing behavior on management of WR, is a long ongoing process and not possible to acquire with building infrastructure or development of tools.

The MoNRE counts also with some national budget for activities and with the support of several international donors on the WRM sector. In future all achieved results should be conserved and maintained with national support.

On provincial level the DoNRE's recruiting additional staff for the WRM, so at the end of the program should be obtained a fully working, national supported DoNRE staff, working on WRM.

### 7 MEASURES AND RECOMMENDATIONS

The overall project suitability for 2009 could be rated with "B". The high national ownership and the interest to integrate all program results in the National Strategy on Water Resources aim for a good sustainability, but the execution of the activities are rather slow and many times delayed by bureaucratically procedures.

The project management by 8 PMU's also makes the progress and evaluation complex and obscure. For this reason, following recommendations are given.

### 7.1 Overview of the assessment criteria

For a factual assessment of the program performance, two essential items are missing:

- 1) M&E tool which allows in-time and the dynamically supervision of the activity progress (and not just monitoring the disbursement) and the achievement of milestones. A tool, which provides the PMU's/PSU with graphic tools for an easy assessment and makes possible to interfere in time.
- 2) The redefinition of the program indicators, to obtain more realistic indicator, measurable in "Vietnamese Reality" and in the given time scopes, and the definition of milestones for each result, to define the most important precursors.

### 7.2 Recommendations

### **GENERALL:**

It is strongly recommended the development of an online M&E tool, which is manageable via internet. In inception phase should be discussed with the PMU the indicators and program milestones and integrate them in the M&E system.

This system should be used also for reporting and including several graphic analyzing tools and automatically alert procedures to intervene in time on critical activities.

**Program Specific:** 

Result	The result is	Measures
A1	Could be more:     efficient     but is:     sustainable	The preparation of the assessment on water resources need first to develop detailed guidelines and plans on provincial and central level, which slows down the implementation. Should be more dynamic and less bureaucratic; however this also causes a good sustainability because a structured planning.
A2	is: • efficient • sustainable	Nevertheless this activity shows a good progress performance and high interest by the involved parties, many further action's (workshop's, training's, etc) are necessary reach the target. This makes also necessary to extend the support for the international expert.
A3	could be more: • efficient • sustainable	Slow progress in translating and publishing the concept. Should be more dynamic taking decisions by the central PMU.

B1	is: • efficient • sustainable	No recommendations
B2	could be more: • efficient	Guideline of protection has to be consulted on national level and discussed with relevant stakeholder. This document is supposed to form part of the national policy and a support on the new Water Law (review).
С	is: • efficient • sustainable	No recommendations
D	must be more: • efficient • sustainable	Many "workshops" in 2009 where just events and the efficiency and sustainability of the training effect are low. In future have to be improved the content's and training skills/methodology.

## 8 PLANNING FOR THE UPCOMING YEAR (2010)

2010 is a critical year for the implementation, because the total planed budget (NEX) is over 1,3 Mio Euro (on central and provincial level).

Result 1: Comprehensive ground- and surface water assessment carried out in 7 provinces

Important is to finalize the Data Assessment Plan and to start with the data collection. A "data catalogue" should be one of the precursors, which is a collection of "meta-data" about WR in each province.

implementation load in the provinces. The DoNRE are compromised to give full time position for both staff after project finalization. This activity includes the recruitment of 2 additional DoNRE staff, one technical assistance and accountant to dynamic the

Result 2: An interactive water resource database operational in MoNRE and 7 DoNRE's

Main challenge is to agree on a database structure, data base system and information system. Especially the controversy of the discussion "commercial software against opens source" is an ongoing debate. For sustainable reasons, the project support the open source solution, but many agencies have resistance against such a step.

Second milestone will be the harmonization of existing databases and integration on the central level database server.

Third necessary step to set up the online user-interface between the central database and the local DoNRE's.

Tool for the assessment and evaluation of the stored data have to be developed (e.g. Indexes for quality)

Once the database is built, exiting information entered and the tools are online available, the training in the use of the database (water resource information system) will take place and play also an important part in the capacity building and staff training component.

Result 3: the IWRM concept, including decision-making protocol, developed and applied in selected provinces

In 2010 will be translated, edit and published the concept. Te divulgation should be take place by events, workshop or training's.

