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REPORT ON MANAGING FOR DEVELOPMENT RESULTS



**Monitoring & Evaluation Report for the TA Project
“Wastewater and Solid Waste Management in Provincial Centers”
Phase 1**

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Ministry of Construction – Hanoi

in cooperation with

Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH

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ABBREVIATIONS

ADC	Asset Documentation Center
BMZ	Bundesministerium für Wirtschaftliche Zusammenarbeit und Entwicklung (Ministry for Economic Cooperation and Development)
BN	Bac Ninh
BoUME	Bureau of Urban Management and Environment
CCU	Customer Care Unit
CDP	Corporate Development Plan
CIDMC	City Infrastructure Development and Management Company (Vinh)
CT	Can Tho
DoC	Department of Construction
DoF	Department of Finance
DoLISA	Department of Labor, Invalids and Social Affairs
DoNRE	Department of Natural Resources and Environment
DPI	Department of Planning and Investment
EP	Environmental Protection
FA	Financial Assistance
GFA	Gesellschaft für Agrarprojekte mbH (German Consulting Group and Technical Advisor for WWM)
GIS	Geospatial Information System
GoV	Government of Vietnam
GTZ	Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
HD	Hai Duong
HRD	Human Resource Development
HRM	Human Resource Management
I-Mon	Indicator Monitoring System
JSC	Joint Stock Company
KfW	Kreditanstalt für Wiederaufbau (German Development Bank)
Ltd.	Limited Liability Company
M&E	Monitoring and Evaluation
M&E	Mechanical and Electrical
MIS	Management Information System
MoC	Ministry of Construction
MoFi	Ministry of Finance
MoH	Ministry of Health
MoM	Minutes of Meeting

MoNRE	Ministry of Natural Resources and Environment
MoU	Memorandum of Understanding
MPI	Ministry of Planning and Investment
natPMU	Project Management Unit at National Level
O&M	Operation & Maintenance
PC	People's Committee
P-Mon	Performance Monitoring in Companies
PO	Plan of Operation
PPC	Provincial People's Committee
PPM	Project Planning Matrix
proPMU	Project Management Unit at Provincial Level
PSC	Project Steering Committee
PWC	Public Works Company
SOE	State Owned Enterprise
SOP	Standard Operation Procedure
ST	Soc Trang
TA	Technical Assistance
T-Mon	Training Monitoring System
TNA	Training Needs Assessment
ToR	Terms of Reference
TUPWS	Department of Transport and Urban Public Works Services
TV	Tra Vinh
UPWC	Urban Public Works Company (Soc Trang)
URENCO	Urban Environmental Company
USC	Urban Service Company (Hai Duong)
VAT	Value-added tax
Vn	Vinh
WS	Water supply
WSDC	Water Supply and Drainage Company (Bac Ninh, Tra Vinh)
WSSC	Water Supply and Sewerage Company (Can Tho)
WTO	World Trade Organization
WW	Wastewater
WW&D	Wastewater & drainage
WWM	Wastewater Management in Provincial Urban Centers Vietnam

1 M&E and the System of Managing for Development Results

1.1 Monitoring & Evaluation

Monitoring & Evaluation (M&E) are understood as important activities carried out along with the implementation of a project. In the context of development assistance M&E is not only required in order to create transparency and maintain accountability under obligation to donors. Besides making sure that funds are spent in a way corresponding to the objectives of a project, M&E can furthermore serve as a useful management tool providing information on the progress of project implementation. The results of M&E constitute empirical evidence on reached goals in form of inputs, outputs and their use. They identify potential problem areas and set the basis for a judgement on whether the project objectives have been achieved, are expected to be achieved or are endangered. We have to distinguish between Monitoring and Evaluation. **Monitoring** is the continuous assessment of project implementation in relation to agreed schedules, and of the use of inputs, infrastructure, and services by project beneficiaries. It provides the project management, stakeholders and the public with a continuous feedback on the state of implementation, succeeding and problem areas as early as possible. Therefore it helps to facilitate timely adjustments to project operation. Thus, monitoring should be pursued continually in an integral manner. **Evaluation**, however, is the periodic assessment of a project's relevance, performance, efficiency, and impact - both expected and unexpected - in relation to stated objectives. Interim evaluations are undertaken during implementation as a first review of progress, as a prognosis of a project's likely effects and as a way to identify necessary adjustments in project design. Project progress review missions of ongoing projects are an evaluation instrument. Terminal evaluations conducted at the end of a project are required for project completion reports. They include an assessment of project's effects and their potential sustainability. Evaluation is one aspect of quality management. It provides an organised communication process among stakeholders focussing on performance evaluation and impact assessment.

Basic requirements for all M&E activities are that they follow a predetermined time schedule, that responsibilities are pointed out clearly, that all results are based on proper and systematic data collection, and finally, that results are used in order to modify policies and instruments of project implementation in case of shortcomings. The scope of each M&E approach has to be adapted to the nature of the project, to existing capacities for its realization, to external requirements and the project management's and stakeholders' needs.

1.2 The System of Managing for Development Results

The 'Wastewater and Solid Waste Management Project in Provincial Urban Centers in Vietnam' (WWM) is carried out by the GfA Consulting Group on behalf of the German Technical Cooperation (GTZ). Funded by the German Federal Ministry of Economic Cooperation and Development (BMZ) it constitutes an ODA project for which there is a high public demand for accountability. The implementing organization GfA, thus, has to account to its client GTZ who again has to account to its client BMZ. Finally, the BMZ has to account to the people of Germany.

Within the context of current changes in M&E policy of German development assistance, the BMZ generated the so called **AURA** (literally "Auftragsrahmen"), the "**Development-Policy Contract and Cooperation Framework**". This framework stands out against former approaches in which mainly project inputs were monitored. So now, the project planning unit and the management have more flexibility in terms of inputs and implemen-

tation, but at the same time bear higher responsibilities in terms of outputs, their use and their impacts. In the end it is those results which reveal the project's value. For this reason current monitoring activities of German ODA projects set a focus on results. The monitoring approach of the GTZ is named "**Managing for Development Results**". It emphasizes the use and the direct benefit of project outputs and does not remain any longer on the input level as former approaches did.

