## The Socialist Republic of Viet Nam Danida

## **NRWSS**

National Rural Water Supply & Sanitation Strategy Study

Final Report - Volume 3

# **Action Plan**

**Implementation 2000 to 2005** 

March 1999

Carl Bro International a/s

**CERPAD** 

In association with Crone & Koch VKI

## **FOREWORD**

This Final Report has been produced for the Ministry of Construction with assistance from Danida (Danish International Development Assistance). It has been prepared by a study team consisting of the National Project Manager, the Chief Technical Adviser and international and local consultants led by Carl Bro International. The study team was assisted with detailed comments from a core team of sector professionals and the final report is the result of extensive discussions with sector stakeholders. The draft report was discussed at national, provincial and district workshops and this final report is intended to reflect the views of sector stakeholders. The report does not, however, reflect the official views of the Government of Viet Nam nor of Danida.

The study team would like to thank the numerous sector staff who have assisted in its preparation.

This volume presents the action needed in the first phase of the NSSP (2000 to 2005) to introduce the new strategy approach in conjunction with the National Programme. This volume is complemented by two other volumes:

Vol. 1 - Strategy Report

Vol. 2 - NSSP, Long Term Implementation

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## **ABBREVIATIONS**

-	D:11:
hn	Billion
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<i>On</i>	Dillon		
CERPAD	Centre for Residential Planning and Development		
CERWASS	Centre for Rural Water Supply and Environmental Sanitation (central & provincial)		
	Commune Health Station		
	Chief Technical Adviser		
0111			
Danida	Danish International Development Assistance		
DARD	Department of Agriculture and Rural Development		
DOC	Department of Construction		
	Department of Education and Training		
DOF	Department of Finance		
DOH	Department of Health		
<b>DOLISA</b>	Department of Labour, Invalids and Social Affairs		
DOSTE	Department of Science Technology and Environment		
DPI	Department of Planning and Investment		
DVC	Double Vault Composting (latrine)		
GDP	Gross Domestic Product		
GoV Government of Viet Nam			
<b>EPI</b>	Expanded Programme for Immunisation		
HRD	Human Resource Development		
*F-G			
IEC	Information, Education and Communication		
KAP	Knowledge, Attitudes and Practices		
KAF	Knowledge, Attitudes and Fractices		
l/c/d	Litres per capita per day		
LFA	Logical Framework Approach - special planning approach based on the Logframe		
Logframe	Logical Framework - a special structured project framework used by most donors		
<b></b>			
MARD	Ministry of Agriculture and Rural Development		
MOC Ministry of Construction			
MOCI			
MOET	•		
MOF	•		
MOH	OH Ministry of Health		
MOI Ministry of Industry			
<b>MOLISA</b>	A Ministry of Labour, Invalids and Social Affairs		
<b>MOSTE</b>	E Ministry of Science Technology and Environment		
MPI	Ministry of Planning and Investment		

mVND Million VND

NGO Non Government OrganisationNPM National Project Manager

NRWSS National Rural Water Supply and Sanitation

- NSC National Steering Committee for Safe Water Supply and Environmental Sanitation NSSP National (RWSS) Strategy Support Program **ODA** Official Development Assistance **O&M** Operation and Maintenance **PC** People's Committee **PCF** Peoples Credit Fund PIP Public Investment Plan **PMU** Project Management Unit **PSC** Project Steering Committee **QA** Quality Assurance QC Quality Control **RWSS** Rural Water Supply and Sanitation - including towns up to 30,000 people SBV State Bank of Viet Nam **SOE** State Owned Enterprise **SV** Single Vault (latrine) TA Technical Assistance **TOR** Terms of Reference **TOT** Training of Trainers TTg 200 Decision of the Prime Minister setting out the approach and responsibilities towards RWSS **UN** United Nations UNICEF United Nations Children's Fund USD US Dollar **VBARD** Viet Nam Bank for Agriculture and Rural Development **VBP** Viet Nam Bank for the Poor **VIP** Ventilation Improved Pit (latrine) **VKI** Water Quality Institute (Denmark) **VLOM** Village level operation and maintenance **VND** Vietnamese Dong *VNLS* Viet Nam Living Standard Survey (1992/93) VWU Viet Nam Women's Union
- **WATSAN** Existing national RWSS Programme, with UNICEF funding
  - **WRAI** Water Resources Administration and Irrigation (a section in DARD)
  - WSC Water Supply CompanyWSS Water Supply and Sanitation

## **EXECUTIVE SUMMARY**

#### ASSUMPTIONS AND GENERAL APPROACH

This Action Plan describes the work than needs to be done in 2000 to 2005 in order to establish the National Strategy Support Programme (NSSP). This programme is the framework which will assist users and the private sector to construct water and sanitation facilities and implement the new strategy. The Action Plan will form part of the new National Programme for rural water supply and sanitation (RWSS). It is assumed that the Action Plan and the NSSP will start on 1st January 2000 while the National Programme will commence some time in 1999.

During 1999 the National Programme will be planned in detail and have its budget allocated. At the same time the resources for the Action Plan will be put in place. The NSSP will be introduced in two ways. Firstly in a low key general way through the National Programme. This will consist of changing existing programmes such as WATSAN to bring them more in line with the strategy. Secondly the new strategy approach will be gradually introduced in detail over a six year period in all provinces of the country. This Action Plan only covers the second, more detailed work.

The work in the Action Plan has been grouped into four main components:

- Information, education and communication. (IEC)
- Capacity Building (reorganisation, human resource development (HRD) and strengthened regulations).
- Financial.
- Technical.

The work that needs to done within each component has been grouped into individual tasks, and these are described in more detail in Annex A.

