

# **TECHNICAL & FINANCIAL FILE**

## **WATER SUPPLY AND SANITATION PROGRAMME IN BINH DINH PROVINCE**

**VIETNAM**

**DGDC CODE: NN 3004523  
NAVISION CODE: VIE 07 035 11**



# **CONTENTS**

<b>CONTENTS</b> .....	<b>2</b>
<b>ABBREVIATIONS</b> .....	<b>4</b>
<b>EXECUTIVE SUMMARY</b> .....	<b>5</b>
<b>ANALYTICAL RECORD OF THE INTERVENTION</b> .....	<b>6</b>
<b>1. SITUATION ANALYSIS</b> .....	<b>7</b>
1.1 Introduction.....	7
1.2 Institutional arrangements .....	7
1.3 Legal framework.....	8
1.3.1 General water and sanitation legal framework .....	8
1.4 Capacity needs assessment.....	10
1.5 Public awareness.....	10
<b>2. STRATEGIC ORIENTATIONS</b> .....	<b>11</b>
2.1 Content of the program .....	11
2.2 Overall strategy & areas of intervention .....	11
2.2.1 Rural water supply .....	11
2.2.2 Solid waste management.....	14
<b>3. INTERVENTION FRAMEWORK</b> .....	<b>21</b>
3.1 Overall objective.....	21
3.2 Specific objective.....	21
3.3 Expected results and activities.....	21
3.3.1 Result 1: Capacity building of the related agencies.....	21
3.3.2 Result 2: Awareness raising .....	22
3.3.3 Result 3: Rural water system .....	23
3.3.4 Result 4: Solid waste treatment schemes.....	23
3.4 Indicators and means of verification.....	24
3.5 Description of beneficiaries.....	24
3.5.1 Rural water supply project in Phu Cat district.....	24
3.5.2 Solid waste component.....	25
3.6 Sub-projects selection.....	26
3.6.1 Budget constraints .....	26
3.6.2 Selection criteria.....	26
<b>4. RESOURCES</b> .....	<b>28</b>
4.1 Financial resources.....	28
4.2 Human resources.....	31
<b>5. IMPLEMENTATION MODALITIES</b> .....	<b>32</b>
5.1 Legal framework and administrative responsibilities .....	32
5.2 Management, Implementation and Follow-up Structures.....	32
5.2.1 Basic Principles .....	32
5.2.2 Steering Committee.....	33

5.2.3	Program Management.....	34
5.3	Technical responsibilities .....	36
5.4	Financial responsibilities .....	37
5.4.1	National Execution.....	37
5.5	Procurement Management.....	40
5.6	Human Resources Modalities .....	40
5.7	Reporting.....	40
5.7.1	Baseline data .....	41
5.7.2	Progress reports .....	41
5.7.3	Audits .....	41
5.8	Modification of the TFF .....	41
5.9	Monitoring and evaluation.....	42
5.9.1	External evaluation.....	42
5.10	Closure of the project.....	42
<b>6.</b>	<b>CROSS CUTTING ISSUES.....</b>	<b>44</b>
6.1	Environment.....	44
6.2	Gender/ Social economy/ Children’s rights/ HIV/AIDS.....	44
<b>7.</b>	<b>ANNEXES .....</b>	<b>45</b>
7.1	Logical framework .....	45
7.2	Implementation calendar.....	49
7.3	Sector Strategies and Policies overview .....	51
7.3.1	Water and sanitation.....	51
7.3.2	Solid waste management.....	53
7.5	Terms of reference for long term technical assistants .....	57
7.5.1	International Technical Advisor .....	57
7.5.2	National program director.....	58
7.5.3	Financial officer .....	59
7.5.4	Secretary/translator.....	60
7.5.5	Water/ sanitation national engineer.....	61
7.5.6	Awareness raising and capacity building specialist.....	61

## **ABBREVIATIONS**

ADB	Asian Development Bank
AusAID	Australian Agency for International Development
BTC	Belgian Technical Cooperation
CEMDI	Centre for Environmental Monitoring Data and Information
CERWASS	Centre for Rural Water Supply and Sanitation
DANIDA	Danish International Development Assistance
DARD	Department of Agriculture and Rural development
DGDC	Directorate General of Development Cooperation
DoF	Department of Finance
DoNRE	Department of Natural Resources and Environment
DPIU	District Project Implementation Unit
DWRM	Department of Water Resources Management (MoNRE)
FR	For Reference
GoV	Government of Vietnam
HRD	Human Resources Development
ICP	Indicative Cooperation Program
IEC	Information, Education, Communication
IRBM	Integrated River Basin Management
IS	Identification Study
IWRM	Integrated Water Resources Management
JSC	Join Stock Company
LWR	Law on Water Resources
MARD	Ministry of Agriculture and Rural Development
MDG	Millennium Development Goals
MPI	Ministry of Planning and Investment
MoC	Ministry of Construction
MoNRE	Ministry of Natural Resources and Environment
NE	National Execution
NTP	National Target Program
NWRC	National Water Resources Council
NWRS	National Water Resources Strategy
PCERWASS	Provincial Center for Rural Water Supply and Sanitation
PPC	Provincial People's Committee
PPMU	Provincial Project Management Unit
PPP	Public private partnership
PWMMP	Provincial Waste Management Master Plan
SC	Steering Committee
SEDP	Socio-Economic Development Plan
SWMPD	Solid Waste master Plans of the 4 districts
TNA	Training Needs Assessment
TOR	Terms of Reference
USSAP	Unified Sanitation Strategy and Action Plan
URENCO	Urban Environment Companies
VDG	Vietnamese Development Goals
VND	Vietnamese Dong
WB	World Bank
WSSP	Water Supply and Sanitation Program in Binh Dinh Province
WR	Water Resources

## **EXECUTIVE SUMMARY**

In recent years Vietnam is experiencing fast socio-economic development, rapid urbanization and industrialization. As a result, the environment, including traditional water resources for rural and urban inhabitants, are under intense pressure: 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. In parallel, production of domestic and industrial solid waste is booming, even in rural areas, while solid waste collection and treatment are not efficient.

In such a context, during the Indicative Cooperation Program between Belgium and Vietnam signed the 8th of March 2007 for the 2007-2010 period, Belgium Government manifested its interest in supporting some districts of the coastal province of Binh Dinh, located in the central part of Vietnam, that is presently facing difficulties in the water supply and solid waste management.

The "Water Supply and Sanitation Program in Binh Dinh Province" (WSSP) is aiming at improving the environmental quality and the quality of life of the inhabitants of the targeted district and communes of Binh Dinh province by investing in proper cost-efficient infrastructures. Furthermore, as stressed by the institutional analysis as well as the experience of other donors in the field, capacity building and awareness raising activities were added to the program. They should reinforce the local capacities in planning, management, operation and maintenance of the schemes, with exposure to alternative solutions, while developing a long-term strategy in awareness raising with the support of some pilot activities.

The donors experimenting national execution modalities have also stressed the importance of capacity building. This mode of execution will be endorsed by the present program, while using a Commercial Bank with control of the Treasury. External audits will be conducted every six months during the first 18 months, and upon positive evaluation, will be annual. The validity of the Specific Agreement is extended up to 6 years in order to cover the risk of delays.

Considering the remarks of the basic designs review and the important inflation that Vietnam is presently facing, the formulation mission stressed the fact that the total available budget of the program will not be sufficient to cover all the foreseen investment projects. Priority should be made at the earliest in order to limit population expectations. Selection among the listed investment projects will be made based on the cost estimates of the detail designs, the results of solid waste master plans and on the list of priorities defined in the TFF. In order to be in line with its objectives, at least one water scheme and one solid waste landfill should be considered in the present program. Due to this lack of fund, Belgium decided mid-October to provide an additional envelope of 2.5 million euros to the program.

## **ANALYTICAL RECORD OF THE INTERVENTION**

DGDC number	3004523	Navision code BTC	VIE0703501
Partner institution	MPI, MARD, Binh Dinh PPC, Phu Cat, An Nhon, Tay Son, Phu My, Hoai Nhon DPCs		
Specific Agreement Duration	72 months	Project duration	60 months
Estimated starting date of intervention	March 2009		
Partner's contribution	1,450,000 €		
Belgian contribution	7,500,000 €		
Overall Objective	To contribute to poverty reduction, enhancing public health and improving living conditions and quality of life of the people of the target areas		
Specific Objective	To improve the quality of life of the population of some communes of 6 districts of Binh Dinh (Phu Cat, Phu My, Tuy Phuoc, Tay Son, An Nhon, and Hoai Nhon districts) through the provision of efficient facilities for both irrigation and drinking water as well as solid waste management, including appropriate capacity building, awareness raising and operation and maintenance modalities.		
Results	<ul style="list-style-type: none"> <li>• Agencies in charge of planning, design and implementation of the rural water schemes and the solid waste management systems are reinforced.</li> <li>• A strategy to raise awareness on the use of safe drinking water and on resource preservation as well as on environment protection through proper collection and treatment of solid waste is set up.</li> <li>• Cost efficient rural water systems designed for both flooding and dry seasons, for 5 + 2 communes are implemented, while, possibly, Hoc Mon dam, its spillway and the related irrigation canals are rehabilitated, with efficient operation &amp; maintenance modalities and secured funding.</li> <li>• Environmental friendly infrastructures to treat solid waste for the target areas of part or all 3 target districts (Tay Son, Phu My and Hoai Nhon districts) are provided with efficient operation &amp; maintenance modalities and secured funding.</li> </ul>		

# 1. SITUATION ANALYSIS

## 1.1 INTRODUCTION

The project fits in the Indicative Cooperation Program between Belgium and Vietnam signed the 8<sup>th</sup> of March 2007 for the 2007-2010 period, which is focusing on two major sectors: capacity building, institutional strengthening and support for water and sanitation programs. Both sectors are of major concern, considering on the one hand the important socio-economic development and institutional transformation Vietnam has been experiencing since Doi Moi, on the other hand, the water and sanitation difficulties the country is facing due to the rapid transformation of the country and the climate changes.

In that respect, the Belgium Government manifested its interest in supporting some districts of the coastal province of Binh Dinh, located in the central part of Vietnam that is presently facing difficulties in the water supply and solid waste management sectors.

## 1.2 INSTITUTIONAL ARRANGEMENTS

Thanks to the decentralization process, a lot of responsibilities in the fields of rural water and sanitation are in the hands of the Provincial authorities, as described in the previous chapters. PPC and DPCs have the overall political responsibility on water and sanitation issues, while they delegate the technical aspects to specific agencies. These political bodies should apply within their geographical boundaries the policies, regulations, standards and norms defined at the central level. DPI assists the PPC/DPCs in investment planning, while DoC is ensuring the correctness of the technical designs and through construction supervision, the actual realization of the works.

PCERWASS, under the DARD, is playing a key role during the investment phase of the water projects while either the community or WSCs are involved in the O & M phase. Mass organisations, such as the Women Union, are mainly involved in the awareness raising campaigns.

Regarding solid waste, URENCO is mainly in charge of the management, collection and treatment of the waste, although PPP are getting more and more involved in the operation phase.

The following table presents the responsibilities of central ministries and their related departments at provincial level in both sectors.

<b>Policy Aspect</b>	<b>Central Government</b>	<b>Provincial Government</b>
Investment Policy/Planning	Appraise large scale investments (category A) and issue investment licenses (MPI with input from line ministries (MoC, MoF) on technical and financial aspects and from provincial authorities	<ul style="list-style-type: none"><li>• People's Committee can approve smaller investment projects (category B &amp; C). Seek inputs from DoC, DoF;</li><li>• Allocates budget to support WSC/S&amp;DC/URENCO's activities;</li><li>• Decides on water and wastewater tariffs based on approval of the Provincial People's Council and within national tariff framework.</li><li>• DPI is planning the investment projects</li></ul>

Technical Decisions and Oversight	<ul style="list-style-type: none"> <li>Appraise technical aspects of larger investment projects (MoC)</li> </ul>	<ul style="list-style-type: none"> <li>DoC/ DARD appraise technical design for category B and C projects;</li> <li>monitors project implementation;</li> <li>reviews WSC/S&amp;DC/URENCO 's annual program;</li> <li>monitors WSC/S&amp;DC/URENCO activities</li> </ul>
Tariff Setting	<ul style="list-style-type: none"> <li>Develops tariff framework (MoC/ MoF/ Government Department of Material Pricing - DMP);</li> <li>develops technical/ economic norms (MOC/DMP);</li> <li>sets labor policies and salaries</li> </ul>	<ul style="list-style-type: none"> <li>People's Council approves tariff adjustments. , based on the tariff framework jointly set by ministries. It requests inputs from the Department of Material Pricing, the Department of Finance and the Department of Construction (Urban Public Works)</li> </ul>

The organizations that would be involved with implementing the intended Belgium-funded water and sanitation programs in Binh Dinh province are therefore PPC, DPI, DoC, DARD's pCERWASS, DPCs and their Environment Unit and PIUs, the Provincial Treasury, the Vietnam Women Association, other punctual project entities and, where available, private sector entities.

The rapid assessment revealed a series of points:

- Strong commitment and leadership by PPC and DPI as well as adequate technical knowledge about the matters to be addressed by the program.
- All DPIU's including the pCERWASS PMU demonstrated good technical and financial management skills, a clear view on the objectives of the intended program and a good ability to anticipate potential bottlenecks.
- Experience with implementing foreign-funded projects is generally limited.
- Experience with awareness program is non-existing in the PMU's.
- The pCERWASS PMU has significant construction project implementation experience, while being aware of how it will become increasingly involved in the O & M of rural water schemes.
- The provincial Treasury has experience with foreign funded projects, but payment approval processes could cause delays.

The formulation mission revealed also that there is a significant scope for strengthening the planning and management capacity in both sectors. The different agencies need exposure to alternative techniques and management modalities, on the necessity of proper planning tools and on the importance of environment awareness raising of the citizens. Further more, the review of national execution experience emphasised the importance of capacity building.