Results, or the equivalent term **Outcomes**, are defined as:

- changes that are linked to the plan is a causal matter
- desirable, undesirable, intended and unintended effects of project intervention and project outputs
- a developmental outcome, if there is a use of output

The term **Monitoring of Results** is understood as:

- a monitoring activity that focuses on outcomes
- a consideration not only of factors that have contributed to change but in particular of the linkages to effects itself
- a view on the project environment from two perspectives:
 - the influence and its extent of the environmental factors on the project, and
 - the influence and its extent of the project on environmental factors
- a feasible activity within the project's capacities rather than an excessive research

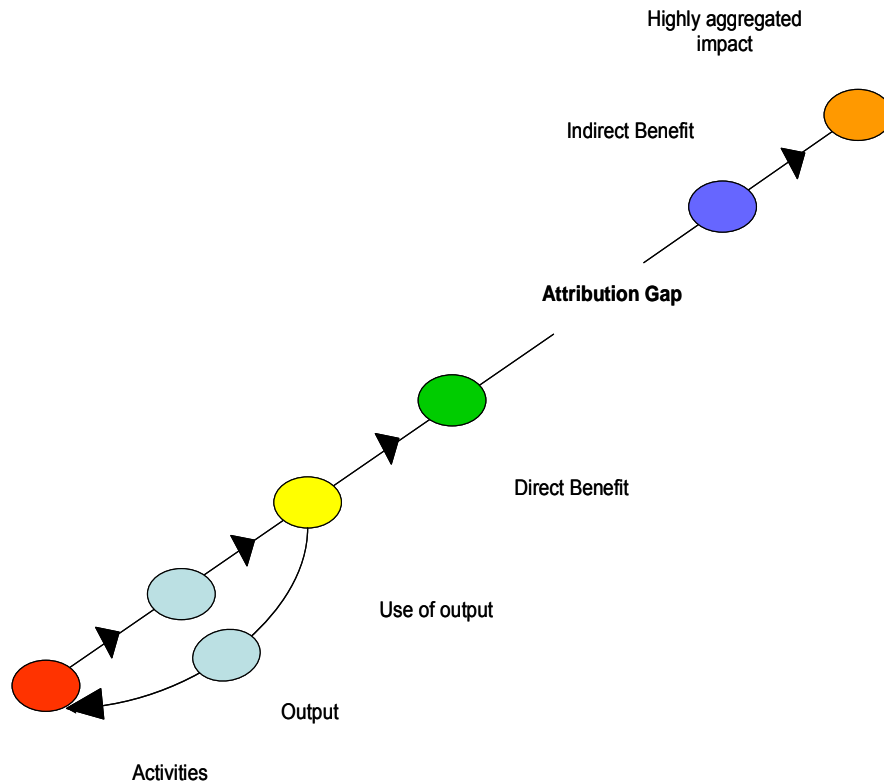
The system of "**Managing for Development Results**" and **Monitoring & Evaluation with Orientation on Results** it basically a comparison between planned and achieved targets. It needs to refer to the Project Planning Matrix (PPM). This matrix specifies in measurable terms several questions or indicators for different levels of aggregation, from the objective level to the activity level. On the objective-level we would ask: "Why is the project carried out, and in what way will the target group benefit from it?"

On the activity-level we would ask: "How is the project going to achieve the results?" Initially the Project Planning Unit (PPU), and later on also the Project Management Unit (PMU), has to consider and determine which internal and external factors are crucial in order to meet success, and which risks can threaten this success. The leading question regarding the M&E is how to assess the success of a project. For this assessment indicators have to be developed along the so called "**Result Chains**" corresponding to the above introduced levels of aggregation. Project planning as well as M&E activities are always pursued along those chains. There can be various Result Chains in one project, one for each of the desired results, or the results are combined into one Result Chain. The scope of M&E has to be adapted and linked with relevance to each of the proposed Result Chains. In this way reasons for failure can be determined within existing causalities and they can be consequently resolved.

1.3 Monitoring & Evaluation along Result Chains

Result Chains are understood as a basic concept in initial planning and in M&E of development projects. They reflect the underlying logic of the project and the intentions of project planners and managers - therefore they are the basic axis of the M&E approach. Although we cannot assume a Result Chain to be an in-depth representation of all causal relationships that occur during project planning and implementation, it is still a model that help us to understand the logic of cause-and-effect and provide us with a basic directive

how the project should work, and thus, how and with regard to which results we should monitor and evaluate the project.



The **Result Chain** is not intended to give a complete picture of all causal complexities, but to exemplify the impact hypothesis clarifying, structuring and formulating it in a graphical way. The structuring is done along a linear model with different levels of aggregation, i.e. different levels of effects:

The project activities lead to output. The output is made use of (what furthermore leads to new output). In case there is use of output, then it creates a benefit. This direct benefit again has effects on the broader environment of the project and might create further indirect benefit and highly aggregated impact which are separated from the direct benefits through the so called “attribution gap”. The attribution gap marks the border beyond which a clear and unambiguous attribution of impact to the project outputs is no longer possible because causalities cannot be linked empirically. In order to bridge the attribution gap, plausibility hypotheses have to be developed in order to relate the direct benefit level to indirect benefit level and highly aggregated benefits. A convincing **Result Chain** has direct causal links between the different levels of aggregation, based on the impact hypothesis. Linkages of the different components should be made visible or be expressed in writing.

For different levels of the **Result Chain** following questions have to be answered:

Result chain level	Guiding questions
Highly aggregated impact	How will the programme/project environment develop further? What will the indirect benefit induce? Which Millennium Development Goals are addressed?
Indirect benefit	What changes will be provoked by the direct benefit? What impact do the behavioural changes of the users have?
----- Attribution gap -----	
Direct benefit	What will be changed through this use of outputs? What will the project be accountable for?
Use of outputs	Who will use the outputs and how will they be used?
Outputs	Which services/outputs does the programme/project deliver in order to reach the desired impact? What are the direct effects of completed activities?
Activities	Which activities does the project have to carry out in order to produce the outputs that are required to be delivered?

2 Monitoring & Evaluation in the Context of WWM Phase I

2.1 Background of the WWM Project

The Vietnamese national development plans currently put a focus on urban infrastructure development and on capacity building within the public service sector. Regarding German development cooperation it was agreed that the protection of natural resources, including the improvement of water supply and waste water management, is one of the focal areas of cooperation. Through financial assistance (FA) the German Development Bank (KfW) allocated approximately EUR 46 Million in supporting the augmentation of wastewater collection and treatment facilities in six provincial urban centres. Complementary to FA, the German Government committed a technical assistance (TA) package through the German Technical Cooperation (GTZ) to strengthen institutional capacities and improve the service delivery quality of the six participating companies in the provincial urban centres Bac Ninh and Hai Duong in the northern region, Vinh in the central region and Can Tho, Soc Trang and Tra Vinh in the southern region.