Result 4: A Water Resource Development and Protection Plan developed in 7 provinces

After reviewing and adjusting the draft guideline on protection of water resources, a national consultancy has to integrate Vietnamese legislation in the guidance. Further on will be presented the final draft to the relevant audience for comments and after publishing the Guideline can be the basis for the training and application in field.

Result 5: CEMDI's water resource and environmental monitoring system applied in 7 provinces

2010 has to be finished all seven provincial monitoring plans and to assemble the overall monitoring plan, including cost estimation and technical advises for purchasing monitoring equipment. Once defined where to set up new groundwater observation wells, the drilling can start in late 2010 and first equipment should be installed. From the budget line of this activity every province will purchase a Pick-up car to maintain the new Monitoring Network.

Result 6: Public awareness campaigns implemented in each of the 7 provinces

Based on the C&PA Action plan the implementation for the public awareness rising actions will take place, partly on central or provincial level. This includes a diverse list of activities, which can be found in detail on the project homepage.

Result 7: A series of staff training courses implemented in key WRM areas

Training and Capacity Building is the main concern of this project, therefore a very detailed Training calendar drives the activities in this result. Building capacity will executed not just by classroom activities, also by study tours, learning-by-doing and practical field trips.

### 8.1 Activity and Financial planning year 2010 (NEX)

Working and Budget Plan for the Program: "Capacity Building in Assessing and Managing Water Resou	irces in Vietnar
Activity Code and Description	2010
A 1.1.2 Agreement on the parameter, methodology, procedure, standards	2,000€
A 1.2.2 Preparing Assessment Plan for each Province	5,000€
A 1.2.3 Data Assessment in the provinces and collecting existing information	250,000€
A 1.2.4 Reviewing and digitizing existing data	40,000€
A 1.2.5 Training in assessment methodology and experience	5,000€
A 1.2.6 Submit ground/surface water status report to DoNRE	12,000€
A 2.1.1 Contract National Data and Web Expert	10,000€
A 2.1.2 Contract a GIS Environmental and Data Expert (international) - Creation of WR Database/System	73,000 €
A 2.1.3 Execute Workshops for the definition of the Database and Parameter	5,000€
A 2.1.4 Purchase Software and Licenses	5,000€
A 2.1.5 Agreement on Data Exchange	5,000€
A 2.2.1 Acquire IT equipment to improve WRM for the provinces	5,000€
A 2.2.2 Install a professional Central Server	5,000€
A 2.2.3 Establishment and training of the WRIS system in the Provinces	5,000€
A 3.1.1 Review and documentation of the IWRM concept and preparing pilot implementation plan	8,000€
B 1.1 Preparing the guidance for protection areas for water resources	left over (5.00
B 1.2 Workshops and training on the guidance of protection areas for WR	7,000€
B 2.1.1 Preparing the Monitoring Plan for each province	25,000€
B 2.1.2 Preparing ToR and tendering for the needed equipment and drilling, for each province	11,000€
B 2.2.1 Drilling of observation wells	200,000€
B 2.2.2 Acquire the Equipment for Water Quality and Quantity Monitoring on Surface and Groundwater	240,000€
C 1.2 Implementation of the provincial public awareness campaigns	138,900€
C 1.3 Recruit a Communication and Training Officer	16,000 €
D 1.2 Study tours	70,000€
D 1.3 Staff training	80,000€
D 1.4 Team Building and Planning workshops	40,000€
X 1.1 Acquire a program car	40,400€
X 1.3 Project Accountant and Accountant Software	15,000€
	1,318,300 €