## **1.3 LEGAL FRAMEWORK**

### **1.3.1 General water and sanitation legal framework**

Vietnam does not yet have a national clear strategy for the development of rural water supply and the improvement of sanitation conditions. That does, however, not mean that the Government does not give direction to the development of those sectors. On the contrary, as part of its public sector



reform program, during the last decade, the Government of Vietnam has issued a series of laws, decrees and regulations aimed at improving the management of the water and sanitation sectors:

- The Law on Water Resources (LWR) in 1998;
- Orientation for Urban Water Supply Development till 2020, issued in 1998
- Orientation for Urban Drainage and Sanitation Development till 2020, issued in 1999
- The National Rural Water Supply and Sanitation Strategy, promulgated in 2000
- The National Urban Solid Waste Management Strategy, promulgated in 2000
- Government Decree 162/2003 on the regulation of water resource data collection, management and usage in 2003;
- Government Decree 149/2004/ND-CP on licensing for the exploitation and usage of water resources and the discharge of wastewater into water bodies;
- The Law on Environmental Protection (LEP) issued in 2005;
- Government Decree 67 in 2003 and the revised one in 2007 on environment protection charges for wastewater;
- The national Water Resources Strategy,
- Government Decree 59/CP, issued in 2007 on Solid Waste Management
- Governmental Decree 88/CP, issued in 2007 on Wastewater Management for Urban and Industrial areas
- Government Decree 117/CP, issued in 2007 on Water Supply and
- Various other related government decisions, legal provisions and regulations.

Among this long list of documents, three require a focus:

**Law on Environment Protection:** The Law was passed in 1993 and went into effect in 1994. A revised version passed the National Assembly in 2005. The Law provides the legal basis for the protection of the environment with a view to protecting the health of the people, serving the cause of sustainable development of the country and contributing to the protection of the regional and global environment.

**Law on Water Resource:** The Law on Water Resource was passed in 1998. It provides the legal basis for the management, protection, exploitation and use of the national ground and surface water resources. This Law is currently under revision to cope with new institutional developments in the country and requirements related to the new context of socio-economic development.

The Orientation for **Urban Water Supply Development** (Decision No.63/1998/QĐ-TTg of 18 March 1998) underpins the principle that water is an economic and social good. The implementation of the policy is decentralized to provincial level governments with the MoC providing oversight. The long-term objectives are:

1. 100% of urban population having access to safe water of 120-150 l/capita/day by 2020;
2. Reform the sector including the financial policy;
3. Modernize technology and equipment and enhance human resource development;
4. Mobilize contributions from communities and all sectors of the economy.

Notwithstanding this range of legal instruments to regulate and manage the sector, significant discrepancies and misunderstandings remain due to laws/regulations conflicting with each other leading to unclear distribution of tasks and responsibilities between national level institutions, between national and provincial as well as among provincial institutions in the sector. Also the re-

enforcement of those laws and regulatory documents and putting these into practice is still a sector challenge.

The GoV has issued three key Governmental Decrees in 2007 (on Water Supply, Waste Water and Solid Waste Management). They are mainly policies for governing and developing the sectors; the decrees provide detailed guidelines on technical, financial, managerial, responsibility, investment and other matters related to the sectors.

The main ideas of the decrees and regulations listed above are described in the annexes.

## **1.4 CAPACITY NEEDS ASSESSMENT**

Through discussions with representatives of the partner organizations, needs assessments of the capacities of the different agencies against their expected roles and responsibilities in implementing the program have led preliminary indications such as exposure to innovative sector developments in Vietnam. However, in-depth capacity needs assessment are required for fine-tuning the needs. This is a useful but time consuming exercise that should be done during the program inception phase.

## **1.5 PUBLIC AWARENESS**

Sanitation or environmental concerns are not yet on the mind of the officials in many (district) towns of the country. As a result, no significant budget allocations have been made to improve sanitation conditions. Further more, the review of the Solid waste landfills basic design stressed that the current public awareness was very low, while the support from the public being important for the following reasons:

- to support the waste collectors in carrying out their works and to actively participate to the anti-litter campaigns;
- to push pressure to provide increasingly better quality of solid waste services for improving living and public health standards;
- to cooperate with the collectors' services and become active in improving local cleanliness in public areas;
- to endorse waste separation at source favoring recycling and compost activities.

Therefore efficient awareness raising activities will have to be undertaken aimed at various groups in society before a concerted move towards improving sanitation conditions can be expected in district towns.

## **2. STRATEGIC ORIENTATIONS**

### **2.1 CONTENT OF THE PROGRAM**

Regarding rural water system, the program will address the following challenges:

- The lack of quality water during both dry and rainy season for the inhabitants of Binh Dinh province;
- The difficulty to operate and maintain water and irrigation schemes as well as to insure sustainable financial resources.

Concerning solid waste management, the challenges are as follow:

- The absence of a clear long-term vision on how to manage the collection system and how to treat solid waste;
- The needs for infrastructure equipment for collecting and treating the solid waste, especially in the urban areas;
- The difficulty to set up efficient, comprehensive and cost effective collection system and to provide the required resources to make then running effectively.

The common difficulties of both sectors are:

- The challenge in organizing public awareness campaigns with real impact on the behavior of the citizens and on the planning of the local authorities;
- The lack of knowledge and skills for planning, managing and monitoring among the responsible authorities.

Solving these common difficulties is a prerequisite to an appropriate design as well as the operation and maintenance of the investment projects. They should therefore be considered in first priority, although not having been originally integrated in the identification report.

These issues are all directly supporting the Government's overall strategy in water and sanitation sectors.

## **2.2 OVERALL STRATEGY & AREAS OF INTERVENTION**

### **2.2.1 Rural water supply**

In order to answer to the lack of quality water throughout the year, a rural water system should be implemented targeting the population of the 5 + 2 identified communes in Phu Cat and Tuy Phuoc districts (Cat Thang, Cat Chanh, Cat Tien, Phuoc Thang, Phuoc Hoa, Cat Nhon and Cat Tuong), which are densely populated areas having difficult access to safe drinking water. These two coastal districts are usually flooded during the rainy season. During the dry season, shortage of safe drinking water is also observed. Both Belgian and Vietnamese parties consider this component of the program as a priority.

The Hoc Mon reservoir that belongs to the sub-basin of Nhien stream was completed in 2000, providing irrigation capacity for 104ha of agricultural lands. It is the only irrigation source for My Chau commune area, but remains insufficient to cover all the needs. Leveling-up the dam would

have the advantage of both increasing the reservoir capacities for irrigation purposes during the dry season and better regulating water flow during raining season, while eventually limiting flooding down stream. It could also be a source of safe drinking water for the population of My Chau.

The level of 80 liters per capita per day is foreseen as appropriate for a rural area, while the Vietnamese standards on drinking water quality should be met. On the other hand, the design schemes should follow international standards and be based on the population capacity to pay for the services, while the financial means and the appropriate modalities for O & M made available.

Therefore, three major components are foreseen for this component, awareness raising of the future users and capacity building of the concerned agencies on the one hand, the rural water schemes investment on the other, including definition of proper O & M modalities.

#### **2.2.1.1 Awareness raising**

While the population has presently access to unsafe and irregular sources of water, it will be important to raise awareness on the importance of using drinking water and how to use it, and to be ready to pay for the service provided, including waste water treatment in a longer long-term perspective. The importance of preserving the water resources should also be emphasized especially in a rural region that is extensively using fertilizers, illegally dumping waste, while facing a rapid industrialization.

#### **2.2.1.2 Capacity building**

It is critical to enhance the local capacities on planning, managing and maintaining rural water facilities. After in-depth assessment survey to be conducted during the inception phase of the program, the capacity building activities should cover at least the following issues:

- Guidance and coordination on the preparation of a water management master plan of the province that should be seen as a strategic tool for managing and preserving the local resources that should be carried out by the BTC project VIE 07 034 11 "Capacity building in assessing and managing water resources program";
- Exposure to innovative sector development in Vietnam and in the region, including on management modalities by alternative institutions set up, such as Joint Stock Company;
- Training on site supervision modalities;
- Support to the preparation of the operation and maintenance modalities of the water system and the costs recovery mechanisms, including survey on the population willingness to pay, the definition in the water tariffs and their modalities;
- Training on the operation and maintenance modalities of the investment projects;
- Support to the development of monitoring and reporting tools and mechanisms of exploitation and operation, service provision and their effectiveness.

Data collection on surface and underground waters through systematic collection, the treatment of information and the water monitoring in terms of quality and quantity as well as data management and mapping are other important issues. As the BTC project VIE 07 034 11 is focusing on them, they have not been integrated in the present program. However, coordination and co-operation among the two programs should be ensured.

The capacity building and awareness raising activities of the rural water sub-project should be made in coordination with other donors' interventions, while taking into account the lessons learnt from past and ongoing projects.

The following table briefly lists the departments that should benefit from the different types of training.

Data collection	PPC, DPC, DoNRE
Master plan preparation	PPC, DPC, DARD, DoC, DPI, pCERWASS
Exposure to innovative sector development	PPC, DPC, DARD, DoC, DPI, pCERWASS, PMU
Site supervision	DARD, DoC, pCERWASS, PMU
Operation & maintenance modalities assistance	pCERWASS, Private sector, commune
Monitoring & reporting tools	pCERWASS, Private sector, commune

### 2.2.1.3 Rural water supply

A basic design of the water supply and sanitation in Phu Cat district and the rehabilitation of Hoc Mon reservoir in Phu My district was approved in February 2008 and was reviewed in May 2008. The technical and management recommendations and remarks made in this report<sup>1</sup> should be integrated in the detail design of both projects. This detail design would then have to be reviewed in detail to get the non-objection from BTC. The eventual remarks will be integrated before the start of the Vietnamese administration approval process. It is only when the detail design will be provided that it will be decided if the Hoc Mon reservoir rehabilitation will be financed by the present program.

A focus will be given on the revision of the Relocation Action Plan to guarantee that the Project Affected People will receive decent compensation. This document should clarify the relocation and compensation modalities, while making them consistent with donors' policy in this field.

Based on the basic design, the Phu Cat project will include the following items:

- 4 deep boreholes located along the Con River in Cat Thon commune, at a distance of around 20m from the riverside. They would be in operation during around 15 hours per day, providing an estimated amount of 5,500m<sup>3</sup>;
- Transmission pipeline to conduct the water from the wells to the treatment plant;
- Water treatment plant with aeration facility, sediment, rapid filtration and storage tanks with pumping station;
- A water network including:
  - Transmission, distribution and service pipe systems with a total length of more than 100km;
  - House connections and pipes for more than 14,641 households (10,689 HH for the first 5 communes and 3,952 HH for both added ones).
- The definition of the households monthly contribution;
- The set up of the operation and maintenance modalities.

The borehole and its related equipment (treatment plant, electric supply...) should be designed for the 7 communes. From there, a separate pipe will provide water to Cat Nhon commune, while the distribution pipe for Cat Tuong commune could be connected to the main transmission pipe on a later stage, depending on the availability of funds. Therefore, the population of both additional communes has to be considered in the detail design of Phu Cat water scheme although the connection network of these 2 communes would be phased. Considering the increase of the

---

<sup>1</sup> SECO, "Review report of the basic design documents of the water supply and irrigation projects in Phu Cat and Phu My districts, Binh Dinh Province", Hanoi, June 2008

Belgium contribution, it is most likely that both additional communes will be integrated directly in the implementation stage.

The basic design cost estimates was of 52 billions VND with the following approximate break down:

- Land acquisition, 10 billions
- Borehole, treatment plant, electrical system, 12.7 billions
- Main water pipe, 14 billions
- Secondary network, 10.2 billions
- Connection to HH, 5.2 billions

Additional 17 billions should be considered for the two added communes. The basic design review estimated that such investment, covering the 7 communes could be as high as 99 billion VND, based on WB similar water schemes. According to the review team, the O & M costs would be of around 3.5 billion VND per year.

The basic design of the Hoc Mon reservoir considered the following items:

- The existing main dam will be raised by 3m, increasing the storage capacity of the reservoir up to 2,786 million cubic meters;
- The existing auxiliary dam will be rehabilitated;
- A new spillway and a concrete facility to disperse and the reduce the spill water load power;
- The rehabilitation, dredging and widening of existing canal and 83 works to convey the additional water flow.

The original cost estimate of the Hoc Mon reservoir was of 16.4 billion VND, a figure that should be around 24 billion VND, according to the basic design review exercise.

The dam rehabilitation could also be an opportunity to provide safe drinking water to the My Chau commune, taking the raw water from the Hoc Mon dam. This would include:

- A raw water pumping station and water pipeline;
- A water treatment plant;
- A clean water storage;
- Transmission and distribution pipelines.

A survey defining the population willingness to pay for the services should be conducted while a proper economic study should be made to evaluate the financial means required for optimal O & M modalities, including water tariffs. Based on both results, a strategy should be defined by PPC and the related DPCs in coordination with the program to define water fees and their evolution through time as well as alternative sources of financing.

### **2.2.2 Solid waste management**

The most populated areas of the province, including the fast growing urban areas, will face major environmental problems in a near future if the management of the solid waste collection is not improved.

In order to do so, four key activities are identified in this field: (i) the definition of a District Solid Waste Management Plan in the 4 originally targeted districts, while reviewing the global strategy for solid waste collection in the Province; (ii) the capacity building of the concerned agencies; (iii) the definition of an awareness raising strategy targeting the population; and (iv) investments in waste treatment, with a focus on the construction of landfills and on the operation and maintenance modalities.

#### **2.2.2.1 Solid Waste Management Plans for the districts, and reviewing the Global strategy on solid waste for Binh Dinh province**

In order to ensure the integration and sustainability of the solid waste project component, comprehensive, synchronous and coordinated measures should be applied, including management institution, human resource reinforcement for operation and maintenance, costs recovery guaranteeing the financial sustainability of exploitation, coherent management of the waste collection, recycling and treatment as well as efficient awareness raising campaigns based on socio-economic surveys. These issues will need to be covered by a Province Solid Waste Master Plan (PSWMP) to be approved in October 2008. This PSWMP should be reviewed in order to make sure it will lead to the definition of a coherent strategy for the Province and the targeted districts.

Such a review, based on international standards, would consider grouping some districts around the same landfill, while taking into account costs efficiency, accessibility, transport distance and the target population. This exercise could be a good capacity building activity for both the technicians and the decision makers. Objective and measurable criteria could help them overcoming the NIMBY syndrome (No In My Back Yard) that lead to the 'one district – one landfill' policy. These administrative boundaries should anyhow in mid-term vanish, as the recent national initiative for an increased decentralization process should give higher power to both the communes and the Province levels.

The planning exercise could also stress the importance of recycling and of developing alternative solutions for the rural areas, such as composting.

Such a study, to be carried out during the program inception phase, should define in particular the responsibilities and duties of the different agencies, including eventually the private sector, in charge of the management of the waste collection and the landfills, as well as the modalities to ensure their coordination, while guaranteeing cost recovery and sustainable operation of the system. It should also set-up the appropriate mechanisms for monitoring and reporting the solid waste management, the service provision and its effectiveness, including surveys on the users' satisfaction, their socio-economic and environmental impacts as well as on the road infrastructures.