2.2 Objectives of the WWM Project

The overall goal of the project is the enhancement of environmental conditions for the communities residing in the project areas through improved wastewater facilities, efficient management and changing community behaviors. Among others, by the year 2020 all of

the urban population shall have access to safe water, all municipal wastewater shall be treated, and all solid waste shall be collected and safely disposed. As an interim target, by 2010 at least 60% of the urban areas shall have a functioning waste water system.

Indicators for this objective have already been formulated, namely:

- I. Storm water & wastewater is collected & treated in accordance to agreed plans and standards
- II. storm water pumping stations are operated in accordance to agreed plans and reduce inundations considerably
- III. effluents from the wastewater treatment plants are controlled by DoNRE in accordance to existing Vietnamese legislation
- IV. revenues from customer tariffs cover the operation and maintenance cost of the newly constructed sewerage collection and treatment system
- V. National Ministries and relevant institutions utilize project experiences and recommendations to formulate appropriate wastewater regulations and standards

Thus, sound capital investments in urban infrastructure and the development of public capacities and accountability are vital in achieving the formulated objectives. Private sector participation and community awareness building are prerequisites of a successful development agenda. The implementation of the technical assistance package of GTZ / GfA is scheduled for a period of up to eight years. This time frame comprises three years - from February 2005 until January 2008 - for the first project phase, for which this monitoring design has been done. During that period it is assumed that the KfW financed components for wastewater collection and treatment are completed and ready for operation. The TA activities of the first phase focus on the setting of a conducive administrative and operational environment, comprising four internal and two external core perspectives, namely:

- Human resources development (Learning and Growth)
- Institutional Strengthening (Internal Business Processes)
- Customer Relations
- Financial Aspects
- Public Awareness and Participation/Pilot Measures, and
- Knowledge Management.

The first perspective addresses **human resources development** and the establishment of corporate culture attitudes. In a knowledge-based and service oriented organization *people* are the main resource. The second perspective refers to **internal processes**. Metrics based on this perspective allow the managers to know how well their institution is functioning, how efficient operations are running, and whether its services conform to customer requirements. The project will analyze the corporate performance of each participating SOE and will provide a range of informed options for increasing their internal efficiency. **Customer focus** is playing an increasing role in private and public organizations. Customer satisfaction facilitates eventually the expansion of service provisions and impacts positively on the financial health of the SOE. Thus, good customer performance is a leading indicator of future corporate appreciation. Timely and accurate **financial management** will always be a corporate priority. With the planned establishment of software supported systems, it is expected that the financial management can be implemented more objectively and efficiently. Cost coverage of services is an important objec-

tive, requiring the enactment of suitable local legislation in setting service tariffs in accordance to actual cost. **Public awareness building** and equitable community involvement in wastewater management is of importance to optimize the proper usage of facilities and benefits of services. Particular attention should also be given to low-income households in improving their living conditions through affordable sanitation services and facilities. Establishing an information-network among the operators, related government institutions, donors, and professional organizations at all political levels is vital for a comprehensive development of the wastewater sector in Vietnam. Hence, the project will explore all possible means to foster **knowledge sharing & management**.

2.3 Objectives of the WWM Phase I

Phase I of the WWM Project, for which this M&E Design has been made, has specific objectives. The overall objective of Phase I of the WWM Project is that wastewater companies in up to six provincial urban centres operate their existing storm water systems in accordance to agreed standards and are prepared to take over additional tasks related to the extension of the sewerage collection and treatment facilities. In order to empower the target companies and build sufficient capacities to enable them to follow up with their duties for future operations, several basic outcomes have been defined in the Project Planning Matrix. The Phase I has its specific objectives which serve as indicators for the M&E process of this phase. The Phase 1 of the projects shall create a number of development results that are required in order to implement Phase II and go ahead in order to reach the overall objective of the Wastewater Management Project. There are four results serving as a hand in order to express the outcomes of phase I. Those are:

- I. Capacity building of wastewater management institutions in provincial urban centres ensure more effective operation and maintenance of the wastewater system
- II. Revenue collection systems and mechanisms to recover operation and maintenance costs of upgraded wastewater systems in provincial urban centres are developed and introduced stepwise
- III. Beneficiaries in the selected provincial urban centres are aware of their rights and responsibilities regarding wastewater management and participate actively
- IV. Cooperation and information sharing within and between local and national levels are increased

Those four results or objectives have been transferred into five indicators or outcomes, which will be monitored (see chapter three). In this way we can evaluate the progress of project implementation during the Project Phase I.