### 8.2 Activity and Financial planning year 2010 (Regie)

cDisplayDesc	BudLineValid	BudLineFinMet	Budget	ExpensesTtY	cBalTtYExpense	<b>cBalTtYAvailable</b>	cY1Tot	Y2P1	Y2P2	Y2P3	Y2P4	cY2Tot
A To improve strategic water resources manage x			3,106.40	0.00	3,106.40	922.02	298.38					
04 Fund transfer to NEX account	X		3,106.40	0.00	3,106.40	922.02	298.38					
01 Replenishment to NEX account		COGEST	3,106.40	0.00	3,106.40	922.02	298.38					
Z General means	Х		893.60	0.00	893.60	306.00	192.50	34.20	44.70	34.20	53.60	166.70
01 Personnel	Х		560.40	0.00	560.40	106.80	175.20	31.90	31.90	31.90	40.30	136.00
01 CTA		REGIE	450.00	0.00	450.00	80.20	157.30	26.50	26.50	26.50	33.00	112.50
02 National Technical Avisor		REGIE	86.40	0.00	86.40	26.50	12.20	3.50	3.50	3.50	5.40	15.90
03 Translator cum sectorectary		REGIE	24.00	0.00	24.00	0.10	5.70	1.90	1.90	1.90	1.90	7.60
02 Office Equipment	χ		15.00	0.00	15.00	0.20	9.30	0.50	1.00	0.50	0.50	2.50
01 Equipment IT		REGIE	15.00	0.00	15.00	0.20	9.30	0.50	1.00	0.50	0.50	2.50
03 Operational means	Х		43.20	0.00	43.20	9.00	8.00	1.80	1.80	1.80	2.80	8.20
01 Local transportation		REGIE	24.00	0.00	24.00	3.10	4.90	1.00	1.00	1.00	2.00	5.00
02 Communication		REGIE	9.60	0.00	9.60	4.60	0.80	0.30	0.30	0.30	0.30	1.20
03 Office stationary		REGIE	9.60	0.00	9.60	1.30	2.30	0.50	0.50	0.50	0.50	2.00
04 Monitoring and evaluation	Х		275.00	0.00	275.00	190.00			10.00	·	10.00	20.00
01 Mid-term review and final evaluation	Х	REGIE	75.00	0.00	75.00	50.00						
02 External Auditing	Х	REGIE	200.00	0.00	200.00	140.00			10.00		10.00	20.00

### 9 CONCLUSIONS

### 9.1 Activities and Finance

Adjustment on activities and budget's are done by updating the TFF in inception phase, based on the demand from MoNRE, to archive NWRT goals and incorporate the results in a national context of WRM.

### 9.2 Monitoring criteria

### 9.2.1 Efficiency

Is exactable but should be improved.

### 9.2.2 Effectiveness

Can be improved, especially in result "D".

### 9.2.3 Sustainability

So far no negative considerations.

### 9.3 Advice of the JLCB on the recommendations

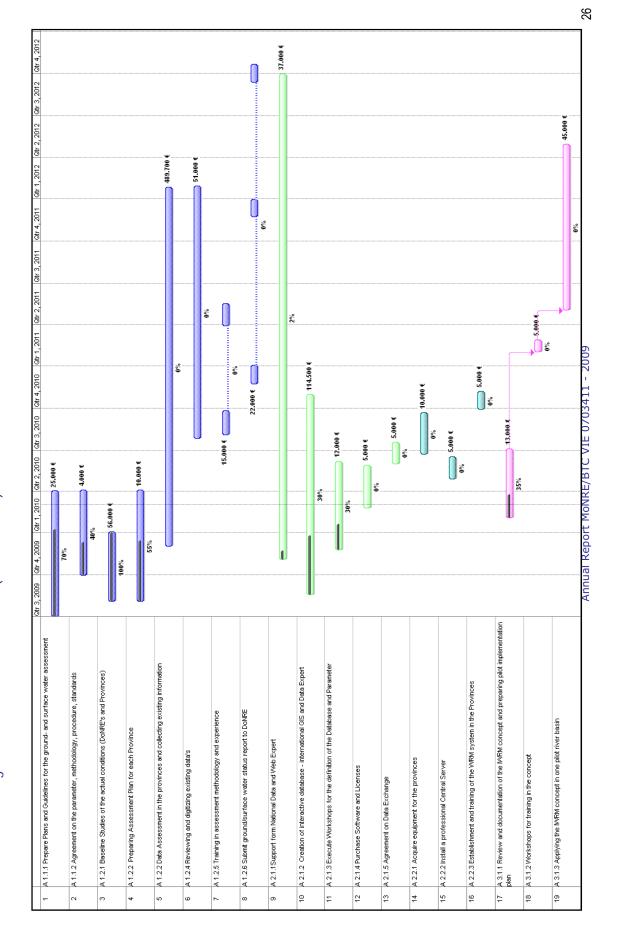
### 9.3.1 Recommendations on Logical Framework