These SWMPs and the review of the provincial master plan, that should include coherent strategic prioritization of the interventions with plausible budgeting, should be conducted at the start of the project. The project will adjust its foreseen activities as much as possible in line with the SWMPs. On a second step, the detail design of the most appropriate landfills will be conducted, being financed by the present program. Based on the results of the 4 DSWMP and the detail design costs estimates, the SC will decide which landfill will be included in the program, based on the available budget.

#### **2.2.2.2 Awareness raising strategy**

As the collection system remains partial, covering around 60% of the targeted households, it could be anticipated that a lot of efforts will have to be made in convincing the population to use the

collection system and to pay for the services. Full households' coverage is not only essential to improve the environment conditions but also to justify the investment of the landfills.

So far, different agencies and organizations are organizing awareness raising activities, often in the form of a day-event. Experience in Vietnam and abroad have demonstrated that to be effective, awareness campaigns should be professional, made on a regular basis, being well targeted, while using different media in a dynamic way. This requires a comprehensive communication approach. The set-up of a comprehensive strategy coordinating the present and up-coming initiatives should therefore be set-up. Pilot activities in the four originally foreseen districts could also be developed in order to show to the related agencies the interest of alternative ways of communication as part of a capacity building initiative and to evaluate their impact.

The program should also define alternative activities that should accompany the awareness campaigns as well as clarifying the role of the different actors, including the private sector, the communities, the mass organizations, local NGOs and the related authorities, while coordinating their interventions.

The objectives of public awareness campaigns should be as follow:

- informing the public of requirements for operating new solid waste management system, with extended collection and sanitary land filling;
- Gaining public support for solid waste management improvement initiatives;
- Establishing routes and schedules for the implementation of steps towards sustainable waste management;
- Information on operational and logistic issues, implication of improper solid waste management;
- Favoring waste separation at source for both recycling and composting activities;
- Developing measures, with the support of the ward and cells authorities and contracting mechanisms, enforcing the households to use the collection system.

### **2.2.2.3 Capacity building of the related agencies**

The agencies in charge of the future solid waste treatment facilities should be trained in organizing their tasks in a comprehensive way in coordination with the collection system, as well as in planning the up-coming investments in terms of equipment and infrastructure on operation and maintenance. The staff should also gain the appropriate skills for operating and maintaining the landfill and its equipments, dealing with informal recycling and scavengers activities and on the ways of limiting the socio-economic and environmental side effects of the landfills.

All the agencies involved in solid waste management should have access to the lessons learnt of the best practices in terms of collection systems, recycling, cooperation with the private sector, awareness raising, both in Vietnam and in the region.

The following table briefly lists the departments that should benefit from the different types of training.

Training on global solid waste strategy	PPC, DPC, DoNRE, URENCO
Training in investment planning	PPC, DPI, URENCO
Exposure to innovative sector development	PPC, URENCO
Site supervision	URENCO
Operation & maintenance modalities assistance	URENCO, private sector



#### **2.2.2.4 Landfill construction**

Among the different investments required for setting up an efficient solid waste management system, the construction of proper landfills is a priority for the province in order to both preserve the environment and improve the sanitation conditions of the urban areas. The provision of the required equipment should be ensured by the agency in charge of running each landfill.

The SWMP will assess the feasibility of handing over this task to the private sector. If the potentialities are demonstrated by an in-depth economic study, DPC will be in charge of writing terms of references and launching a tendering procedure to select the private companies that will run the landfills. Tendering documents together with the contract documents will be subjected to the BTC non-objection.

The table below presents some general information of the landfills.

Dist.	Loc.	Total size (ha)	Min size (ha)	Access road (km)	Target pop		Waste (T/day)		Characteristics
					2010	2025	2010	2025	
<b>An Nhon</b>	Nam Tuong 2 hamlet, Nhon Tan commune	30	3.7	3	69,759	82,811	31.33	37.36	300m from nearest HH on rice fields, Surrounded by 3 mountains Bottom Elevation of lf 29 -35m 10km from Tay Son New side subjected to flooding. Some scavengers on the existing site
<b>Tay Son</b>	Phu An hamlet, Tay Xuan commune	12	1.8	2.5	57,365	68,098	22.95	27.24	3km from closest HH On the slope of a mountain, forest area Bottom elevation:42 -44m Better geological conditions than An Nhon Some scavengers at the existing site that will be the one of the foreseen landfill
<b>Phu My</b>	Phu Nhieu hamlet, My Phong commune	30	0.6	1	62,808	74,560	19.9	33.62	New landfill will be located 1km from the closest HH Located on farming garden, not far from the sea Bottom Elevation: 20 -23m On the slope of a mountain 25km from Hoai Nhon landfill No scavengers at existing site that will be the one of the foreseen landfill
<b>Hoai Nhon</b>	Lai Duc hamlet, Hoai Duc commune	25	3.2	1.5	49,749	59,057	25.12	29.82	Localisation modified, due to the decision of building an industrial zone on the initial site Located in forest area, with a mountain on one side Elevation of bottom of lf 23 -24m Some scavengers at the present site.

The Basic design of the four proposed landfills was conducted in 2008. These studies are based on a series of criteria, among which:

- Estimated amount of solid waste generated in the beneficiary areas counting from year 2010 for a period of 12 years for Phase I;
- Calculation based on the estimated population by 2025;
- Estimated amount of waste of 0.45kg/person/day for Category IV urban centers;
- Collection of 80% of the HH of the beneficiary urban areas;
- Density of the waste at the landfill varying from 600 to 900/m<sup>3</sup>, with an average height of 9m;
- 1.2 coefficient applied for the calculation of the landfill, including fencing and auxiliary facilities;
- Approximated investment of 3 billion VND/ha.

The selection of the sites was based on the following assumptions:

- One small scale landfill per district adapted to the size of their adjacent towns and communes;
- Distance to the nearest residential area is around 3km in the major wind direction but not located too far from the district center (less than 8km);
- Located nearby Highway n°1 to ease their access;
- Good geological conditions with low absorption;
- Green land available for expansion.

The different criteria on which these basic designs are based, as well as their outcomes have been reviewed in August 2008<sup>2</sup>. This study lead to a series of remarks related to the localization, calculation criteria, socio-economic and environmental impacts, size, type of equipment, cost estimates and the design concepts. These comments will have to be taken into account during the detail design phase prior the non-objection by BTC that should come before the start of the Vietnamese administrative approval process. It should be mentioned that international standards are considering landfill below than 2.4ha as un-economical to operate. It is therefore highly recommended to increase the coverage area of the landfill in order to collect more daily waste in order to guarantee the full use of the equipment and the staff.

The original cost estimates for the four landfills of 96 billions VND has been revised up to 100.7 Billions VND by the design review.

Knowing this and the fact An Nhon landfill could be subjected to flooding, while being less than 10km from Tay Son, the formulation mission considered this landfill as not appropriate, while recommending constructing a larger landfill in Tay Son for both districts. It was therefore decided to drop out the landfill of An Nhon from the list of potential projects to be financed by the Belgian contribution.

Based on the results of these master plans and the costs estimates of the Detail Design, the Steering Committee will select from the remaining three landfills the ones to be financed in the framework of the present program, while considering their size and their coverage areas based on international standards as a guarantee of costs efficiency.

---

<sup>2</sup> EP&T, "Review of the feasibility Studies for the Project 'Solid Waste Treatment in four districts in Binh Dinh province – VIE0703501", 4 September 2008

Land acquisition and compensation are under the responsibility of the local authorities that will take all measures to guarantee that the land will be made available on time for the good execution of the sub-projects. The program will give a focus on the revision of the Relocation Action Plan to guarantee that the Project Affected People will receive decent compensation for their loss and that their future income will not be affected. This document should clarify the relocation and compensation modalities.

## **3. INTERVENTION FRAMEWORK**

### **3.1 OVERALL OBJECTIVE**

The overall objective of the Project is to contribute to poverty reduction, enhancing public health and improving living conditions and quality of life for the people in the project area.

### **3.2 SPECIFIC OBJECTIVE**

The specific objective of the project is as follow:

Improve the quality of life of the population of some communes of 6 districts of Binh Dinh (Phu Cat, Phu My, Tuy Phuoc, Tay Son, An Nhon, and Hoai Nhon districts) through the provision of efficient facilities for both irrigation and drinking water as well as solid waste management, including appropriate capacity building, awareness raising and operation and maintenance modalities.

### **3.3 EXPECTED RESULTS AND ACTIVITIES**

#### **3.3.1 Result 1: Capacity building of the related agencies**

**“All the related agencies in charge of the planning, design, implementation and management of the rural water schemes and the solid waste management systems of the province are reinforced through adapted trainings”.**

The capacity building addresses a number of key features that should impact on the effectiveness of managing the provincial water resources and solid waste.

##### **3.3.1.1 Rural water supply**

It is crucial at the provincial level to develop a comprehensive assessment of the water resources, to set-up efficient database, to guarantee the sustainability of the resources and their quality, while being aware of innovation within the sector in terms of design, management and operation modalities. The following activities should be performed:

- Ensure the coordination with the BTC project "Capacity building in assessing and managing water resources program" in order to collect and monitor the available data at the provincial level in a systemic way, as an exercise for the redaction of an up-coming Master Plan for water management;
- Establish effective institutional arrangements and other necessary cooperation with the different agencies involved in the sector within the province;
- Conduct detailed training needs assessment and prepare a comprehensive staff training;
- Organize seminars and study tours in Vietnam and in the region related to the good management practice on rural water supply issues, including awareness raising, innovative design, technologies and operating modalities, involvement of the private sector, including exposure to Joint Stock Company and Community management;
- Train the related agency in basic supervisory of water system construction and reporting skills;
- Train the owner agencies in water quality control & monitoring, operation & maintenance.

### **3.3.1.2 Solid waste management**

A lot of experience needs to be gained on the solid waste issue by the local authorities. A PSWMP review and the development of 4 DSWMP will be supported by the Belgium study fund in a coherent and comprehensive way. The different output related to solid waste management of the present project should be in line with this up-coming document, including the capacity buildings activities. The related activities should be as follow:

- Assessment of the most operative and efficient agencies for operation and maintenance of the investment projects;
- Guidance on revision of a master plan on the management of solid waste for the province and the setting up of Solid Waste Management Plan for the 4 related districts, and based on their outcomes, adjust the activities of the program;
- Conduct detailed training needs assessment and prepare a comprehensive staff training;
- Train related agencies in basic supervisory of landfill construction and reporting skills;
- Organize seminars and study tours in Vietnam and in the region related to the good management practice on solid waste issues, including awareness raising, collection, recycling, treatment of solid waste, involvement of the private sector, service delivery and landfill design and management;
- Train the staff in charge of the operation and maintenance of the investment projects, including follow-up training in operation.

### **3.3.2 Result 2: Awareness raising**

**“A strategy is developed to raise awareness on the use of safe drinking water and on the preservation of the water resource as well as on the importance of protecting the environment with proper recycling, disposal and treatment of domestic solid waste”.**

Environmental improvement, good hygiene practice and water resource preservation require adapted population behavior. This necessitates a long-term and efficient communication strategy. The following activities should be developed in the framework of the present project:

- Assess the agencies and different local initiatives involved in awareness raising issues (Women Association, Youth Association, Ministry of Education, DoNRE, ONGs and private initiatives...) to insure their coordination while favoring networking with different existing initiatives in Vietnam and in the region for exchanges of good practices;
- Develop adapted awareness raising strategy and guidelines related to both water resources and solid waste with short, medium and long-term actions plan, with regular evaluation, targeting the different population groups as well as related agencies through different media in an coordinated way;
- Propose alternative activities to accompanying the awareness raising campaigns to strengthen their effect, including coordinated action plans including all the actors involved;
- Training the staff of the selected agencies in the strategy and guidelines;
- Pilot projects activities targeting the beneficiaries of the infrastructure investments of the projects and evaluation; including guiding water users with social Policy Bank. These pilot activities should provide general messages on the importance of preserving the environment and adopting hygienic habits, while giving a focus either on water issues and/or on solid waste management through separate messages.

### **3.3.3 Result 3: Rural water system**

**"Cost efficient rural water systems designed for both flooding and dry seasons, for 5 + 2 communes are implemented, while, possibly, Hoc Mon dam, its spillway and the related irrigation canals are rehabilitated, with efficient operation & maintenance modalities and secured funding."**

The core of the project is the provision of cost-efficient infrastructures, including a rural water system to the 5+2 target communes at the level of 80 liters per capita per day, based on the Vietnamese standards on drinking water quality as well as the international standards and good practices. This project will be phased according to fund availability, priority being given to the original 5 communes.

If the budget is sufficient, the rehabilitation of the Hoc Mon reservoir will also be part of the program, with the eventual inclusion of the My Chau drinking water scheme.

Further more, in order to guarantee the sustainability of the infrastructure investments, cost effective management tools should be provided to the implemented schemes, while assessing the most adapted modalities of operation and maintenance.

This result will cover the following activities:

- Definition of the responsibility for the good execution of the project during design, and construction of the water schemes, while guarantying the availability of all required resources;
- Appraisal of the detail design of both water schemes, based on the review of the basic design, leading to the non-objection of BTC before the start of the approval procedure by the Vietnamese authority;
- Bidding procedure, of the water scheme(s) selected by the Steering Committee, following the Vietnamese procurement rules;
- Assisting both pCERWASS and DARD in site supervision of the works, with a responsibility of good results;
- Defining the most appropriate institutional set up for the O & M for each implemented scheme, with their modalities in accordance with the Vietnamese law, insuring environmental protection and cost recovery;
- Handover of the water scheme(s) to the designated owner;
- Coordination with the Social Policy bank to make the loans for the households water connection affordable and accessible on time;
- Set-up monitoring and reporting tools and mechanisms for the operation and maintenance, service provision and effectiveness of the schemes;
- After a survey defining the population willingness to pay for the services, provide guidance in the definition of the cost recovery mechanisms, as well as the consolidation of other financial sources to guarantee the projects sustainability.

### **3.3.4 Result 4: Solid waste treatment schemes**

**"Proper infrastructures on basis of District Master Plans on solid waste management are provided for the treatment of solid waste for the target areas of all or part of the 3 selected districts (Tay Son, Phu My and Hoai Nhon districts) with the setting up of proper operation and maintenance modalities, including availability of funds to operate and maintain the schemes in good condition".**

Considering the inflation that is now affecting Vietnam and the region, priority has to be given in the execution of the landfills and their equipment. This selection will be based on the results of the DSWMP and the cost estimates of the detail design, while considering that the landfill of An Nhon was dropped out of the program.