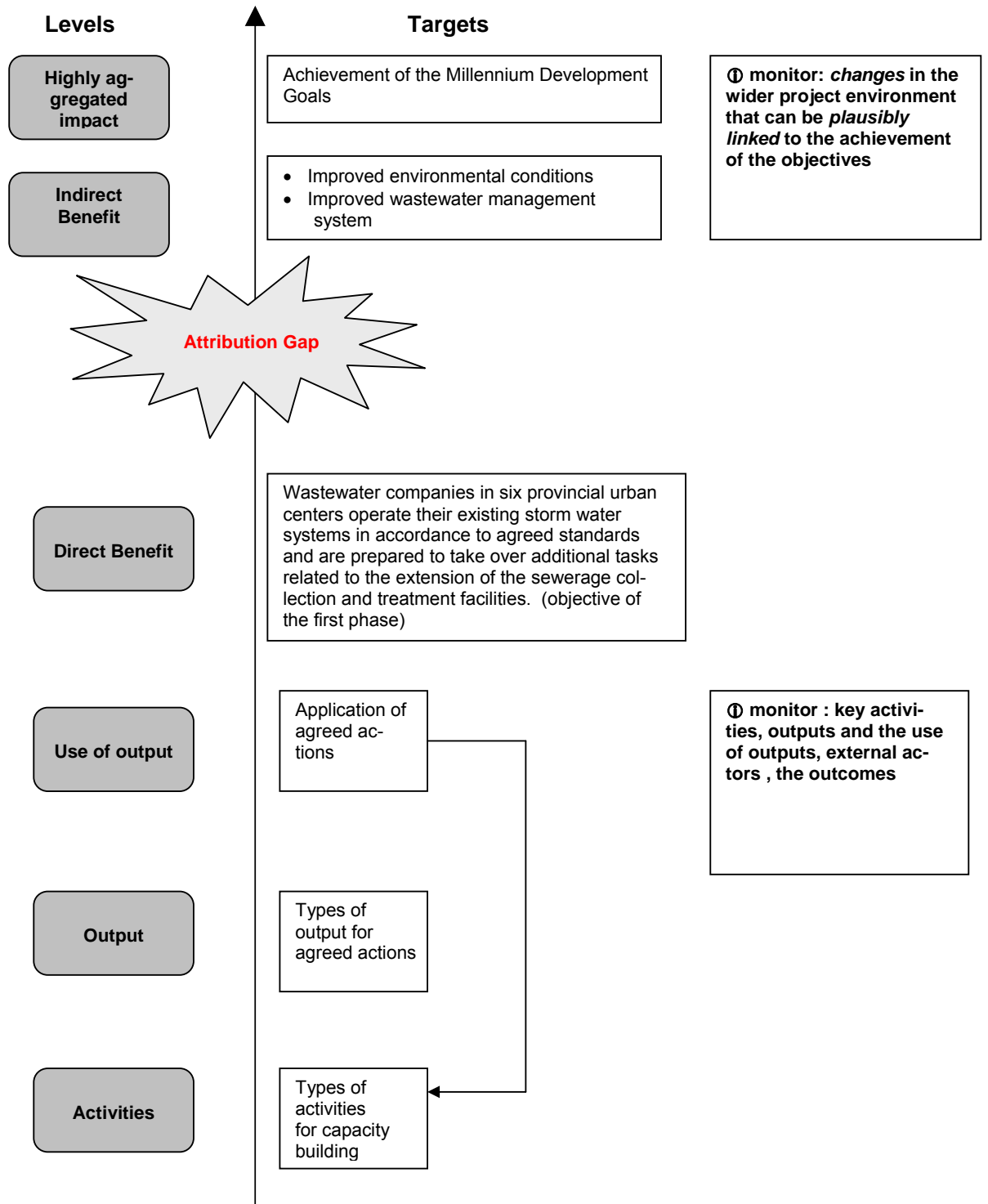
3 M&E – an Appropriate Design for the WWM Phase I

3.1 the Result Chain of the WWM Project Phase I

The WWM Phase I has its own Result Chain modelling its Impacts from the output level to higher aggregated levels. According to the WWM Result Chain which represents the impact hypothesis of the project we have to monitor our progress in order to know whether we are on the right way or whether we have to adjust some of our outputs in order to get back on track. Our Result Chain comprises the levels Activities (Inputs), Output, Use of Output, Direct Benefit, Indirect Benefit and Highly Aggregated Benefit. As mentioned before Indirect Benefit and Highly Aggregated Benefit are difficult – often im-

possible – to measure reliably. However, we can measure and monitor our progress from the level of Activities to the Level of the Direct Benefit.

Working with the Result Chain model of our project, we have to consider two dimensions. The first dimension is the dimension along the Result Chain.



The second dimension is the dimension of Indicators. We can imagine the Result Chain as a bundle of parallel Result Chains of which each causes a distinct benefit. In the Phase I of our WWM Project we have five Outcomes that have to be accomplished. Thus the Result Chain stretches along five Indicators which measure progress. Our five **indicators** are:

- I. The managers of the six participating wastewater companies have the capacity to operate the sewerage systems in accordance to agreed job descriptions and are appraised regularly
- II. In all six participating urban centres maintenance works are implemented and operational conditions of the sewerage systems are documented for at least 50% of the main sewers
- III. In all six participating cities the issue of cost covering wastewater tariffs (limited to a maximum of 5% of the average household income) is presented to the Peoples Council and to the Peoples Committee for promulgation
- IV. In at least one district in each provincial centre are at least 60% of the households connected to the sewerage system informed about their rights and duties relating to wastewater management (representative survey)
- V. Two thirds (2/3) of the management of the related provincial institutions and national Ministries confirm in a representative survey that they are informed about the project's activities and experiences (through information from the website)

We have to measure our progress for each of these five indicators along our Result Chain. The foundation of the result chain is the **activity level**. The activities cause an output. For our WWM project the main activities can be clustered in milestones. There are activities accomplished by the WWM Project (consultants and companies), by the WWM consultants themselves, by Vietnamese authorities like the MoC and the PPC and finally by the KfW. Concretely, the WWM Project and the consultants undertake activities that are targeted on the production of Corporate Development Plans for each of the six participating companies. The hypothesis is that the establishment of the CDP is a core process in the reform of the company policies and for the achievement of the overall objective. For CDP creation trainings and workshops are carried out in order to enhance the capacities of the company's management and staff and to initiate reflections about the company's strategy.

The **output** of the workshops, trainings and reflections is first of all a common perception of all stakeholders. We see the common perception as the main aspect of sustainable results and the achievement of the objectives (the objective of the current phase and the overall objective). A more tangible output is the CDP that we use as a planning tool for the companies and the key to operate economically according to agreed plans and standards. The CDP includes a policy statement, a strategic development concept and activities for the corporate development in five sectors.

Besides that, knowledge gained through workshops and trainings is transferred as an output via a webpage on the project's activities. Every three months we install a newsletter with a quiz to achieve the indicator V. of the first project phase, the information of the management of national ministries and the wastewater companies.

The **use of output** is concerned about the question whether the project's activities and output are used and converted into practice. Following our result chain that is the application of the CDP. From the policy statement including the company's vision, its values and its mission, the CDP comprises more detailed strategies how to comply with the policy statement and how to reach corporate objectives.

With regard to our impact hypothesis and under support of the project's stakeholders (KfW, MoC and PPC) the application of the CDP which is worked out in common by each company and the WWM Project will result in two forms of **direct benefits**: first, wastewater companies in six provincial urban centers operate their existing storm water systems in accordance to agreed standards and are prepared to take over additional tasks related to the extension of the sewerage collection and treatment facilities, which will be reached after the first phase. Second, the overall objective of the project 'Wastewater companies in six provincial urban centers operate their storm water and sewerage systems economically in accordance to agreed plans'.