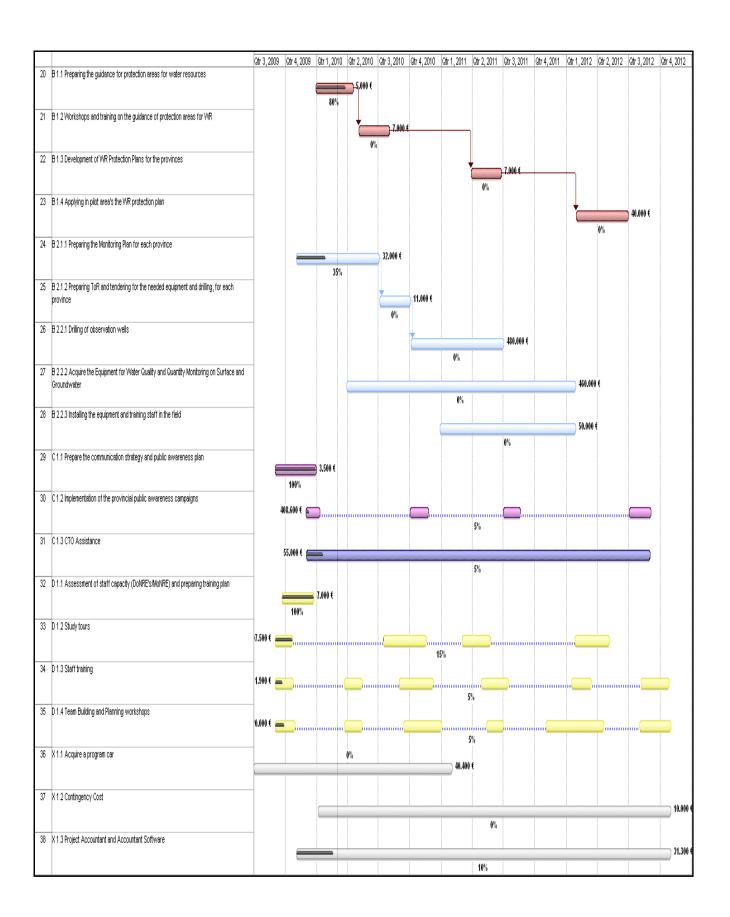
It is necessary to review the actual logic framework (indicators very week and not realist), even it is recommendable seriously to discuss, if this standard logic framework should be applied in future and is the appreciative planning tool for this kind of programs (Capacity Building). This review should be undertaken by the PMU's and in form of participant workshop.

### 9.3.2 Other recommendations

M&E tool, more backstopping from HQ, a platform for frequently TA – meetings.

# 10.1 Tracking Gantt view / Activities (2009-2012)





### 10.2 Checklist efficiency

Checklist 1.		Е	fficiency				08.03.2010	
Efficiency refe	Efficiency refers to the way in which the resources of the cooperation intervention are converted through the project activities into the expected results.							
To be compl	leted by the Project							
1. Facts about	the result indicators:		% expected realisation	actual % of realisation		difference*		
	Indicators for		5	5		0		
	Indicators for	Result 2	0	0		0		
	Indicators for		50	40		10		
	Indicators for		25	20		5		
	Indicators for		20	15		5		
	Indicators for		10	10		0		
	Indicators for	Result 7	10	9		1		
						(% expected realisation		
2. Achieveme	nts of the results referring	~			Yes	No	NA	
	Are these indicators for		ırt' way ?			V		
	Are all indicators monit	tored?					V	
	Is there a baseline to c	ompare with for e	ach indicator?			✓		
3. Facts about	activities:	Implemenation is on schedule	Implementation is delayed	Implementation is in advance		Explanation		
	for Result 1		x		Missing of Standard (	Guideline for Assessmer	nt of WR Data	
	for Result 2		х		Nese carry to arrange	agreements on datak	oase system and struct	
	for Result 3	х				-		
	for Result 4	х						
	for Result 5		х		Missing Guideline on	Monitoring WR delay N	Monitoring Plan	
	for Result 6				-			
	for Result 7		х		Training Plan is still no	t approved by the PM	U	
10111030117				-				
4. The activitie	es are implemented as p	olanned.				V		
	Some activities will nee		e completed		<u>~</u>			
	Some activities can be			d of time			V	
	Any occured delay will				<u>~</u>			
	Detected deviations w					<u> </u>		
			,	on or resons			_	
5. The general	l quality of the project a	ctivities is perceive	ed as:		_			
				satisfactory				
				sufficient				
				problematic				
6. Do activities	s contribute to reach the	e planned results ?	?		<b>▽</b>			
	If not, explain why:							
7. Is it possible	to plan the activities in	a more optimal w	ay ?		<b>▽</b>			
	If so, explain how: Bette	er communication	central-PPMU; tro	aining on project n	nanagement in th	e PPMU; more flue	nt approval from	
	the PMU							
0 Facts	t the a avenue and a	% of total	% of annual	date of latest	Front and 100	97 of financial	alannina : : Y	
8. Facts about	the expenses:	budget	budget	adjustment	Explanation	% of financial)	planning year X	
	for Result 1	88.000 €	79.405 €			90		
	for Result 2	53.500 €	37.504 €			70		
	for Result 3		4.584 €			92		
	for Result 4		0€			0		
	for Result 5		7.000 €			100		
	for Result 6		34.268 €			92		
for Result 7 51.400 €			43.765 €		85			