Similarly to the water investment component the activities will be as follow:

- Assistance to the revision of the PSWMP and the development of 4 DSWMP in a coherent and integrated way, following international standards, the landfill of An Nhon being excluded from the implementation phase;
- Definition of the responsibility for the good execution of the project during design, and construction of the landfills, while guarantying the availability of all required resources;
- Follow-up and revision of the detail designs leading to the non-objection of BTC before starting the approval procedure by the Vietnamese authority;
- Bidding procedure of the selected landfills, following the Vietnamese procurement rules;
- Assisting DPC PMUs in site supervision of the works, with a responsibility of good results;
- Assisting the local authorities to define the most efficient institutional arrangement to manage the schemes guaranteeing quality services;
- Handover of the landfills to the designated owner;
- Defining the most appropriate institutional set up for the O & M, with their modalities in accordance with the Vietnamese law, insuring environmental protection and cost recovery;
- Set-up monitoring and reporting tools and mechanisms for the operation and maintenance, service provision and effectiveness of the schemes;
- After a survey defining the population willingness to pay for the services, provide guidance in the definition of the cost recovery mechanisms, including solid waste collection tariffs as well as the consolidation of other financial sources to guarantee the projects sustainability.

It is assumed that private sector operators will finance operation and maintenance equipment for the landfills as well as for the collection and transportation of the solid waste. The scope of the solid waste management services, the level of fees that households are ready to pay and the fee collection regulations, which DPC will put in place, will have to be carefully assessed by the DPC with the assistance of the PPMU. The Terms of References to select the private companies in charge of running and maintaining the landfills as well as the contract will be reviewed by the PPMU.

## **3.4 INDICATORS AND MEANS OF VERIFICATION**

The indicators and means of verification can be found in the logical framework.

## **3.5 DESCRIPTION OF BENEFICIARIES**

### **3.5.1 Rural water supply project in Phu Cat district**

Beneficiaries of the sub-project include the inhabitants of the 5 communes of Cat Thuang, Cat Chanh, Cat Tien (Phu Cat district), Phuoc Thang and Phuoc Hoa (Tuy Phuoc district) initially identified and the ones of Cat Nhon and Cat Tuong, the water scheme going through both communes. These two communes will be integrated in the design of the scheme but the implementation of their related secondary network will be phased and executed through other sources of funding. The present populations of the five first communes are of 54,076 people, 62,460 being expected for 2020. The ones of the 2 added communes are of 18,575 and will be of 21,691 in 2020.



The total foreseen number of beneficiaries with 2007 figures is therefore of 72,651 and of 84,151 by 2020. The proportion of poor households in this area accounts for around 17%.

Beneficiaries of the Hoc Mon irrigation sub-project include all the inhabitants of My Chau and My Duc communes (Phu My district), with a total population of 18,162 at present and around 20,000 in 2020. The total area benefiting from higher water for irrigation is of 262ha. This will bring an economic value of some 8 billion VND annually from agricultural activities. The population of My Chau that will benefit from the water scheme to be connected to the dam is of 9,984 at present and is estimated to be around 11,000 in 2015.

The agencies dealing with rural water supply will also benefit from the program. They are: DoC, DARD, DPI, DoNRE, PPC, DPC, and pCERWASS.

### **3.5.2 Solid waste component**

Beneficiaries of the solid waste management sub-project in the three targeted districts include all the residents and the related institutions of the following localities:

- An Nhon district:
  - Binh Dinh town, Dap Da town
  - Nhon Thanh, Nhon Hung, Nhon Loc, Nhon Hoa, Nhon Tan and Nhon Tho communes
- Tay Son district:
  - Phu Phong town
  - Tay Phu, Tay Xuan and Binh Nghi communes
- Phu My district:
  - Binh Duong town, Phu My town
  - Deo Nhong residential cluster
- Hoai Nhon district:
  - Bong Son town
  - Hoai Duc, Hoai My, Hoai Huong, Hoai Tan and Hoai Xuan communes.

The population of An Nhon district remains beneficiaries of the project, as their should be part of the coverage area of the landfill of Tay Son. The estimated total number of beneficiaries in 2010 would be of 239,681 people, 284,526 being expected for 2025, based on an average growth of 1.1%.

The targeted towns and communes located along Highway N°1 present higher population density than the rest of Binh Dinh province. According to the authority provisions, some of the selected towns will become provincial town in a near future, such as Binh Dinh town in 2010, Bong Son by 2015, Phu Phong, Phu My and Binh Duong before 2020, while some communes will get the town status. Their lack of water and efficient waste collection system will therefore become a major concern in the future.

The agencies dealing with solid waste management will also benefit from the program. They are: DoC, DARD, DPI, DoNRE, PPC, DPC, URENCO, and District PMUs.

## 3.6 SUB-PROJECTS SELECTION

### 3.6.1 Budget constraints

The following table presents the cost estimates of the different proposed sub-projects and their price revision by the related reviews.

Billion VND	Basic design cost estimates	Review
Phu Cat water network for 5 communes	52	99
Hoc Mon reservoir rehabilitation	16	24
4 landfills	96.4	100.7
<b>Total</b>	<b>164.4</b>	<b>223.7</b>

The 2 extra communes of Phu Cat network that should be included in the detail design are not considered here, as not originally included in the program proposal. Beside these investment costs, the initial agreement was to allocate 20 billion VND to capacity building and awareness raising. This amount has been increased up to 29.1 billion VND during the formulation mission, including the program general means.

Put together, these figures makes a total of 193.5 billion VND, equal to 8.4 million euros, while the total original available budget of the program being of 6.45 million euros. This demonstrates that even when considering the lowest cost estimates, the program lacked of a minimum of 1.95 million euros to achieve all the expected sub-projects.

Further more, considering the strong inflation that is presently facing Vietnam and the lack of precision in the basic design of the different investment projects, it could be easily anticipated that this lack of funds will be even higher. Therefore, the Belgian government decided to increase its contribution up to 7.5 million euros, while requesting to drop out the landfill of An Nhon; the construction of this landfill being questioned on a technical point of view. This increase of funds should allow the program to conduct the required studies in a professional manner, while sizing the landfill according to the real needs and considering the O & M cost efficiency criteria.

### 3.6.2 Selection criteria

Despite the budget increase, priorities might have to be given by the Steering Committee, when more precise costs estimates being known thanks to the detail design of the different sub-projects. Both parties agreed to give the highest priority to the rural water supply component of Phu Cat. On the other hand, in order to keep the balance between water and sanitation sectors that are part of the present program, at least one project of each sector should be financed. Other objective criteria should be considered such as follow:

- The cost-efficiency of the investment projects;
- The ratio between the investment costs and the total number of beneficiaries - the selected projects having the lowest investment costs per beneficiaries;
- Respect of the international standards in terms of planning and design;
- Positive EIA and socio-economic analysis - the projects presenting the lowest impact/risks on both the environment and socio-economy being selected;

- The sustainability of the investment in terms of O & M and cost recovery - projects presenting the lowest O & M running costs, while having consolidated all the sources of funding should be considered.

The detail design of the different sub-projects should cover these issues with standardized calculation norms in order to facilitate the comparison exercise.

## **4. RESOURCES**

### **4.1 FINANCIAL RESOURCES**

The Vietnamese Government will exempt all goods, equipment and services purchased for the program from all custom duties and taxation.

The Value of the Vietnamese contribution for the capital investment project will be of 33.5 billion VND, equivalent to 1.45 million euros. From this amount, around 650.000 euros should be allocated to rural water supply and 805.000 euros to solid waste investment.

The District People Committees will make the funds available in a timely manner. Furthermore, DPC will cover 100% of the costs for land acquisition and resettlement for all the investment projects, while considering BTC remarks in the redaction of the Resettlement Action Plans.

PPC will bear the cost of the salaries of the Vietnamese personnel involved in the program and premiums in conformity with the Decision 61/2006/DQ-BTC on spending limits applicable to programs/projects using Official Development Assistance capital sources. The project will ensure adherence to the most recent UN-EU guidelines for financing local costs in Development Cooperation with Vietnam.

DPI will provide double salary to the full-time staff of the PPMU and 30% increase to the staff working part-time. Belgium contribution will support the TA, the secretary/translator, as well as the awareness raising and capacity building local specialist.

DPI will provide appropriate office infrastructure and furniture for 6 staff, with room for punctual consultants, and PPC will cover the cost of operation and maintenance of both the rural water and solid waste programs' infrastructure and equipment.

The general means of the program includes the following:

- IT equipment for each member of the PPMU, with consumable and maintenance;
- Office running costs;
- Local transportation (taxi, car rental...);
- Communication (internet, telephone, fax...);
- Other operation costs such as bank fees, advertisement for job recruitment, representation costs...

The costs related to the redaction of the administrative and financial guideline as well as to the recruitment of the personnel of the PPMU are related to the start of the project. They could therefore be made before the signature of the TFF.

DPI will certify the total amount spent in accordance with Vietnamese regulations, before the program ends.

The details of the Belgian and Vietnamese contribution are shown in the following table.

		BUDGET TOTAL	Unit	Rate	Q	Total	Modality		%
							Technical responsibility	Financial	
<b>A</b>		<b>Capacity building</b>				<b>575000</b>	<b>Co-management</b>	<b>Natex.</b>	<b>7,7</b>
A	1	<i>Training needs assessment</i>	lumpsum	10000	1	10000			
	1	<i>1 Training (per diem, location, fees...)</i>	lumpsum	120000	1	120000			
	1	<i>2 Seminar and study tour</i>	lumpsum	70000	1	70000			
	1	<i>3 Guidance on master plan preparation</i>	lumpsum	15000	1	15000			
	1	<i>4 Technical assistance</i>	man/month	15000	24	360000		Regie	
<b>B</b>	<b>1</b>	<b>Awareness raising</b>				<b>390000</b>	<b>Co-management</b>	<b>Natex.</b>	<b>5,2</b>
	1	<i>1 Assessment &amp; coordination</i>	lumpsum	10000	1	10000			
	1	<i>2 Development of an awareness raising strategy</i>	lumpsum	50000	1	50000			
	1	<i>3 Training (per diem, location, fees...)</i>	lumpsum	50000	1	50000			
	1	<i>4 Pilot activities</i>	lumpsum	100000	1	100000			
	1	<i>5 Technical assistance</i>	man/month	15000	12	180000		Regie	
<b>C</b>	<b>1</b>	<b>Rural water systems</b>				<b>3056000</b>	<b>Co-management</b>	<b>Nat.ex.</b>	<b>40,7</b>
	1	<i>1 Definition of responsibilities</i>	lumpsum	10000	1	10000			
	1	<i>2 Review of detail design, including relocation</i>	lumpsum	20000	1	20000			
	1	<i>3 Investment works</i>	lumpsum	2981000	1	2981000			
	1	<i>4 Set-up monitoring &amp; reporting tools</i>	lumpsum	25000	1	25000			
	1	<i>5 Definition of financial means for O &amp; M</i>	lumpsum	20000	1	20000			
<b>D</b>	<b>1</b>	<b>Solid waste</b>				<b>2962000</b>	<b>Co-management</b>	<b>Nat.ex.</b>	<b>39,5</b>
	1	<i>1 Definition of responsibilities</i>	lumpsum	10000	1	10000			
	1	<i>2 DSWMP, detail design &amp; review</i>	lumpsum	250000	1	250000			
	1	<i>3 Investment works</i>	lumpsum	2657000	1	2657000			
	1	<i>4 Set-up monitoring &amp; reporting tools</i>	lumpsum	25000	1	25000			
	1	<i>5 Definition of financial mains for O &amp; M</i>	lumpsum	20000	1	20000			
<b>Z</b>		<b>General means</b>				<b>517000</b>	<b>Co-management</b>	<b>Nat.Ex</b>	<b>6,9</b>
	1	<i>Personnel</i>				<i>223000</i>			
	1	Project director	FR		60				
	1	Financial officer	FR		60				

	1	3	Water & solid waste eng.	FR		60			
	1	4	capacity building & awareness specialist	man/month	800	60	48000		
	1	5	Secretary/translator	man/month	500	60	30000		
	1	6	Consultancy	man/month	15000	9	135000		Regie
	1	7	Admin & financial guideline	lumpsum	10000	1	10000		Regie
	2		<i>Office equipment &amp; functioning</i>				157000		<b>NatEx.</b>
	2	1	IT & equipment	month	12000	1	12000		
	2	2	Office running costs	month	400	60	24000		
	2	3	Local transportation	month	900	60	54000		
	2	4	Communication	lumpsum	400	60	24000		
	2	5	Steering Committee organisation	lumpsum	2500	10	25000		
	2	6	Other operation costs	lumpsum	300	60	18000		
	3		<i>Monitoring &amp; evaluation</i>				137000		<b>Regie</b>
	3	1	Mid-term review	lumpsum	40000	1	40000		
	3	2	External auditing	lumpsum	12000	6	72000		
	3	3	Backstopping	lumpsum	10000	1	10000		
	3	4	Final evaluation	lumpsum	15000	1	15000		
			<b>TOTAL</b>				<b>750000</b>		<b>100</b>

## 4.2 HUMAN RESOURCES

The human resources of the PPMU necessary for this program are shown in the below tables.

<b>Program staff</b>			
<b>Specification</b>	<b>N°</b>	<b>Affected by</b>	<b>Duration (months)</b>
Program director	1	DPI	60
Secretary/translator	1	BTC	60
Water & Solid waste engineer	1	DPI	60 – part-time
Awareness raising & capacity building specialist	1	BTC	60
Financial officer	1	DPI	60
International TA in water & solid waste	1	BTC	36

## 5. IMPLEMENTATION MODALITIES

### 5.1 LEGAL FRAMEWORK AND ADMINISTRATIVE RESPONSIBILITIES

The legal framework for the project is formed by the Specific Agreement, to be signed between the Kingdom of Belgium and the Socialist Republic of Vietnam. The Technical and Financial file (TFF) is part of this Specific Agreement.

The Vietnamese Government designates the **Provincial People's Committee (PPC) of Binh Dinh Province** as the project owner. The PPC is the administrative entity responsible for the implementation and follow-up of the program, and for the Vietnamese contribution to the program. It has also a financial responsibility, having to make sure that the funds are properly used.

The Belgian Government designates the **Directorate-General for Development Cooperation (DGDC)**, represented by the attaché for International Cooperation in Hanoi as the Belgian entity responsible for the Belgian contribution to the program.