The direct benefit finally leads to an **indirect benefit**. The links are not as transparent and causal as between the other levels on the Result Chain because they are separated through the attribution gap. Anyhow, our hypotheses is that the direct benefit of the WWM project has an effect on the improvement of the environmental conditions and the wastewater management system in the project area. The concrete indirect benefits are reduced flood in the rainy season and reduced wastewater load to adjacent streams and rivers.

These indirect benefits serve on their part as a little step to a **higher aggregated impact**, i.e. achievements of global scope and interest, such as the Millennium Development Goals.

3.2 Implications for an Appropriate Design for M&E of WWM Phase I

The WWM project is a very comprehensive project which can be seen as a pilot project in Vietnam. We target six companies in six urban centres in each their provinces. Our approach is to implement and drive reforms on multiple layers from within the company to local and national legislation. The scope of the project is immense, it comprises multiple activities being addressed to different stakeholders on various layers. As project planning had designed such a wide approach on wastewater issues in Vietnam, the M&E Activities have to be carried out alongside multiple activities as well.

There are several implications and requirements for the M&E of the WWM Phase I. We have pointed out basic requirements for M&E in general already. Those are, thus, valid for the WWM Project. Nevertheless, as project planning has to concentrate on objectives with down-to-earth prospects for realization, the M&E design has to be apt. This includes considerations on capacities for M&E such as budget and staff as well as users, expertise, demand for M&E as a management tool, requirements on the donor-side, availability of data and means of data-collection, documentation and the scope of the M&E process in general. For the WWM Project we have to point out limitations of M&E capacities and adapt the scope of related activities to appropriate indicators and measurements alongside Result Chain.

The establishment of a comprehensive M&E design and its implementation would require a full time staff. The project has no capacities for a full time staff member to pursue a comprehensive M&E approach monitoring every single activity that is being carried out by the project. Budgeting for M&E is also not sufficient for pursuing a comprehensive approach or hiring an external M&E service provider. Thus, M&E is carried out commonly by CTA, project assistants and a designated expert of the WWM team. Expertise is limited due to the fact that there is no M&E expert available under the staff members. A demand for M&E as a management tool exists in general, but through the scope of activities performed in 6 target companies and the related corpulence of data it is limited to core tendencies for each indicators. Thus we perform a slim approach that satisfies the demand of the project management as well as our donors' minimum requirements. Data will be collected by the designated M&E staff member in the project in cooperation with the experts consulting the company in each of their functions, such as capacity building, finan-

cial matters, community matters, etc. It is estimated that capacities for M&E consume at the maximum 5 percent of office time.

As already mentioned, M&E needs solid planning documents such as the PPM, a clear indicator sheet, an appropriate design contributing to relevant and measurable data collection and easy to handle data collecting forms. All documents have to be as simple as possible and practicable for everyone who will be working with it. Clear definitions and simplicity are a basic requirements in order to make sure that stakeholders with different background will be able to comprehend the content and purpose and work with the M&E system over a certain period of time.

The scope of the M&E design shall therefore concentrate on central measurements. Our Project involves various groups of different stakeholders, all of different background and orientation, the project takes places in a bilingual context and within two cultures. Not only for this reason, but also for the before mentioned implications our design has to be simple. There are a few basic requirements that should be fulfilled in order to leave it not only as a means for accountability towards donors but also make it a useful tool for the project management, the project consultants and the target companies themselves. The whole system has to:

- be user friendly
- be as simple as possible
- be practicable and feasible
- make use of data that is easy to access, store and process
- make use of tools with relevant applications
- rely on the availability of up-to-date information
- assess effects, measures benefits and impacts of project intervention
- constitute a systematic observation of ongoing project progress

3.3 Indicator-Monitoring on Output- and Use-of-Output Level – an Appropriate Design for Collecting Data on WWM Phase I

As we said in chapter 3.2, our M&E design is a slim indicator monitoring focussing on basic tendencies for selected areas. Along our Result Chain we monitor the level of the Output and the level of the Use-of-Output. We do this for our five Indicators (chapter 3.1).

Data has to be collected centrally within the M&E database. This database is the core of our M&E approach. It is designed as a MS Excel Database, which serves data collection, data storage and visualization of progress. The decision for an Excel sheet has been made for two reasons: in order to ensure that everybody involved in M&E activities will be able to handle the software and in order to easily import data from the companies' MIS in later project phases.

The Excel sheet comprises an M&E Overview Sheet for all companies. On this sheet the percentage of accomplishment for the five indicators is displayed. Direct benefit is assumed as a logical consequence of the Use-of-Output as the result of the creation of the output itself. So, the scheme gets more abstract from Output level via Use-of-Output level to Indicator level. The percentage of accomplishment of an Indicator is based on the accomplishment of Use-of-Outputs which are required for this Indicator and that have to be made following the Output's creation by the project. The percentage of accomplishment is displayed for each company (Indicators I-IV) and for the website (Indicator V).

Please refer to the sheet itself and the manual in order to understand the table and its function. Data being displayed in this Overview Sheet for all companies is taken from 6

Company Overview Sheets (Indicator I-IV) and the Website Overview Sheet (Indicator V). If you are only interested in the Status of accomplishment for an Indicator, a Use-of-Output or an Output itself in one specific company, then you can display this information through the Overview Sheet for the company you are interested in. Please refer to each the Company Overview Sheets to understand the table and the function. Sample sheets for all layers of the M&E database are each attached to this Design Report as an Appendix.

The Company Overview sheets show for each company the Indicator, the Use-of-Output that has to be produced for the accomplishment of the Indicator, and the Output itself that has to be produced by the WWM project before our companies can make use of it. For each Output and Use-of-Output there is furthermore an information on responsibility and time (deadline for accomplishment or baseline and interval for continual assessment).

For each of the company Overview Sheets and the Website Overview Sheets there are Data Collection Sheets. Those are not relevant if you are just interested in the current state of project implementation as a whole or for a specific company or the website. The Data Collection Sheet is of interest for the person who performs the M&E and who collects data or for someone who is interested in the development of project achievements over time. Data itself has to be "SMART". That means it has to be specific in terms of quantity, quality and time, it has to be measurable at acceptable cost, available from existing sources or with reasonable extra efforts, relevant to objectives and sensible to change timely in order to ensure usefulness to the project management and the stakeholders. The data being collected in the Data Collection sheet are simple figures. For each Output and for each Use-of-Output the number of achievements (e.g. the number of produced job-descriptions) is brought into relation to the number of required achievements (e.g. the number of job-descriptions that have to be produced). The data collection is done by the person in charge for it. The person in charge for data collection should refer to the M&E Sheet Manual. Out WWM consultants each responsible for the creation of specific Outputs and the creation of the corresponding Use-of-Outputs will have to provide simple figures. The figures will be requested by the person in charge for M&E.