### 10.3 Checklist effectiveness

Checklist 2.	Effectiveness	08.03.2010
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Effectiveness assesses if the results of the project are delivered and if they contribute to the achievement of the specific objective. It investigates if the occured changes within the project area are caused by the project. It also assesses if the beneficiaries use the results delivered by the project.

To be compl	eted by the project			Yes	No	NA
1. Concerning	the indicators of the specific object			_	_	_
	Are there any indicators for the spe	•		<u>~</u>		
	Are the indicators of the specific of	•		H	V	
	Are the indicators of the specific of	•	ored?	<u></u>	<u> </u>	
	Is there a base-line to be compare	d with ?			<b>V</b>	
	cators of the specific objective	% expected	actual % of realisation		difference <sup>*</sup>	*
reached ?**		realisation				
	Indicator 1	0	0		0	
	Indicator 2	0	0		0	
	Indicator 3 Indicator 4	0	0		0	
	macaror 4	0	* (% expected realisation - ac	tual % of realisation		
**2009 was NOT e	xpected to reach any of those Indicato	275	(// Oxposion roundation as	staal 70 or Fourious	o,	
	cific objective be realised purely that		ults delivered ?		<b>V</b>	
4 Are there ar	ny side effects caused by the results	S		V	П	П
4.710 111010 01	If there are any side effects, do the		e specific objective ?		e program results in	n the national
	₩		e specific objective :			tation and enhance
	in a positive way		n a negative way	the targets (group ownership and su	o and dimension), b ustainiblity	ut also shows
	in a positive way		ranogamo may			
5. Are there ar	ny external factors influencing the sp	pecific objectiv	ve ?	Exvhanghe rate (	cal situation, PMU o Euroto Dong), Nat	
			a nogativo wav	Climate Change,	ect	
	in a positive way	"	n a negative way			
6. What are th	e caracteristics of the beneficiaries the poor, the better off, men, wom knowledge and management skills population	en, explain:	: All government and sta	•	•	, ,
7. The groups v	7. The groups who are (or who will be) benifiting from the specific objective are: intended, unintended, explain: intended selected as targed group is the Government Staff in the Agencies, (DoNRE/MoNRE); other group will be the population in the pilot provinces					Agencies,
8. Do the bene	eficiaries have access to the results on the results in the result	· ·	ne project ?	<b>~</b>		
9. Are the ben	eficiaries using the results delivered If not, explain why (for the results in answer			nal products, i	n this stage no	vot posible to
10. Are the be	neficiaries satisfied with the results d If not, explain why:	elivered by the	e project ?			☑
11. Is the proje	ct implementation responding to:			_	_	_
	- the problems of the beneficiarie	es		~		
	- the priorities of the beneficiaries			<b>✓</b>		
12. Do the pro	posed solutions solve the problems o	of the benefici	iaries ?			✓