The **Belgian Technical Cooperation (BTC)**, represented by the Resident Representative in Hanoi, is the Belgian entity responsible for the implementation and the follow-up of the program.

Although the program follows mainly National Execution modalities, the technical responsibility should be shared between both parties (co-management).

### 5.2 MANAGEMENT, IMPLEMENTATION AND FOLLOW-UP STRUCTURES

#### 5.2.1 Basic Principles

The programme takes into account the “**Hanoi Core Statement on Aid Effectiveness** (June 2005)”, the Vietnamese Decree 131 of 2006 on management and utilization of ODA and the Belgium Plan of Action on Harmonization and Alignment of 2007. The relevant stipulations are:

- Donors use country systems and procedures to the maximum extent possible. Where use of the country system is not feasible, donors establish additional safeguards and measures in ways that strengthen country systems and procedures.
- Donors avoid creating parallel structures for day-to-day management and implementation of aid-financed programs and projects.
- Donors phase out paid incentives for government officials administering aid-financed activities, and do not establish incentives in future activities.

The program structure is integrated in the PPC of Binh Dinh province. The program is guided by the Steering Committee and the implementation is coordinated by the program management. The intervention is considered as a programme, consisting of projects, implemented by different actors and supervised by a common coordination structure.

All program activities will be executed under ‘**national execution**’ modalities.



## **5.2.2 Steering Committee**

### **Composition of the Project Steering Committee**

In view of the decision making mandate that will be taken by consensus, the Project Steering Committee (PSC) membership will be limited to the following members:

For Vietnam:

- The vice-chairman of the PPC as chairperson;
- A representative of the Ministry of Planning and Investment;
- A representative of the Ministry of Finance;

For Belgium:

- The resident representative of the Belgian Technical Cooperation (BTC) or his delegate;

Based on the agenda for a particular SC meeting, different stakeholders shall be invited to the Steering Committee as non-voting participants such as:

- Representatives of the District People's Committees of Phu Cat and Tuy Phuoc, Phu My, Hoai Nhon, An Nhon and Tay Son;
- a representative of the Binh Dinh Department of Planning and investment;
- a representative of the Binh Dinh Department of Finance;
- a representatives of Binh Dinh DARD;
- a representative of Binh Dinh DOC;
- a representative of Binh Dinh DONRE;
- Other resource persons such as the representative(s) of relevant donors, projects and programs involved in the Province or having a relevant experience in the related fields.

### **Responsibilities**

The Steering Committee (SC) represents the highest management level of the program. It is responsible to provide the necessary strategic guidance to all program implementers and supports the program management in timely attaining the program inputs and objectives. The SC is the organizational, technical and financial advisor and auditor of the program.

The SC will assume the following responsibilities and is mandated to:

- Insure that the role and responsibility of the different agencies and entities involved in the project is clearly defined;
- Provide general guidance to the program implementation;
- Appraise the state of progress of the program and the achievement of its specific objectives;
- Approve the financial and progress reports prepared by the program management;
- Based on the financial and progress reports as well as the audits reports, give advice to BTC regarding the decision to transfer the funds;
- Approve the report related to the disbursement and utilisation of program funds based on the six-monthly budgeted Action Plans submitted by the program management (PPMU);

- If necessary, approve modifications of Program Results, Activities and budget realignments provided that such modifications do not alter the program's general and specific objectives nor its overall budget;
- Approve the proposals related to modifications to specific objective indicators and result indicators;
- If necessary, seek approval of both Governments for modifications to the validity of the program's Specific Agreement, changes to Specific objectives, duration of the Specific Agreement and the programs overall budget;
- Approve the Terms of Reference of evaluation missions, as well as appraise their recommendations;
- Ensure that bi-annual (for the first 18 months) and then annual External Audits are carried out by an accredited accounting firm and appraise any findings; Based on positive audit reports, the Steering Committee will decide to make the audit annual.
- Approve the final report and the final closure of the program

### **Operating Mode**

It is recommended that the SC meets for an inception meeting three or four months after program initiation. Hereafter, the SC will meet every six months. The final SC meeting shall be organised about 3 months prior to program completion. During this meeting the draft final report will be presented for approval.

If required by special circumstances, an extraordinary SC meeting may be held upon request of one of its members.

Within the limitations imposed by the Specific Agreement of the program, the Steering Committee shall lay down its own internal rules and take its decisions by consensus of the members.

The program management provides the secretariat function of the SC. The Project Director will propose the agenda of the PSC and present the reports and budgeted work plans for approval. The financial report will provide a detailed overview of the overall state of utilization of program funds.

Minutes of the meeting of the steering committee as well as a copy of the 6-months reports will be transmitted to all members of the SC, as well as to the Attaché for International Cooperation.

## **5.2.3 Program Management**

### **Overall Program Management**

A Provincial Programme Management Unit (PPMU) located at DPI will be set up as the coordinating office for the different programme components.

The PPMU shall assume the following responsibilities:

- To guarantee the proper use of funds;
- To organize, coordinate and supervise the execution of the program components in accordance with the program work plans approved by the SC;
- To guide the construction DPIUs during the preparation and construction phases;
- To monitor the application of sound practices that can meet the Vietnamese and international standards;

- To identify learning opportunities and common approaches among projects;
- To ensure involvement of relevant departments (DoC, DARD, DoF, DONRE) in the program activities;
- To be in charge of certain project overriding components such as the organization of the awareness building activities and capacity building activities;
- To follow up and harmonize the program activities;
- To ensure adequate implementation of the day to day program activities;
- To assure good management of the program resources (material, financial and human);
- To facilitate decision-making processes for the program;
- To ensure the financial and administrative management of the program as per agreed procedures;
- To approve the tender plans according to Vietnamese law;
- To appraise the tender evaluation reports and propose to PPC for approval;
- To recruit and supervise consultants, suppliers and contractors;
- To review narrative progress reports and financial reports from the districts and compile into progress reports to be submitted to the PSC; To prepare and update work plans and budgets from the districts and submit them to the PSC;
- To review and propose adjustments to the water & sanitation projects for consideration at the PSC;
- To prepare TOR for the Mid-Term Review and tender for consultants;
- To prepare the annual reports and the final report;
- To assure the administrative support of the PSC (secretariat, agenda, documents, minutes, dissemination of minutes);
- To provide all necessary information to the program auditors and evaluators.
- To ensure the adequate closure of the program activities, including the preparation of the final report at the end of the program duration.

The program management at provincial level will be composed of the following persons assigned within DPI :

- One full- time program director;
- One full time financial officer;

The programme management will work in close collaboration with other entities of PPC such as DoC, DARD, DONRE, Dept. of Finance and Treasury, and BTC.

The program management will be supported through the programme by:

- a full time international technical advisor in water and solid waste at least during the first 3 years of the programme;
- a full time secretary/translator;
- One part-time water and sanitation engineer;
- a full-time awareness raising and capacity building specialist.

### **Direct Project Management**

In accordance with the “Hanoi Core Statement on Aid Effectiveness”, and in avoidance of the creation of parallel management structures, the project specific components of the programme,

namely the construction of the landfills and the water supply system will be implemented by the existing infrastructure PMU's at district level or district Project Implementation Unit (DPIU).

The construction of the landfills will be implemented by the concerned DPCs, through their existing DPIUs. The chairman of the DPC or its delegate will be the project director of this project component. Each DPC will assign a district Project Coordinator within the PMU, who will coordinate the project and assume responsibility for specific activities to be implemented at the district level following the Technical and Financial File. The PMUs will also have the role to coordinate with and report to the PPMU through DPC on technical, procurement and financial issues.

The construction of the water supply system in Phu Cat and Tuy Phuoc districts will be implemented by pCERWASS (Center for Rural water supply and sanitation) of the DARD, through its existing PMU. The Hoc Mon reservoir will be rehabilitated by DARD. Apart from a project director for this project component, a Project Coordinator will be assigned at PMU level for the coordination and day to day management. pCERWASS will coordinate with and report to the PPMU on technical, procurement and financial issues.

The project overriding components will be implemented by the PPMU within DPI.

## **5.3 TECHNICAL RESPONSIBILITIES**

All technical responsibility lies with the PPC. Departments directly involved in the project are:

- DoC: technical aspects of the implementation related to the solid waste project;
- DARD: technical aspects of the implementation related to the water supply project;
- DPI's project appraisal unit: coordinates the appraisals of the projects through the relevant technical departments at the province (DoC, DARD, DoNRE, DPCs) and drafts recommendations for the PPC approval of different tender documents.
- Supervisory **consultants**

The international and national technical advisors will provide technical support. Independent consultants could carry out appraisal of investment projects, if the required expertises are not available within the Provincial departments.

While either National Execution or Regie modalities will be used in terms of financial management and system, the technical responsibility will be shared by both parties for all the activities (co-management in all technical aspects).

For the investment projects, the non-objection of BTC will be required for the following stages:

- Terms of references;
- Contract modalities;
- Before disbursement;
- At the partial and final handover.

BTC could delegate this task to the Technical Advisor. He will be in charge of reviewing the technical documents and conducting site visits in order to make sure that they are in line with the international guidelines and norms.

All the services documents, including terms of references, contracts, notifications... will be reviewed and approved by the technical advisor.

## **5.4 FINANCIAL RESPONSIBILITIES**

Regardless of the source of funding, all financial resources of the program will be managed transparently and reported in accordance with the principles of joint partnership, as defined by the Paris Declaration and respecting the rules on Public Financial Management.

### **5.4.1 National Execution**

Provincial People's Committee (PPC) of Binh Dinh Province is responsible for the execution of funds in national execution and will respect the following principles when executing Belgian funds in national execution:

- a) Cost Efficiency ;
- b) Efficacy ;
- c) Economy ;
- d) Transparency ;
- e) Respect of the Vietnamese legal framework.

The DPIUs and the PPMU shall open dedicated project accounts in a Commercial Bank through which project funds will be channeled from the Belgian Contribution. The master account in euros will have the double signature of the PPMU director and the financial officer. The bank accounts of the sub-components in VND will have the double signature of both PPMU and DPIU directors.

The chart presented in page 58 illustrates the proposed fund flow. It indicates that the Vietnamese contribution has to go through a separate channel, the Treasury. In order to avoid parallel procedures for the same expenditure, it is recommended that each contribution would fund separate packages of the different investments sub-projects. The Steering Committee will define the practical modalities in this matter.

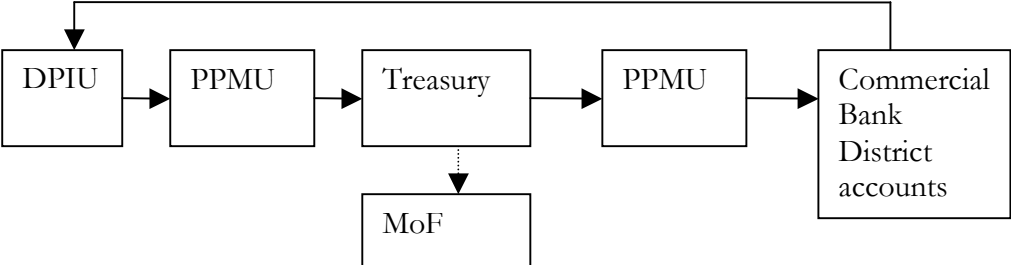
The DoF, on behalf of PPC will request the Authorizing and Co-Authorizing Officers on quarterly basis transfer of funds to these accounts, based upon half-yearly approved work-plans and budgets with buffer, by the Steering Committee as well as financial reports on the utilization of the contribution.

The transfer will be allowed by BTC based on the following documents to be approved by both PSC and BTC:

- The letter requesting the transfer;
- The six-monthly progress report;
- The six-monthly financial reports on the previous transfer (budget monitoring report including the accountancy of the previous semester) and cash flow reports (bank account statements);
- The six-monthly budgeted Action Plans and list of main engagements;
- The six-monthly financial planning;
- The positive external audit reports approved by the Steering Committee.
- 

The updated financial planning and reporting will be joined to the request.

The management and further release of the funds will follow the Vietnamese Rules and Regulations for ODA projects<sup>3</sup>. Contractors, together with the related DPIU, will submit an expense with the supportive document to PPMU that will check them. The payment request will than be submitted to the Provincial Treasury that will control it within maximum 5 working days based on the contractual documents. Treasury will inform the local branch of MoF about the expense approval as well as PPMU that will authorize the Bank to release the money to the contractor.



The names of the designated persons to the specific accounts will be communicated after signing the project.

The PPC will share with BTC the reports that result from GoVs regular auditing procedures. BTC will deploy an independent, certified auditor to audit the dedicated project accounts bi-annually for the first 18 months, and than based on positive evaluation, annually.

An independent consultant with the support of the PPMU and the RR will further elaborate the procedures on national execution modality once the TFF is approved. The guideline will be submitted for approval during the first Steering Committee. Based on the results of the first months of execution and on the audit reports the Steering Committee can decide to fine-tune the financial modalities of the Belgian contribution under national execution.