The colour scheme for the five indicators is white. The Use-of-Outputs are each coloured in a mint green, and the Outputs which have to be created before there can be a Use-of-Output are coloured in a light blue.

The percentage of accomplishment is each emphasized by a traffic-light colour-scheme. Percentages of accomplishment between 0 and 32.99 percent are displayed in a red cell, percentages between 33 and 99 percent are displayed in a yellow cell, and percentages above 99 percent, are displayed as accomplished through a green cell.

The colour scheme is done in each sheet so that it is very easy keep orientation. ***For further information on the use of the M&E sheet please refer to the M&E Manual!***

Related Documents:

- 070214 WWM Phase I M&E Sheet - Master Version - Assessment 2006 Dec (Excel)
- 070213 WWM Phase I M&E Design - Presentation - Christian EN – Final (Power-Point)
- 070214 WWM Phase I M&E Design Phase I – Manual – Christian – Final (Word)

Appendix 1

Performance Indicators

Wastewater Management in Provincial Urban Centers --- Phase I : Feb 2005 – Jan 2008

<p>Indicator I: The managers of the six participating wastewater companies have the capacity to operate the sewerage systems in accordance to agreed job descriptions and are appraised regularly.</p>	<p>A: Communication of job descriptions</p> <p>B: Performance appraisal interview are conducted</p> <p>C: Conclusion of performance appraisal interviews are entered to updated staff training programme.</p>	<p>A: Deadline Sep 2006, quarterly until completion</p> <p>B: annual, Sep</p> <p>C: annual, Sep</p>	<p>HR expert Thu in cooperation with Frank and Rene</p>	<p>A: Job description for heads of departments/units.</p> <p>B: Forms for performance appraisal interviews.</p> <p>C: Guideline for the use of the performance appraisal interview forms.</p>	<p>A: Deadline Sep 2006, quarterly until completion</p> <p>B: Deadline Sep 2006, quarterly until completion</p> <p>C: Deadline Sep 2006, quarterly until completion</p>
<p>Indicator II: In all participating urban centres maintenance works are implemented and operational conditions of the sewerage system are documented for at least 50%of the main sewers.</p>	<p>A: Asset Documentation Centre is operational (accommodation, IT-staff, field-staff, trainings, hardware, software)</p> <p>B: O&M of main sewers is implemented in accordance to agreed schedules.</p>	<p>A: Deadline Sep 2007, quarterly until completion</p> <p>B: Deadline Sep 2007, quarterly until completion</p>	<p>A. Asset Documentation Expert – Long</p> <p>B: Asset Management Expert - Khanh</p>	<p>A: Manual for the establishment of Documentation Centre and standard operation procedure (SOP).</p> <p>B: Manual for O&M of main sewers and SOP.</p>	<p>A: Deadline Mar 2007, quarterly until completion</p> <p>B: Deadline Mar 2007, quarterly until completion</p>

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<p>Indicator III: In all six participating cities the issue of cost covering wastewater fees (limited to a maximum of 5% of average household income) is presented to the Peoples Council and Peoples Committee for promulgation.</p>	<p>A: Proposed wastewater management cost and tariff are discussed in the Peoples Committee and the Peoples Council.</p>	<p>A: not yet defined</p>	<p>A: Use of Output: PMU and Institutional Expert – Minh A / B / C Output: Financial Expert - Hang</p>	<p>A: Manual for financial management B: Calculation of tariffs C: Dissimilation and consensus on tariff issue among provincial decision makers.</p>	<p>A: Deadline Sep 2006, quarterly until completion B: Deadline Dec 2006, quarterly until completion C: Deadline Dec 2007, quarterly until completion</p>
<p>Indicator IV: In at least one district in every provincial urban center are at least 60% of the households connected to the sewerage system informed about rights and duties of the wastewater management.</p>	<p>A: Customer Care Unit is established. B: Public Campaigns are organized and implemented according to agreed plans and schedules. C: In at least one district 60% of the households connected to the sewerage system are informed on their rights and duties</p>	<p>A: Deadline Dec 2007, quarterly until completion B: Dec 2007, quarterly until completion C: Baseline Mar 2008 quarterly until completion, then annual</p>	<p>A: CRM Expert – Linh B: Community Expert - Son</p>	<p>A: Manual for Customer Relations and SOP B: Design of Public Campaigns</p>	<p>A: Deadline Sep 2007, quarterly until completion B: Deadline Sep 2007, quarterly until completion</p>
<p>Indicator V: 2/3 of the management of the related provincial Institutions and national Ministries confirm in a representative survey that they are informed about the projects activities and experiences.</p>	<p>A: Webpage and Newsletter is visited by managers of the six companies and related ministries.</p>	<p>A: From June 06 every 3 months.</p>	<p>A: Webmaster</p>	<p>A: Wastewater Management Webpage, Newsletter, Quiz</p>	<p>A: Deadline Mar 2007, quarterly until completion</p>

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Appendix 2

M&E Sheet Phase I - Overview all (Dec 2006 monitor)