### 10.4 Checklist sustainability

Checklist 3.	Sustainability			08.	.03.2010		
Sustainability r	Sustainability refers to the likelihood that the benefits from a development cooperation intervention will be maintained and reproduced after the withdrawal of donor support.						
To be compl	eted by the project	Yes	No		NA NA		
To be compi	ered by the project	163	10		- INA		
1. Is the partne	er institution participating actively in:	_	-				
	reporting decision-making	<b>▽</b>	<b>~</b>				
	planning of activities	~					
	financial management implementing the project	V V					
	monitoring and evaluation			·			
	human resource management	~					
	management of material resources			~			
2. Are resource	es and capacities available for the maintenance and reproduction of the res						
	Human resources Financial resources						
	Equipment						
3. Is the partne	er institution taking the necessary dispositions to take over the project?	~					
4. Is there a pla	an for the integration of the project in the partner institution?	~					
	If so, explain: National Execution support the integration and ownership of th	e progra	m				
5. Is the projec	t providing institutional training for the partner institutions?	<b>Y</b>					
6. Is the trained	d personnel staying in place ?	V					
7. Is the projec	et providing capacity building for organisations regarding ?  Management of systems  Process management  Transfer of knowledge  Networking						
8. Is the projec	t providing the necessary capacity building for individuals regarding ? Transfer of knowledge Exchange of experiences Exchange of values Empowerment Networking	\ \ \					
9. Is the project	t supported by the following local institutions?	_					
	Political institutions Partner institutions	<b>▽</b>					
	Civil society institutions	<b>▽</b>					
	Cultural institutions (religious, ethnic, traditional,)						
10. Are the aid	modalities strengthening the sustainability?	~					
11. Are the exe	ecution modalities strengthening the sustainability?	~					
12. Is the proje	ct contributing to the sustainability in following dimensions ?  Political						
	Social Institutional						
	Organisational						
	Cultural						

### 10.5 Input in PIT

Checklist 6.		lr	nput in F	PIT		N° 09/03/2010
Project:	CAPACITY BUILDING	IN ASSESSING A	ND MANAGIN	IG WATER RESOUR	C.ES.OF.VIFTNAM	
Country:	Viet Nam	,			.020 01 11211 0 111	
Navision code:						
GEO advisor:						
Year:						2009
Meeting JLCB:						
To be seen	Jakad byrtha Drainat					
	leted by the Project					
1. Is the activi	ty calendar respected	 7				
	Delay	$\checkmark$			deviation in month	s
	In time	$\checkmark$		-9; -6; -3;	0; +3; +6; +9	-3
	In advance	<b>✓</b>		-, -, -,	-, -, -,	
2 What is the	realisation degree for	the indicators	2	Projection	Realisation	Difference
2	Result 1					
		Indicator 1				
	Result 2					
			Indicator 1			
			•			
A. ASSESSMENT	OF THE CRITERIA					
1. Assess <b>relev</b>	rance					Α
1. Assess lelev	A= the project is re	lovant maintai	n the offerts			
	B= the project is re					
	C= measures shoul	•		elevance		
	D= the project is no					
	NA= the criterion 'r					
	NA- IIIe Cilielloii II	ele varice rias i	ioi been asse.	ssea		
	Measures to take:					
O A						С
2. Assess effici	•	ficient mediatai	a tha affarta			C
	A= the project is ef B= the project is ef					
	C= measures shoul	-		officionav		
	D= the project is no			,		
	NA= the criterion "					
	TVA- ITIC CITICIIOTI	encioney has i	101 00011 0330	3300		
	Measures to take: M	ore fluent coord	dination betw	een central and p	provincial PMU's	
3. Assess effec						NA NA
	A= the project is ef					
	B= the project is ef	•		effectives as		
	C= measures shoul D= the project is no					
	NA= the criterion "					
	MA- ING CINCINON 6	71100114011032 []	43 HOT DEEH 0	33C33CU		
	Measures to take:					
Comments	National E	xecution needs	different eva	luation and assess	sment forms/measu	rements!