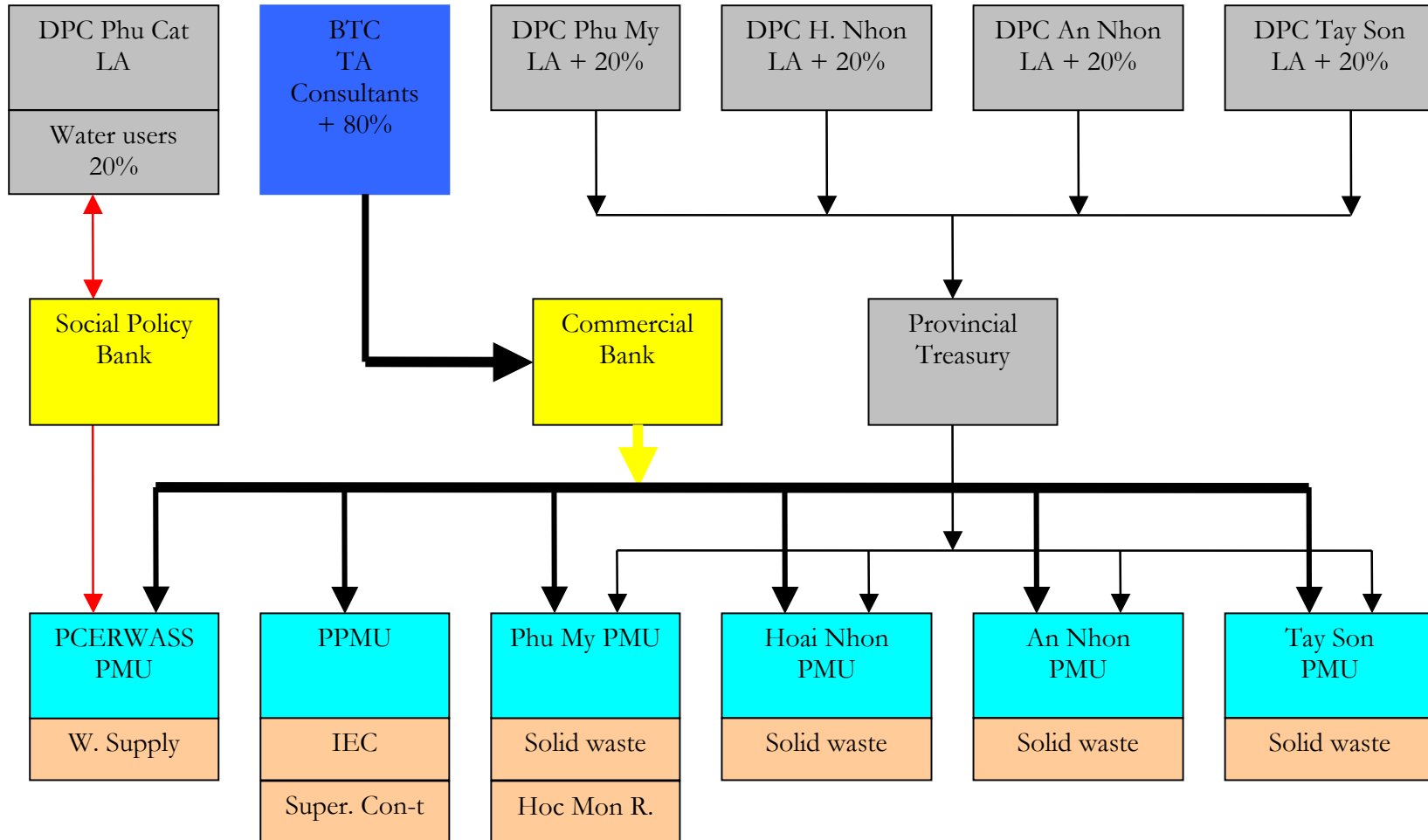
If the annual audit is negative, or if the evaluation of the on-going project of the New-Zealand Cooperation in Binh Dinh that experiments similar modalities appear to be negative, BTC is entitled to modify the execution modalities in order to limit the related fiduciary risks.

---

<sup>3</sup> The related decrees are:

1. Decree 131/2006/ND-CP dated 09/11/2006 of the government on the promulgation of Regulations on ODA use and management.
2. Circular 03/2007/TT-BKH dated 12/03/2007 of MPI, guiding the functions and organisation of ODA project/program management units
3. Decision 61/2006/QD-BTC dated 02/11/2006 of Ministry of Finance on the cost norms applied for ODA projects/programs
4. Circular 04/2007/TT-BKH dated 30/07/2007 of MPI guiding the implementation of Decree 131/2006/ND-CP

## FINANCING SOURCES AND FUND FLOW



## 5.5 PROCUREMENT MANAGEMENT

The procurement of goods for the national execution budget lines will apply Vietnamese rules and regulations. Tenders under national execution above 67.000€ must have the approval ('no-objection') from the BTC ResRep on the tender plan (including bid dossier) and the tender evaluation report with the positive evaluation of a legal advisor.

The procurement of services for the national execution budget lines are on co-management in terms of responsibilities. They will apply Vietnamese rules and regulations and will follow the national execution modalities in terms of budgeting but will require the technical non-objection of the Technical Advisor.

For the **BTC managed** budget lines, procurement will be done according to the Belgian law on public tendering.

For tenders in BTC-management above 22.000 €, a publication on the BTC website is required. For orders above 150.000 €, notification at the OECD-DAC is required. For tenders in BTC-management above 67.000 €, a non-objection has to be mandated by the BTC-HQ after advice from the BTC legal advisor.

## 5.6 HUMAN RESOURCES MODALITIES

Local staff members recruited for this programme will be recruited as per Vietnamese Government rules and regulations. The selection will need to be approved by BTC prior to employment.

International staff paid in BTC management modalities will be recruited by the BTC as per Belgian rules and regulations. The selection will need to be approved by PPC prior to employment. He will be employed for a period of 36 months that could be spread throughout the project duration.

Short-term consultants will be recruited by the PMU on the basis of clear terms of references and according to the Vietnamese Bidding Law (No 61/2005/QH11, 29 November 2005). The costs for these services will be in line with the EU cost norms on financing of local costs in ODA programs.

## 5.7 REPORTING

Reports on monitoring and evaluation are scheduled as follows:

REPORT	RESPONSIBLE	CONTENT	DESTINATION
6-monthly financial report	Program Management (PPMU)	Financial reports	BTC/DPI
6-monthly activity/progress report	Program Management (PPMU)	Progress reporting and activity planning	Steering Committee, attaché for IS
6-monthly financial planning	Program Management (PPMU)	Financial planning	Steering Committee, attaché for IS
Annual report	Program Management (PPMU)	Progress	BTC/Steering Committee, attaché for IS



External annual audit + GoV annual audit	Auditing firm/GoV	Financial audit	BTC/Steering Committee, attaché for IS
Mid-term evaluation report	Program Management / External consultant	External Mid term review	BTC/Steering Committee, attaché for IS
Final report	Program Management	Provisional acceptance of program activities	Steering Committee, BTC and DGDC

### 5.7.1 Baseline data

**Baseline data** for the indicators will be established by the program management at the start of the activities for M&E purposes.

The program management will ensure that the reports, plans and documents are produced in accordance with agreed-upon formats. Most of the reports, plans and documents will be submitted to the Steering Committee for approval. All reports as specified in the above table made by the Program Management, will be issued in Vietnamese and English.

### 5.7.2 Progress reports

The format of the **progress reports** shall comply with the harmonized reporting system agreed between GoV and the donors (2007), in accordance with Decision No. 1248/2007/QD-BKH on issuance of Framework for Monitoring and Evaluation of ODA programs and Projects in 2006-2010 Period.

### 5.7.3 Audits

Aside from the GoV **auditing** procedures, external audits on procedures and expenses performed by an internationally certified firm will take place every six months and then annually. BTC-Hanoi will write the Terms of Reference of the audits that will be validated by BTC-HQ. The audit will be contracted in BTC management and the choice of the auditing firm will be submitted to the approval of the Steering Committee. The audit reports will be submitted to the Steering Committee who will decide on the measures to be taken, if needed.

## 5.8 MODIFICATION OF THE TFF

The present TFF may be amended by mutual consent of the parties. Careful consideration must be given not to change the present TFF in a way that would unnecessarily change the outcome of the intervention as originally agreed between the parties.

A formal agreement by the Belgian government is needed for the following:

- modification of the duration of the Specific Agreement;
- modification of the total Belgian financial contribution;
- modification of the Specific Objectives of the intervention.

The request of the above modifications has to be approved and motivated by the Steering Committee. The exchange of letters requesting these modifications shall be initiated by the Vietnamese party and shall be addressed to the Belgian Embassy.

The following changes to the TFF will have to be approved by the Steering Committee:

- the financial modalities<sup>4</sup>;
- the program results and activities and their respective budgets;
- the respective budgets for central and provincial levels;
- the specific objective indicators and result indicators;
- the composition and responsibilities of the Steering Committee;
- the mechanism to change the TFF.

All other changes to the TFF should be approved by the chairman of the SC or his mandated responsible and the BTC resident representative.

The adapted version of the TFF shall be communicated to the BTC headquarters Coordination and to the Attaché for International Cooperation (DGDC).

## 5.9 MONITORING AND EVALUATION

Aside from the internal **auditing** procedures, external audits shall be performed on all program accounts on annual basis (see above). The expenses that can not be justified shall be deducted from the next replenishment. If the auditing report shows that the funds are not managed in a transparent and appropriate way, the next installment can be suspended by the BTC Resident Representative. The auditing reports shall be discussed in the Steering Committee.

In addition, the project could also be subjected to audits by the BTC internal audit committee or the Belgium Court of Auditors.

### 5.9.1 External evaluation

An independent **mid term evaluation** will be undertaken after 50% completion of the project. External short-term consultants will be recruited for this exercise. The report will be submitted to the SC, which will take appropriate decisions on the proposed recommendations. The mid-term evaluation can suggest revisions of the program TFF, including the logical framework or implementation modalities. These proposed changes should be appraised by the Steering Committee.

A **final external evaluation** will be conducted at the end of the program implementation. The evaluation mission will gather the required information through direct contact with implementers and program beneficiaries, through a review of program documents and in depth analysis through questionnaires.

The Program Management will facilitate the evaluation missions.

## 5.10 CLOSURE OF THE PROJECT

A final evaluation will be organized at the end of the program, as discussed above.

Drafting the **Final Report** is the responsibility of the program management. The Final Report shall be submitted to the Steering Committee members at the final Steering Committee meeting for

---

<sup>4</sup> If the implementation modalities change, a formal agreement by the Belgian government is necessary.

approval. The report will comprise an overview of the realized activities and include a survey of the status and opinion of a representative sample of beneficiaries related to the impact of the Program.

**The final financial report** of the program is also the responsibility of the program management.

The Steering Committee is responsible for recommendation and approval of the **final closure** of the accounts. The last Steering Committee shall decide on the destination of all program equipment, and the remaining financial resources, if any.

## **6. CROSS CUTTING ISSUES**

### **6.1 ENVIRONMENT**

Water resources and solid waste management being an integral part of environment issue, achieving the program results will have a direct impact on the quality of the environment. Guiding the preparation of Provincial Master Plans both on water and solid waste, while enhancing the local capacities and the population awareness will lead to more effective measures in controlling and mitigating pollution of local resources. Improved water resources planning and management will better secure the long-term, balanced availability of water for domestic, agricultural and industrial needs.

### **6.2 GENDER/ SOCIAL ECONOMY/ CHILDREN'S RIGHTS/ HIV/AIDS**

The other transversal themes will not benefit to a similar extent from the program. However, improved water resources planning and management will secure the long-term availability of water for domestic, agricultural and industrial needs and therefore, to the well-being of the population, especially the women, that traditionally have a direct interest in the developing world of accessing to safe drinking water. On the other hand, a good management and treatment of solid waste could create new jobs and therefore generate income.

## 7. ANNEXES

### 7.1 LOGICAL FRAMEWORK

	INDICATORS	SOURCE OF VERIFICATION	ASSUMPTIONS
<b>Overall objective:</b> Poverty reduction, enhancing public health and improving quality of life			
<b>Specific objective 1:</b> Living condition of population improved through the provision of sufficient drinking and irrigation water throughout the year & operational solid waste treatment systems			
<b>Result 1:</b> Agencies in charge of planning, design, implementation, of the rural water schemes and the solid waste management systems are reinforced	<ul style="list-style-type: none"> <li>Data on the existing and on going water projects are systematically collected and monitored</li> <li>Ground &amp; surface water assessment carried out</li> <li>Innovative and efficient techniques and lay-out are integrated in the new schemes</li> <li>Implemented staff training programs</li> </ul>	<ul style="list-style-type: none"> <li>Provincial reports</li> <li>Training evaluation reports</li> </ul>	<ul style="list-style-type: none"> <li>Clear mandates, tasks and responsibilities of the related institutions</li> <li>Adequate and accurate data made available</li> <li>Provincial institutions ready to participate, deliver and cooperate</li> <li>Suitable trainers available in the country</li> <li>Trainers available for training in the province</li> </ul>
<b>Result 2:</b> A strategy to raise awareness on the use of safe drinking water and on resource preservation as well as on environment protection through proper collection and treatment of solid waste is set up	<ul style="list-style-type: none"> <li>Regular public awareness campaigns provided</li> <li>Hygienic behaviours are endorsed by the population</li> <li>Communities understand the different measures for protecting the environment and use the waste collection system</li> <li>Reduction in dumping waste in water bodies and public areas</li> </ul>	<ul style="list-style-type: none"> <li>Campaign Impact Assessment reports</li> <li>Annual reports of the Urban Environment Companies</li> <li>Campaign materials</li> </ul>	<ul style="list-style-type: none"> <li>Governmental and none governmental organizations with sufficient experience in the field available</li> <li>Province has adequate funds to implement professional awareness campaigns</li> </ul>

<p><b>Result 3:</b> Cost efficient rural water systems designed for both flooding and dry seasons, for 5 + 2 communes are implemented, while, possibly, Hoc Mon dam, its spillway and the related irrigation canals are rehabilitated, with efficient operation &amp; maintenance modalities and secured funding.</p>	<ul style="list-style-type: none"> <li>• Provision of 80 litres per capita per day of safe drinking water, following the Vietnamese standards to the target areas</li> <li>• Number of HH effectively connected to the network</li> <li>• Water-born diseases reduced</li> <li>• Agricultural production increased</li> <li>• Monitoring and reporting tools and mechanisms for the O &amp; M of the water scheme are operational</li> <li>• Objectives criteria as well as the financial means and wiliness to pay of the population are integrated in the water and tariffs</li> <li>• Fees duly collected</li> <li>• Schemes in proper operation, maintenance activities carried out on time</li> </ul>	<ul style="list-style-type: none"> <li>• Operation and maintenance reports</li> <li>• Number of payment made and level of the fees</li> <li>• Province budget reports</li> <li>• Operation and maintenance reports</li> </ul>	<ul style="list-style-type: none"> <li>• None polluted water resources</li> <li>• Operator has adequate funds for O &amp; M</li> </ul>
<p><b>Result 4:</b> Infrastructure to treat solid waste for the target areas of all or part of 3 districts</p>	<ul style="list-style-type: none"> <li>• Provision of landfills properly designed and sized to absorb the waste of the target areas for a medium time frame with possibility of extension</li> <li>• Monitoring and reporting tools and mechanisms for the O &amp; M of the landfills are operational</li> <li>• Objectives criteria as well as the financial means and wiliness to pay of the population are integrated in the solid waste tariffs definition</li> <li>• Fees duly collected</li> <li>• Schemes in proper operation, maintenance activities carried out on time</li> </ul>	<ul style="list-style-type: none"> <li>• Environment Impact Assessment</li> <li>• Operation and maintenance reports</li> <li>• Number of payment made and level of the fees</li> <li>• Province budget reports</li> <li>• Operation and maintenance reports</li> </ul>	<ul style="list-style-type: none"> <li>• Available land with geological and environmental conditions fitting with the requirements</li> <li>• Operator has adequate funds for O &amp; M</li> </ul>