Indicator / Outcome	Status	Use of Output	Time	Status BN	Status CT	Status HD	Status ST	Status TV	Status Vn	Status Web	Output	Time	Status BN	Status CT	Status HD	Status ST	Status TV	Status Vn	Status Web	Influential Factors
Indicator I The managers of the six participating wastewater companies have the capacity to operate the sewerage systems in accordance to agreed job descriptions and are appraised regularly.	#DIV/0!	A: Communication of job descriptions through trainings	A: Deadline Sep 2006, quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	A: job description for heads of departments / units	A: Deadline Sep 2006 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in company's policy
		B: performance appraisal interviews are conducted	B: annual Sep	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	B: forms for performance appraisal interview	B: Deadline Sep 2006 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	
		C: conclusion of performance appraisal interviews are entered into updated staff training programme	C: annual Sep	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	C: guideline for the use of performance appraisal interview forms	C: Deadline Sep 2006 quarterly until completion	0%	0%	0%	0%	0%	0%		
Indicator II In all six participating urban centers maintenance works are implemented and operational conditions of the sewerage systems are documented for at least 50% of the main sewers.	#DIV/0!	A: Asset Documentation Centre is operational (accommodation, IT-staff, field-staff, trainings, hardware, software)	A: Deadline Sep 2007 quarterly until completion	0%	0%	0%	0%	0%	0%	0%	A: Manual for the establishment of Documentation Centre and standard operation procedure (SOP)	A: Deadline Mar 2007 quarterly until completion	0%	0%	0%	0%	0%	0%	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in company's policy 4. Asset ownership, rights, and obligations are conflicting	
		B: O&M of main sewers is implemented in accordance to agreed schedules	B: Deadline Sep 2007 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	B: Manual for main sewers and standard operation procedure (SOP)	B: Deadline Mar 2007 quarterly until completion	0%	0%	0%	0%	0%	0%		
Indicator III In all six participating cities the issue of cost covering wastewater tariffs (limited to a maximum of 5% of the average household income) is presented to the Peoples Council and to the Peoples Committee for promulgation.	#DIV/0!	A: Proposed wastewater management cost and tariff are discussed in the Peoples Council and in the Peoples Committee	A: not yet defined	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	A: Manual for financial management	A: Deadline Sep 2006 quarterly until completion	0%	0%	0%	0%	0%	0%	1. National Laws and Decisions 2. Political agenda of the province 3. Economic development of the region (household income)	
		B: Calculation of tariffs	B: Deadline Dec 2006 quarterly until completion	0%	0%	0%	0%	0%	0%	0%	C: Dissemmination and consensus on the tariff issue among provincial decision makers	C: Deadline Dec 2007 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
		C: Dissemmination and consensus on the tariff issue among provincial decision makers	C: Deadline Dec 2007 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
Indicator IV In at least one district in each provincial center are at least 60% of the households connected to the sewerage system informed about their rights and duties relating to wastewater management (representative survey).	#DIV/0!	A: Customer Care Unit is established	A: Deadline Dec 2007 quarterly until completion	0%	0%	0%	0%	0%	0%	0%	A: Manual for Customer Relations and SOP	A: Deadline Sep 2007 quarterly until completion	0%	0%	0%	0%	0%	0%	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in company's policy	
		B: Public Campaigns are organized and implemented according to agreed plans and schedules	B: Dec 2007, quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	B: Design of Public Campaigns	B: Deadline Sep 2007 quarterly until completion	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		
		C: In at least one district 60% of the households connected to the sewerage system are informed on their rights and duties	C: Baseline Mar 2008 quarterly until completion, then annual	0%	0%	0%	0%	0%	0%											
Indicator V Two thirds (2/3) of the management of the related provincial institutions and national Ministries confirm in a representative survey that they are informed about the project's activities and experiences (through information from the website).	0%	A: Webpage and Newsletter is visited by managers of the six participating companies and related Ministries	A: Baseline Mar 2007 quarterly								A: Wastewater Management Website, Newsletter, Quiz	A: Deadline Mar 2007, quarterly until completion								0%

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Appendix 3

M&E Sheet Phase I - Bac Ninh (Dec 2006 monitor)

Indicator / Outcome	Status	Use of Output	Time	Responsibility	Status %	Output	Time	Responsibility	Status %	Influential Factors
Indicator I The managers of the six participating wastewater companies have the capacity to operate the sewerage systems in accordance to agreed job descriptions and are appraised regularly.	#DIV/0!	A: communication of job descriptions through trainings	A: Deadline Sep 2006, quarterly until completion	A: HR expert Thu in cooperation with Frank and Rene	#DIV/0!	A: job description for heads of departments / units	A: Deadline Sep 2006, quarterly until completion	A: HR expert Thu in cooperation with Frank and Rene	#DIV/0!	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in company's policy
		B: performance appraisal interviews are conducted	B: annual Sep	B: HR Thu expert in cooperation with Frank and Rene	#DIV/0!	B: forms for performance appraisal interview	B: Deadline Sep 2006, quarterly until completion	B: HR Thu expert in cooperation with Frank and Rene	#DIV/0!	
		C: conclusion of performance appraisal interviews are entered into updated staff training programme	C: annual Sep	C: HR expert Thu in cooperation with Frank and Rene	#DIV/0!	C: guideline for the use of performance appraisal interview forms	C: Deadline Sep 2006, quarterly until completion	C: HR expert Thu in cooperation with Frank and Rene	0%	
Indicator II In all six participating urban centers maintenance works are implemented and operational conditions of the sewerage systems are documented for at least 50% of the main sewers.	#DIV/0!	A: Asset Documentation Centre is operational (accomodation, IT-staff, field-staff, trainings, hardware, software)	A: Deadline Sep 2007, quarterly until completion	A: Asset Documentation Expert - Long	0%	A: Manual for the establishment of Documentation Centre and standard operation procedure (SOP)	A: Deadline Mar 2007, quarterly until completion	A: Asset Documentation Expert - Long	0%	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in comany's policy 4. Asset ownership, rights, and obligations are conflicting
		B: O&M of main sewers is implemented in accordance to agreed schedules	B: Deadline Sep 2007, quarterly until completion	B: Asset Management Expert - Khanh	#DIV/0!	B: Manual for main sewers and standard operation procedure (SOP)	B: Deadline Mar 2007, quarterly until completion	B: Asset Management Expert - Khanh	0%	
Indicator III In all six participating cities the issue of cost covering wastewater tariffs (limited to a maximum of 5% of the average household income) is presented to the Peoples Council and to the Peoples Committee for promulgation.	#DIV/0!	A: Proposed wastewater management cost and tariff are discussed in the Peoples Council and in the Peoples Committee	A: not yet defined	A: PMU and Institutional Expert - Minh	#DIV/0!	A: Manual for financial management	A: Deadline Sep 2006, quarterly until completion	A: Financial Expert - Hang	0%	1. National Laws and Decisions 2. Plotical agenda of the province 3. Economic development of the region (household income)
		B: Calculation of tariffs				B: Calculation of tariffs	B: Deadline Dec 2006, quarterly until completion	B: Financial Expert - Hang	0%	
		C: Dissemination and consensus on the tariff issue among provincial decision makers				C: Dissemination and consensus on the tariff issue among provincial decision makers	C: Deadline Dec 2007, quarterly until completion	C: Financial Expert - Hang and the PMU	#DIV/0!	
Indicator IV In at least one district in each provincial center are at least 60% of the households connected to the sewerage system informed about their rights and duties relating to wastewater management (representative survey).	#DIV/0!	A: Customer Care Unit is established	A: Deadline Dec 2007, quarterly until completion	A: Community Expert (CRM) - Linh	0%	A: Manual for Customer Relations and SOP	A: Deadline Sep 2007, quarterly until completion	A: Community Expert (CRM) - Linh	0%	1. Available budgets (approx. 2% of company's turnover for staff training measures) 2. PPC support 3. Change in company's policy
		B: Public Campaigns are organized and implemented according to agreed plans and schedules	B: Dec 2007, quarterly until completion	B: Community Expert - Son	#DIV/0!	B: Design of Public Campaigns	B: Deadline Sep 2007, quarterly until completion	B: Community Expert - Son	#DIV/0!	
		C: In at least one district 60% of the households connected to the sewerage system are informed on their rights and duties	C: Baseline Mar 2008, quarterly until completion, then annual	C: Community Expert - Son	0%					