### Logic Framework 10.6

Specif	Specific objective A			
∢		Strategic water resources management is Aspect of water resources integrated in Five Year Plan Enve Year Plan 2011-2015 • Legal framework will be adapted early 2008 improved.  to abolish current misunderstandings about browince.  tasks and responsibilities in the sector:	Five Year Plan 2011-2015 of each province.	<ul> <li>Legal framework will be adapted early 2008 to abolish current misunderstandings about tasks and responsibilities in the sector:</li> </ul>
		Reports extracted from the interactive water resource data base are used for social economic development planning.		<ul> <li>Improving the management of water resources is on the agenda of the PPC.</li> </ul>
Results	ts			
A.1.1	A.1.1 Comprehensive ground- and surface	Ground- & surface water assessment carried out.	Report on outcomes of	<ul> <li>Provinces show commitment to conduct</li> </ul>
	water assessment carried out in 7 provinces.		assessment in each province.	assessments; • Existing data adequate and accurate for
				assessments; • Provincial teams ready to work under
				guidance from MoNRE and TA team.
A.1.2	A.1.2 An interactive WR system operational at	The use of the interactive water ressource databases	Documented WR analyses	Documented WR analyses • Willingness to share data and cooperate to
	MoNRE and 7 DoNRE's.	and system.	using data from different data bases.	create an interactive database/system.
A.2.1	A.2.1 The IWRM concept, including decision-	IWRM decisions taken by the IWRM Council.	Meeting reports of IWRM	Readiness in each province to cooperate in a
	making protocol, developed and pilot		Council.	IWRM Committee;
	tested in selected provinces.			<ul> <li>Readiness of the selected provinces to strategically cooperate in the IWRM Council;</li> </ul>
				<ul> <li>Adequate funds available for the institutions</li> </ul>
				represented in the Council to implement the
				בווכמטעוכט ווומו מוס טפוווט מטופט.

Logic of Intervention   Indicators     Specific objective B   To improve the development and protection of water resources.   Provincial five years social economic development and protection of water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years social economic development and ground water resources.   Provincial five years are ground water resources.   Provinc			
e development and vater resources.		rce of Verification	Source of Verification   Risk and Assumptions
р			
	• Policy measures to improve water resource conditions   Provincial Five Year Plan   Water resources protection is on the agenda of	incial Five Year Plan	Water resources protection is on the agenda of
Provincial five years social economic developm plan includes surface and ground water resource development and provinced from plans.	in the province;	2011-2015.	the PPC.
plan includes surface and ground water resource	<ul> <li>Provincial five years social economic development</li> </ul>		
and a motortum but the management	plan includes surface and ground water resources		
מפעפוס ליינים אינים איני	development and protection plans.		

Result				
B.1.1	A Water Resources Development and Protection Plan developed in 7 provinces.	Water resources development and protection plan	Report for each province.	Adequate and accurate data available;     Provincial institutions ready to participate, deliver and cooperate.
	CEMDI's water resource and environmental monitoring system applied in 7 provinces.	Water resources and environmental monitoring data available;     More discharging fees collected.	Reports on environmental and water resources conditions; Number of payments made.	Mandates, tasks and responsibilities of the institutions concerned clear;     Environmental monitoring system develope by CEMDI ready for water resource monitoring.
	Logic of Intervention	Indicators	Source of Verification	Risk and Assumptions
	ic objective C	IIIIIIIIII	Oddiso of Formoution	THOR WITH PROPERTY
C	To improve public awareness about the protection of water resources.	Communities understand different measures for water resources protection;  measured by number of the public awareness campaigns conducted annually in the Program provinces;  reduction in dumping wastewater and solid wastes in water bodies.	Campaign Impact assessment reports; Annual reports of Urban Environment Companies, Provincial Center for rural water supply and environmental sanitation.	na
Result				
C.1.1	Public awareness campaigns implemented in 7 provinces.	Implemented public awareness campaigns.	Campaign materials.	Civic society and professional organizations with sufficient experience in the field available in the province to assist with implementing th campaigns; Provinces have adequate funds to implement professional awareness campaigns.
	Logic of Intervention	Indicators	Source of Verification	Risk and Assumptions
	ic objective D	!		·
D	To increase MoNRE/DoNRE's staff capacity in water resources management.	Visibility of DoNRE increased in the provinces;     Number of professional staff working on water resource management at DoNRE increased, be able to enter data, information into interactive data base and making report on water resource conditions.	· ·	Adequate number of staff with WR management responsibilities deployed and available for training.
Result				
D.1.1	A series of staff training courses implemented in key WRM areas.	Implemented staff training programs.	Training evaluation reports.	Suitable trainers available in-country;     Training providers available for training in the provinces.