N°	ACTIVITIES	MEANS	COST (Euro)
<b>Result 1</b>	<ul style="list-style-type: none"> <li>• Water supply</li> <li>• Coordination with another BTC project to collect and monitor the available data at the provincial level, as an exercise for the redaction of a Master Plan</li> <li>• Establish effective institutional arrangements on data sharing and other necessary cooperation with the agencies</li> <li>• Conduct detailed training needs assessment and prepare a comprehensive staff training</li> <li>• Organize seminars and study tours in Vietnam related to the good management practices in rural water supply</li> <li>• Train the owner agencies in water quality control, monitoring, operation &amp; maintenance</li> <li>• Solid waste</li> <li>• Assessment of the most operative and efficient agency to takeover the investment projects</li> <li>• Guidance on the reviewing the PSWMP &amp; setting up of a master plan on the management of solid waste in the 4 targeted districts</li> <li>• Conduct detailed training needs assessment and prepare a comprehensive staff training</li> <li>• Training to the related agencies in basic supervisory of landfill construction and reporting skills</li> <li>• Train the staff in charge of the operation and maintenance of the investment projects</li> <li>• Seminars and study tours in Vietnam related to the good management practice on solid waste issues</li> </ul>	CTA Support staff Consultants Trainers	575,000
<b>Result 2</b>	<ul style="list-style-type: none"> <li>• Assessing the agencies involved in awareness raising issues to insure their coordination while favoring networking</li> <li>• Develop adapted awareness raising strategy and guidelines related to both water resources and solid waste with short, medium and long-term actions plan</li> <li>• Training the staff of the selected agencies in the strategy and guidelines</li> <li>• Pilot projects activities targeting the beneficiaries of the infrastructure investments of the projects and evaluation</li> </ul>	CTA Support staff Consultants	390,000
<b>Result 3</b>	<ul style="list-style-type: none"> <li>• Definition of the responsibility for the good execution of the project, while guarantying the availability of resources</li> <li>• Revision of the detail design leading to the none-objection of BTC before approval procedure</li> <li>• Bidding procedure, following the Vietnamese procurement rules</li> <li>• Site supervision of the works, with a responsibility of good results</li> <li>• Handover of the water scheme to the designated owner</li> <li>• Coordination with the Social Policy bank to make the loans for the households connection affordable and accessible on time</li> <li>• Defining the most appropriate institutional set up &amp; modalities for O &amp; M</li> </ul>	CTA Support staff Consultants PCERWASS supervision	3,056,000 from BE and 650,000 from VN

	<ul style="list-style-type: none"> <li>• Set-up monitoring and reporting tools and mechanisms for O &amp; M, service provision and effectiveness of the schemes</li> <li>• Conduct surveys to define the population willingness to pay for the services</li> <li>• Providing guidance in the definition of the cost recovery mechanisms, including water tariffs</li> </ul>		
<b>Result 4</b>	<ul style="list-style-type: none"> <li>• Definition of the responsibility for the good execution of the project, while guarantying the availability of resources</li> <li>• Development and Revision of the detail design leading to the none-objection of BTC before approval procedure</li> <li>• Bidding procedure, following the Vietnamese procurement rules</li> <li>• Site supervision of the works, with a responsibility of good results</li> <li>• Handover of the water scheme to the designated owner</li> <li>• Defining the most appropriate institutional set up &amp; modalities for the O &amp; M</li> <li>• Set-up monitoring and reporting tools and mechanisms for O &amp; M, service provision and effectiveness of the schemes</li> <li>• Conduct surveys to define the population willingness to pay for the services</li> <li>• Providing guidance in the definition of the cost recovery mechanisms, including solid waste collection tariffs</li> </ul>	CTA Support staff Consultants District PMU supervision	2,962,000 from BE and 805,000 from VN



## 7.2 IMPLEMENTATION CALENDAR

		YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>ACTIVITIES</b>		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Capacity building</b>																					
A1	Capacity needs assessment		■	■																	
A2	Training				■	■															
A3	Seminar and study tour				■		■														
A4	Socioeco survey & definition wiliness to pay				■																
A5	Guidance on water master plan preparation					■															
A6	Review PSWMP & guidance on developing 4 DSWMP	■	■	■																	
<b>Awareness raising</b>																					
B1	Assessment & coordination		■	■																	
B2	Awareness raising strategy development				■	■															
B3	Approval procedure							■													
B4	Training								■	■											
B5	Pilot activities										■			■		■				■	
<b>Rural water systems</b>																					
C1	Definition of responsibilities		■																		
C2	Detail Design follow-up		■	■																	
C3	Appraisal of the detail design				■																
C4	Land acquisition		■	■																	
C5	Approval procedure				■																
C6	Bidding					■															
C7	Investment works						■	■	■	■	■	■									
C8	Coordination with SPBank								■												
C9	HH connection								■												
C10	Set-up monitoring & reporting tools							■													
C11	Definition of water tariff									■											
C12	Follow-up O & M training												■	■	■						
<b>Solid waste</b>																					
D1	Definition of responsibilities		■																		

D2	follow up of the DSWMP																			
D3	Detail Design follow-up																			
D4	Appraisal of the detail design																			
D5	Land acquisition																			
D6	Approval procedure																			
D7	Bidding																			
D8	Investment works																			
D9	Set-up monitoring & reporting tools																			
D10	Definition of collection fees																			
D11	Follow-up O & M training																			

## 7.3 SECTOR STRATEGIES AND POLICIES OVERVIEW

### 7.3.1 Water and sanitation

The objective of *the Orientation for the Development of Urban Sewerage and Drainage until 2020* (decision 35/1999/QĐ-TTg of 5 March 1999) is to reduce subsidy requirements through the implementation of an urban drainage public services enterprise model, which needs to reach self-sustainability over the longer term by the means of introducing drainage and sewerage charges and incorporating them into the water tariff. Tariffs should cover operating costs and gradually move towards covering a portion of capital costs. The policy aims to ensure that all urban areas should have suitable water drainage systems and wastewater treatment facilities that guarantee environmental hygiene and address flooding issues. Wastewater should be treated before entering the sewerage system, mostly through the use of septic tanks.

The underlying principle of *National Rural Water Supply and Sanitation Strategy till 2020* (NRWSS Strategy -Decision No. 104/2000/QĐ-TTg of 25 August 2000) is sustainability rather than speed of implementation. IEC activities have been recognized as a vital element of NRWSS and give particular emphasis to promoting construction of hygienic latrines and their proper use as well as on making people fully aware of the relationship between sanitation facilities, water supply and health. The objectives call for the improved health and living conditions of the rural population as well as reduced environmental pollution from human and livestock excreta through active promotion of community participation and a demand responsive approach. The National RWSS is underpinned by the principles of allocating decision-making and management at the lowest appropriate level, and emphasizing the participation of women in management. The strategic objectives of the NRWSS were:

- By 2020, 100% of rural population having access to national-standard clean water of minimum 60 l/day and use hygienic latrines.
- By 2010, 85% of the rural population having access to the national-standard of clean water of a minimum 60 l/day and 70% of the rural households using hygienic latrines.
- By 2005, 50% of the country's households using hygienic sanitation facilities and 80% having "domestic quality" water.

*Governmental Decree 88/CP on Waste Water Management* issued in 2007 demonstrates the efforts of the Government of Vietnam regarding environment protection from urban and industrial wastewater dischargers in the context of rapid socio-economic development over last three decades.

*Government Decree 117/CP on Water Supply, promulgated on July 11, 2007* emphasizes a clearer separation of roles and responsibilities of the various parties, and the introduction of performance contracts between the service provider (the PWC) and the owner (the PPC). This also opens the ways for private sector participation and public-private partnerships in the area of water service provision. Some elements having direct relevance for the project are the following:

- Water supply activities constitute a type of production and business activities subject to State control aiming to ensure the lawful rights and interests of water supply units and water-using customers, taking into account the water supply support for the poor and regions meeting with exceptional difficulties;
- Develop water supply activities in a sustainable manner, providing an economical service and taking into consideration the socio-economic development requirements;

- Encourage various economic sectors and social communities to invest in the development and management of water supply activities;
- The State encourages people and communities to participate in the management and oversight of water supply activities;
- People's Committees at all levels must abide by the process of contributing opinions and overseeing by communities in the course of formulating, concluding and implementing agreements on water supply service provision with water supply units;
- Organizations and individuals are encouraged to take the initiative in studying and registering as investors in water supply projects;
- The Ministry of Agriculture and Rural Development shall organize the selection of water supply units for rural water supply works of inter-provincial scale, with participation of relevant provinces;
- The Water Supply Rotation Fund has been set up and is managed by the Vietnam Development Bank with a view to creating available preferential financial sources for investment projects on water supply development in small urban centers and concentrated population quarters;
- The transfer of part or all of water supply service business rights of a water supply unit to other organizations or individuals must be approved by the People's Committees or their authorized bodies, that have signed agreements on water supply service provision with that water supply unit;
- Water supply units must establish points of connection to water supply networks for water-using customers; the connection points must be situated close to the land use boundary markers or the foot of fence wall of customers' works when conditions permit;
- Where water-using customers stay far away from distribution pipelines and outside the service areas of water supply units, the two parties must reach agreement in order to ensure the business interests of the water supply units;
- Water-using customers shall pay in full and on time the water charge amounts stated in bills to water supply units;
- Clean water prices must be accurately and fully calculated with reasonable production costs in the course of clean water production and distribution to ensure the lawful rights and interests of water supply units and water-using customers;
- Clean water prices must ensure that water supply units can maintain, develop and raise the quality of services and contribute to the thrifty use of water, taking into account support for the poor according to the local conditions;
- If the decided clean water prices are lower than the accurately and fully calculated prices of clean water, provincial-level People's Committees shall annually consider and allocate the deficit amounts from local budgets in order to ensure the lawful rights and interests of water supply units;
- The Finance Minister shall promulgate the daily-life clean water price bracket for application nationwide;
- Provincial-level People's Committees shall approve water price schemes and promulgate clean water price brackets in their respective localities, suitable to the price bracket promulgated by the Finance Minister;
- The Ministry of Agriculture and Rural Development shall perform the function of state management of water supply activities in rural areas.

The *Government Decree 67/CP on the Collection of Environmental Fees* prescribes the environmental protection charges on wastewater discharging; the mechanisms for its collection, remittance, management and use of the environmental protection charges. The rates of

environmental protection charges for wastewater are prescribed in the article 6 of the Decree: “For domestic waste water, the environmental protection charge rates shall be calculated in percentage (%) of the water tariff for 1 m<sup>3</sup> of clean water but must not exceed 10% of non- VAT clean water tariff...”

### **7.3.2 Solid waste management**

Some of the underlying principles on solid waste management set up in the **Government Decree 59/CP on Solid Waste Management**, promulgated on April 9, 2007 which have relevance for the present project are the following:

- Organizations and individuals that discharge solid waste or are engaged in activities that generate solid waste shall pay charges for the collection, transportation and disposal of solid waste;
- Waste shall be separated at source of generation, recycled, reused, processed and have its useful constituents recovered for use as input materials and energy generation;
- The collection, storage and transportation of ordinary solid waste shall be conducted by service companies, service cooperatives or households under service provision contracts;
- Technologies of processing hard-to-decompose solid waste which may help reduce the volume of waste to be buried should be prioritised so as to save land used for this purpose;
- The State encourages the socialization of the collection, separation, transportation and disposal of solid waste;
- MPI and the MoF shall allocate annual state budget funds for solid waste management planning work according to the provisions of the Law on the State Budget;
- PPC and DPC shall organize solid waste management in their localities; publicly announce plans on solid waste management; organize inspection, examination and handling of law violations in the domain of solid waste collection and transportation;
- Commune-level People’s Committees, mass organizations and local people shall supervise the solid waste collection and transportation in their localities. Any detected law violations in solid waste management shall be reported to local competent agencies for handling;
- The selection of solid waste disposal technologies shall be based on characteristics and composition of waste and specific conditions of localities;
- Solid waste disposal facility owners may operate their facilities only when the work items of investment projects on building solid waste disposal facilities are completed, tested, accepted and put into operation according to the law on construction investment, and only when there are environmental supervision programs, plans and measures to ensure safety in the course of operation;
- For daily-life solid waste, disposal expenses are covered by the state budget, apart from sanitation charges collected from waste generators. Disposal facility owners shall collect charges from collectors and transporters under service contracts;
- PPC shall elaborate and promulgate public-utility service charge rates for application in their respective localities;
- For daily-life solid waste, apart from sanitation charges collected according to regulations, local administrations shall use local budgets to compensate for expenses paid by collectors and transporters under service contracts;
- Solid waste management service contracts may take the form of (a) solid waste collection, transportation and disposal service contract; (b) solid waste collection and transportation service contract, (c) solid waste disposal service contract.

Furthermore, the Decree encouraged the private sector to participate with the public sector in providing solid waste management services, through different types of services contracts.

Other decrees have been issued such as:

***Ordinance 38/2001/PL-UBTVQH10 dated 28/08/2001 on Fees and Charges***

It defines the calculation of fee tariff based on the following principles:

- Fee collected for the service invested/provided by the state has to assure the cost recovery in reasonable period of time, taking into account the government policies in specific periods.
- Fees collected for the service invested/provided by businesses/organizations and individuals have to assure the cost recovery in reasonable period of time, in accordance with the affordability of fee payers.
- The Ordinance regulates the fee/charge collection, management and environment protection charge.

***Decree 57/2002/ND-CP dated 03/06/2002 of Government stipulating the implementation of the Ordinance on Fee and Charges***

- The definition specific fees and charges is stated in the Detail List of Fees and Charges issued by the Decree 57/2002/ND-CP. Government defines the environmental protection charge for solid waste, and provincial People's Councils define sanitation fee.
- Provincial/City People's Councils define fee and charges relating to land, natural resource management, in relation with public administration function of the provincial authority.
- Definition of fees/charges includes the tariff, collection, hand in, management and use for each specific fee/charge.
- The overruling principle is the fee/charge collected has to assure the cost recovery in a reasonable period of time and in accordance with affordability of fee payers.

***Direction 13/2002/CT-TTg dated 11/6/2002 of Prime Minister guiding the implementation of Ordinance 38/2001/PL-UBTVQH10***

***Circular 63/2002/TT-BTC dated 24/7/2002 of Ministry of Finance guiding the implementation of legal documents on fees and charges***

- The fee tariff for the service invested/provided by the state has also to comply with the implementation of socio-economic development policies of the VCP and government in specific periods and in accordance with the actual situation, characteristics and the essence of the fee/charge.
- Stipulates the management of fee/charge collected.