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Appendix 4

		M&E Data Collection - Bac Ninh									
		Use of Output					Output				
Indicator I	Output and Use of Output A	M&E Phase I - Data Collection Sheet					M&E Phase I - Data Collection Sheet				
		BN - Indicator I - Use of Output A					BN - Indicator I - Output A				
		Communication of Jobdescriptions through Trainings					Jobdescriptions for heads of departments / units				
		Time of Assessment	Number of staff already trained	Number of staff having to be trained	Percentage of Accomplishment	Time: Deadline Sep 2006 quarterly until completion, then annual	Time of Assessment	Number of Jobdescriptions	Number of required Jobdescriptions	Percentage of Accomplishment	Time: Deadline Sep. 2006 quarterly until completion
		Sep-06	0	0	#DIV/0!	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet until completion!	Sep-06	0	0	#DIV/0!	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet until completion!
		Dec-06	0	0	#DIV/0!		Dec-06	0	0	#DIV/0!	
		Mar-07	0	0	#DIV/0!		Mar-07	0	0	#DIV/0!	
		Jun-07	0	0	#DIV/0!		Jun-07	0	0	#DIV/0!	
		Sep-07	0	0	#DIV/0!		Sep-07	0	0	#DIV/0!	
		Dec-07	0	0	#DIV/0!		Dec-07	0	0	#DIV/0!	
		Mar-08	0	0	#DIV/0!		Mar-08	0	0	#DIV/0!	
		Jun-08	0	0	#DIV/0!		Jun-08	0	0	#DIV/0!	
Sep-08	0	0	#DIV/0!	Sep-08	0		0	#DIV/0!			
Dec-08	0	0	#DIV/0!	Dec-08	0		0	#DIV/0!			
M&E Phase I - Data Collection Sheet					M&E Phase I - Data Collection Sheet						
BN - Indicator I - Use of Output B					BN - Indicator I - Output B						
Performance Appraisal Interviews are conducted					Forms for performance appraisal interview						
Time of Assessment	Number of interviews conducted	Number of interviews having to be done	Percentage of Accomplishment	Time: annual	Time of Assessment	Number of existing Forms	Number of required Forms	Percentage of Accomplishment	Time: Deadline Sep 2006 quarterly until completion		
Sep-06	0	0	#DIV/0!	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet!	Sep-06	0	0	#DIV/0!	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet until completion!		
Dec-06	0	0	#DIV/0!		Dec-06	0	0	#DIV/0!			
Mar-07	0	0	#DIV/0!		Mar-07	0	0	#DIV/0!			
Jun-07	0	0	#DIV/0!		Jun-07	0	0	#DIV/0!			
Sep-07	0	0	#DIV/0!		Sep-07	0	0	#DIV/0!			
Dec-07	0	0	#DIV/0!		Dec-07	0	0	#DIV/0!			
Mar-08	0	0	#DIV/0!		Mar-08	0	0	#DIV/0!			
Jun-08	0	0	#DIV/0!		Jun-08	0	0	#DIV/0!			
Sep-08	0	0	#DIV/0!		Sep-08	0	0	#DIV/0!			
Dec-08	0	0	#DIV/0!		Dec-08	0	0	#DIV/0!			
M&E Phase I - Data Collection Sheet					M&E Phase I - Data Collection Sheet						
BN - Indicator I - Use of Output C					BN - Indicator I - Output C						
Conclusions of performance appraisal interviews are entered into an updated staff training programme					Guideline for the use of the performance appraisal interview forms						
Time of Assessment	Number of staff already trained	Number of staff having to be trained	Percentage of Accomplishment	Time: annual	Time of Assessment	Number of existing Guidelines	Number of required Guidelines	Percentage of Accomplishment	Time: Deadline Sep 2006 quarterly until completion		
Sep-06	0	0	#DIV/0!	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet!	Sep-06	0	1	0%	Note: please do always link the most up to date cell for the "Percentage of Accomplishment" with the Company Overview Sheet until completion!		
Dec-06	0	0	#DIV/0!		Dec-06	0	1	0%			
Mar-07	0	0	#DIV/0!		Mar-07	0	1	0%			
Jun-07	0	0	#DIV/0!		Jun-07	0	1	0%			
Sep-07	0	0	#DIV/0!		Sep-07	0	1	0%			
Dec-07	0	0	#DIV/0!		Dec-07	0	1	0%			
Mar-08	0	0	#DIV/0!		Mar-08	0	1	0%			
Jun-08	0	0	#DIV/0!		Jun-08	0	1	0%			
Sep-08	0	0	#DIV/0!		Sep-08	0	1	0%			
Dec-08	0	0	#DIV/0!		Dec-08	0	1	0%			

Appendix 5

Support Sheet for Indicator

1. Who are the people to work with during the monitoring process?
2. What problems could we face?
3. What will be necessary to analyze the number of participants of the quiz?
4. How much money do we need for the monitoring?
5. Which preparations and measures will be needed?
6. How much time is required for the preparation of the monitoring measures?

	Bac Ninh:	Hai Duong:	Vinh:	Tra Vinh:	Soc Trang:	Can Tho:
1						
2						
3						
4						
5						