***Decision 155/1999/QĐ-TTg dated 16/7/1999 on the issuance of Regulation on hazardous solid waste management***

Stipulates the management of hazardous solid waste to prevent and minimize the arising damaging effects to environment and human health applied for all entities and individuals that have activities in the territory of Vietnam relating to generation, collection, transportation, transit, storing, treatment and disposal of hazardous solid waste.

***Decree 31/2005/ND-CP dated 11/3/2005 on production and supply of public goods and services***

- Provides criteria, list of public goods and services
- Reorganizes the management and activities of state owned companies that provide public services.
- Defines the provision and supply of public goods/services by businesses of non-state owned entities.
- For public goods/services that can be provided either by state owned or non-state owned entities, the selection of public service provision modality is done in the following order of priorities: bidding; by order from the state; by assignment in annual plan.
- Public goods/services provided by state owned and non-state owned businesses by bidding or by order from the state is applied for public environmental sanitation service.

***Circular 17/2005/TT-BXD dated 1/11/2005 of Ministry of Construction, guiding the methods of calculation and cost estimation of urban public service***

Public urban services companies should take care of the following:

- Collection, transportation and land filling of solid waste;
- Estimated costs of urban public service is the maximum costs that is taken for consideration by the authorized government agencies to define the price for the urban public service and is the basis for considering the application of either bidding, order or assignment modality for entities to provide public service;
- Provincial/city Peoples' Committees issues the unit price of each urban public service to apply in their territory.

***Decree 24/2006/ND-CP dated 06/3/2006 of Government on amendment, supplement of selected articles of Decree 57/2002/ND-CP dated 03/6/2002 of the government regulating the implementation of Ordinance 38/2001/PL-UBTVQH10 on Fees and Charges.***

***Decree 59/2007/ND-CP dated 09/04/2007 of the government on solid waste management stipulates that:***

- The activities of solid waste management, rights and responsibilities of subjects relating to solid waste
- Planning of solid waste management at local level is organized and approved by the provincial PC's Chairman
- Favors separation of solid waste at source
- Definition/classification of usual solid waste and hazardous solid waste
- Management of solid waste collection and transportation charge
- Provincial PC issues unit price, approves the cost estimation of the solid waste collection and transportation service, which serve as the basis of bidding for public service provision, which has used the state budget

***Decree 174/2007/ND-CP dated 29/11/2007 of the government on environmental protection fee for solid waste stipulates that:***

- Entities and individuals who generate solid waste should pay fees

- The tariff of environmental protection fee for solid waste is defined as follows:
  - For usual solid waste generated from the activities of organizations, commercial entities, service, industries, folk businesses: not exceeding 40,000 VND/ton
  - For hazardous solid waste: not exceeding 6,000,000 VND/ton.
- Provincial/city People's Councils decide the environmental protection fee tariff applied for each specific type of solid waste in each location and each group of fee payers in their territory

***Circular 13/2007/BXD dated 31/12/2007 of Ministry of Construction guiding the implementation of selected articles of Decree 59/2007/ND-CP dated 9/4/2007 of the government on solid waste management***

This Circular gives the detail content of solid waste management master plan and construction of solid waste treatment facilities as well as the rehabilitation and reuse of solid waste treatment facilities once completed.



## 7.5 TERMS OF REFERENCE FOR LONG TERM TECHNICAL ASSISTANTS

### 7.5.1 International Technical Advisor

**PROFILE: AWARENESS RAISING, CAPACITY BUILDING AND TECHNICAL ADVISOR**

Duty station : Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: Belgian Technical Cooperation

Duration of the contract: 36 months

Envisaged starting date: Early 2009

**Background:**

In recent years Vietnam is experiencing fast socio-economic development, rapid urbanization and industrialization. As a result, the environment, including traditional water resources for rural and urban inhabitants, is under intense pressure. In parallel, production of domestic and industrial solid waste is booming, even in rural areas, while solid waste collection and treatment are not efficient.

In such a context, during the Indicative Cooperation Program between Belgium and Vietnam for the 2007-2010 period, Belgium Government manifested its interest in supporting some districts of the coastal province of Binh Dinh, located in the central part of Vietnam, that is presently facing difficulties in the water supply and solid waste management.

**The Project:** The "Water Supply and Sanitation Program in Binh Dinh Province" is aiming at improving the environmental quality and the quality of life of the inhabitants of the targeted district and communes of Binh Dinh province by investing in proper cost-efficient infrastructures with an important capacity building and awareness raising activities component aiming at reinforcing the local capacities in planning, management, operation and maintenance of the schemes, with exposure to alternative solutions, while developing a long-term strategy in awareness raising with the support of some pilot activities.

**Methodology:** The consultant is expected to work full-time during the first 36 months of the program that will last 60 months, and then to provide short-term input based on the needs. He/She will primarily work at provincial level and in second instance at district level. The consultant is expected to develop a good working relationship with provincial and district counterparts, PPMU and DPIUs and enable them to accomplish all the tasks. He has to develop a good understanding of local capacities and practices in the field.

**Role of the technical advisor**

General principles: The international technical assistant provides back-up and assistance for the implementation of the program. He/She will provide technical guidance and insight to the provincial and district authorities and assist them in producing qualitative program results. He/She will work with the concerned departments and provide capacity development through on the job-training. He/she can provide some support to managerial tasks of the Program Director or the Deputy program Director – yet, this will only be from the perspective of capacity development for managerial skill; but he/she is not supposed to play a major role in direct management.

Specific tasks: assisting the PPMU, DPIUs and relevant provincial and district departments and agencies in:

- Preparation of technical aspects of ToR, specifications and tenders for engagement of consulting firms and individual national/international consultants for various assessments and aspects of the program as well as for the construction of the investment projects and their supply of equipment; Technical evaluation of offers for selection of consultancies; Supervise consulting firms national consultants' technical inputs and investment projects implementation;
- Co-prepares ToR for needs assessments, training, studies, study tours, assess offers, follow up assignments and their technical quality;
- Accompanies and secures qualitative technical inputs of national technical assistants;
- Ensures completion and technical quality of all assessments;
- Assists in the preparation of the program action plan;
- Provides technical guidance and capacity development (on the job training) to provincial and district levels;
- Assistance in determination of support staff requirements at PPMU and formulation of their duty charter;
- Ensures development of projects planning, coordination, implementation and M&E/reporting frameworks;
- Assesses rules of operation for the Steering Committee;
- Assistance in establishment of a framework for linkages between similar projects in the country;
- Gives advices and assistance on the review of the Provincial Master Plan of the solid waste management and the setting-up of 4 DSWMP;
- Supports the PPMU in preparing an environment awareness raising strategy for the Province related to water resource protection and solid waste management;
- Develops the capacity building component of the program targeting all the related Province and district agencies and provides training;
- Provides technical supports in the preparation of the detail design of the different investment projects and gives his/her non-objection;
- Follow-up the setting up of the O & M modalities of the investment projects.

**Required Qualifications/Competencies:** Master degree on water and sanitation or equivalent; Degree in engineering, preferably with a speciality in water supply, irrigation, and/or solid waste management; proven track record of at least 10 years experience in the related fields with 5 years within the development context; At least 3 years experience in environmental awareness raising, insitution capacity building and on the job trainings is an asset. Experience in writing technical specifications and terms of references; Previous experience in Vietnam would be preferred. Experience in the region can also be considered. Fluent reading, writing and speaking skills in English are indispensable; Good planning and reporting skills.

## **7.5.2 National program director**

Duty station : Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: DPI

Duration of the contract: 60 months

Envisaged starting date: Early 2009

### **Role of the program director**

General principles: The PPMU will be directed by a national project director who will coordinate the implementation activities. This full-time Vietnamese coordinator will be a senior officer of DPI with at least 3 years experience with international cooperation agencies.

Specific tasks: assisting the PPMU, DPIUs and relevant provincial and district departments in:

- Ability to interface positively with government, provincial and international organisations; while being an excellent communicator;
- Responsible of the planning, budgeting, managing, implementing and coordinating all the activities of the program;
- Liaises with national, provincial and district authorities, while insuring a good coordination between the PPMU, the DPIUs and the provincial and districts agencies;
- Assures that replenishment of project accounts, transmission and approval procedures of studies, ToR and tenders taking place according to the provisional plans;
- Ultimately responsible for the production of the results, the successful monitoring and implementation of the project activities following the national execution modalities;
- Collaborates with the international project co-ordinator and informs on the state of approvals and decisions taken by the local authorities;
- Coordinates the preparation, dissemination and evaluation of tenders, prepares progress reports and agendas, minutes of the Steering Committees, participates in the presentation of the program activities to different stakeholders;
- Assures the administrative and financial management of the program according to the official procedures and laws of Vietnam.

**Required Qualifications/Competencies:** Degree in engineering or in management; proven track record of at least 10 years experience with at least 5 years in projects management (planning, finance, administration); Good planning, reporting and computer skills; Fluent reading, writing and speaking skills in English would be an asset.

### **7.5.3 Financial officer**

Duty station: Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: DPI

Duration of the contract: 60 months

Envisaged starting date: Early 2009

#### **Role of the financial officer**

*General principles:* The financial officer will be in charge of the financial planning, the accounting and the financial reporting of the program, following the national regulations. He/she will work under the direct supervision of the program director.

#### Specific tasks:

- Controls all the financial and administration issues of the program;
- Ensures a correct, smooth and efficient organization of the financial administration, with adapted filing, recording and reporting in compliance with legal and administrative procedures and guidelines, including the Specific Agreement, the TFF, the program procedure guideline and the Vietnamese laws and regulations;
- Prepares monthly/quarterly accounting, financial planning (short-term and long-term), financial report and payroll;
- Ensures overall management of bank and cash accounts, preparing cash calls on basis of the financial planning, based on the BTC requirements;
- Record all the expenses, responsible for transparent and consistent filing of all accounting, banking and cash management documents following guidelines; record all bank transactions, maintain bank accounts and overviews;
- Follow up and update the program budget, with comparison with the planning;

- Fully cooperates with the auditors, provides all requires documents and assists them in their tasks, while following their recommendations.

**Required Qualifications/Competencies:** University Degree in finance, business administration or business economics, record of at least 7 years experience with at least 3 years in financial management and project administration (planning, finance, administration); Experience with international development organizations would be an advantage; Good planning, reporting and computer skills (excel, word, database accounting programs); Fluent reading, writing and speaking skills in English would be an asset.

#### **7.5.4 Secretary/translator**

Duty station : Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: Belgian Technical Cooperation

Duration of the contract: 60 months

Envisaged starting date: Early 2009

##### **Role of the secretary/ translator**

*General principles:* The secretary/ translator will be in charge of the administration of the program as well as the translation of all required documents in Vietnamese/English and the direct translation during meetings. He/she will work closely with the program director and the International technical assistant

##### Specific tasks:

- Welcomes visitors, make, receive, answers and/or transfer phone-calls;
- Arranges meetings, Training and Steering Committees;
- Files documents;
- Books international and domestic transport, makes hotel reservations;
- Supervises the reception, registration and filing of documents/mails;
- Makes copies;
- Update list of contact persons and addresses;
- Follow-up PPMUs staff files;
- Follow-up office supplies;
- Makes inventories;
- Follow-up administrative guidelines;
- Translates from Vietnamese to English and vise versa all required documents;
- Insures the direct translation during meetings;

**Required Qualifications/Competencies:** University Degree in business administration and/or English, record of at least 7 years experience with at least 3 years in management and project administration (planning, finance, administration) and translation; Experience with international development organizations would be an advantage; Good planning, reporting and computer skills (excel, word, database); Fluent reading, writing and speaking skills in English is essential.

### **7.5.5 Water/ sanitation national engineer**

Duty station : Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: DPI

Duration of the contract: 60 months – part-time

Envisaged starting date: Early 2009

#### **Role of the water/ sanitation engineer**

General principles: The water/ sanitation engineer will support both the program director and the international technical assistant in the preparation of tenders documents, evaluation and implementation control of the studies and the implementation of the different investment projects.

#### Specific tasks:

- Preparation of technical aspects of ToR, specifications and tenders for engagement of consulting firms and individual national/international consultants in charge of the studies; Technical evaluation of offers for selection of consultancies; Supervise consulting firms national consultants' technical inputs and investment projects implementation;
- Assists in the preparation of the program action plan;
- Assistance to the DPIUs in writing terms of references of the investment projects;
- Gives advices and assistance on the review of the Provincial Master Plan of the solid waste management and the setting-up of 4 DSWMP;
- Provides technical supports in the preparation of the detail design of the different investment projects;
- Conducts regular site supervision of the different investment projects.

**Required Qualifications/Competencies:** Master degree on water and sanitation or equivalent; Degree in engineering, preferably with a speciality in water supply, irrigation, and/or solid waste management; proven track record of at least 10 years experience in the related fields; Experience in writing technical specifications and terms of references; Good computer skills; Knowledge of English would be an advantage.

### **7.5.6 Awareness raising and capacity building specialist**

Duty station : Quy Nhon City, Province of Binh Dinh – Vietnam

Financing source: Belgian Technical Cooperation

Duration of the contract: 60 months

Envisaged starting date: Early 2009

#### **Role of the awareness raising and capacity building specialist**

General principles: The awareness raising and capacity building specialist gives assistance to the program director and the international technical advisor in the setting up of the related activities.

#### Specific tasks:

- Preparation of technical aspects of ToR, specifications and tenders for engagement of consulting firms and individual national/international consultants related to awareness raising and capacity building; Technical evaluation of offers for selection of consultancies; Supervise consulting firms national consultants' technical inputs;

- Co-prepares ToR for needs assessments, training, studies, study tours, assess offers, follow up assignments and their technical quality;
- Accompanies and secures qualitative technical inputs of national technical assistants;
- Ensures completion and technical quality of all related assessments;
- Assists in the preparation of the program action plan;
- Provides technical guidance and capacity development (on the job training) to provincial and district levels;
- Assistance in establishment of a network between similar projects in the country;
- Supports the PPMU in preparing an environment awareness raising strategy for the Province related to water resource protection and solid waste management;
- Develops the capacity building component of the program targeting all the related Province and district agencies and provides training.

**Required Qualifications/Competencies:** Master degree on water and sanitation or equivalent; Degree in engineering, preferably with a speciality in water supply, irrigation, and/or solid waste management; proven track record of at least 10 years experience in the related fields with at least 5 years experience in environmental awareness raising, insitution capacity building and on the job trainings. Experience in writing technical specifications and terms of references; Good computer skills; Knowledge of English would be an advantage.