#### PILOT IMPLEMENTATION

The Action Plan is action oriented and will support concrete implementation. Pilot implementation will start in 5 provinces during the first year (2000) and will be extended to a further 10 provinces in 2001. Several preliminary tasks need to be completed before pilot implementation starts, but it is not the intention that implementation waits until all details are resolved - detailed planning will be done at the same time as pilot implementation.

The pilot implementation tasks are:

- 1. Select the 15 pilot provinces.
- 2. Agree detailed responsibilities of each department in each of the 15 provinces.
- 3. Prepare provincial RWSS Plans of Operation in each of the 15 provinces.
- 4. Select 3 districts in each of the pilot provinces.
- 5. Prepare Annual Action Plans for the pilot provinces.
- 6. Establish district advisory services in each of the pilot districts.
- 7. Design and implement monitoring and evaluation systems to assess the pilot programme.
- 8. Start implementation in line with the strategy in the pilot provinces.
- 9. Carry out demonstration activities for other provinces in the region.

## **IEC COMPONENT**

- 1. Develop an IEC approach at national level.
- 2. Develop and introduce an IEC approach at provincial level.
- 3. Review and revise existing face-to-face IEC materials.
- 4. Select and train water supply and sanitation (WSS) motivators.
- 5. Train commune and village health staff.
- 6. Assist with the development of district advisory services.
- 7. Develop messages and an implementation plan for mass communication.
- 8. Develop guidelines for future mass campaigns.
- 9. Review schools curricula on basic health education and train teachers.
- 10. Assist mass organisations with health education in schools.
- 11. Prepare regulations and guidelines for WSS at public institutions.
- 12. Prepare provincial Action Plans for WSS at public institutions and the associated IEC.
- 13. Plan and implement knowledge, attitudes and practices (KAP) studies and adjust the IEC approach accordingly.

#### CAPACITY BUILDING COMPONENT

- 1. Adjust mandates and organisational structure.
- 2. Improve national and provincial legislation and regulations.
- 3. Improve enforcement structures and procedures.
- 4. Improve management of implementation of RWSS programmes.
- 5. Improve strategy and programme monitoring.
- 6. Carry out preliminary HRD needs assessment at national and provincial levels.
- 7. Prepare initial HRD plan to meet urgent needs.
- 8. Design and implement a comprehensive HRD plan.
- 9. Carry out a preliminary review of the existing situation of shared water supply facilities.
- 10. Develop guidelines for shared water supply facilities.

## FINANCIAL COMPONENT

- 1. Initial Review.
- 2. Establish policy and regulatory base.
- 3. Develop lending and grant allocation criteria.
- 4. Develop lending and grant disbursement procedures.
- 5. Develop tariff system for piped schemes.
- 6. Set up national funds.
- 7. Set up provincial funds.
- 8. Establish monitoring procedures.

#### TECHNICAL COMPONENT

- 1. Develop criteria for enforcing the ban on the use of fresh excreta as fertiliser.
- 2. Agree guidelines for sanitation in flood prone areas.
- 3. Agree guidelines for soakaway latrines.
- 4. Agree improved water quality control approach.
- 5. Produce general manuals and guidelines.
- 6. Produce water resource manuals and guidelines.
- 7. Produce water supply manuals and guidelines.

- 8. Produce sanitation manuals.
- 9. Produce construction management documents and improve private sector participation.

#### ORGANISATION AND STAFFING

Implementing the Action Plan will be facilitated and guided by a Project Management Unit (PMU) which will be based in MARD but which will work with all the relevant ministries and other organisations. Practical implementation of the Action Plan, however, can only be done by the range of sector organisations that are responsible for RWSS implementation. The PMU will be responsible to the Management Board of the National Programme for RWSS and will be staffed by a selection of specialists from MARD and other organisations. The PMU will be assisted by a Technical Assistance (TA) consultancy team.

#### TIME SCHEDULE AND COSTS

For provincial implementation of the NSSP, the provinces will be divided into six groups, with one years introductory implementation for each group of provinces. The overall time schedule is as follows:

ACTIVITY		1999	2000	2001	2002	2003	2004	2005
NP Approval &	Budget							
Prepare NSSP 8	& Pilot Projects							
National Suppo	rt							
Provincial Supp	oort							
Group 1 (Pilot)	5*							
Group 2 (Pilot)	10							
Group 3	11							
Group 4	11							
Group 5	12							
Group 6	12							
Construction under NP								
Construction follows Strategy								
* Number of provinces			Establish NSSP; including pilot implementation					
			Part Tin	ne				
			Impleme	ent NSS	Р			

The total estimated cost of implementation in the six year period (2000 to 2005) is 12,970 bn VND.

This can be subdivided into 12,476 bn VND for construction (of which 10,261 bn. VND will be government contribution to the Grant and Loan Funds) and 494 bn VND for IEC, HRD and Technical Assistance support costs.

## 0 1. INTRODUCTION

#### 01.1 FORMAT AND CONTENT OF THE REPORT

This report is the third volume of the National Rural Water Supply and Sanitation Strategy Study.

**Volume 1** is a statement of the strategy and is referred to as "The Strategy Report".

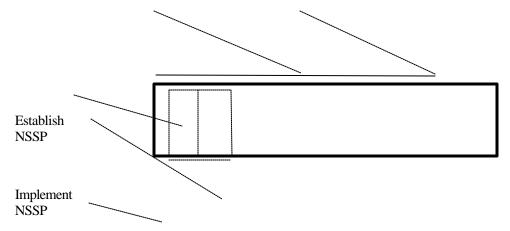
**Volume 2** explains the organisation and implementation of the strategy over the full 20 year period covered by the strategy and is referred to as "**The NSSP**" (National Strategy Support Programme).

**Volume 3** is a more detailed Action Plan and investment programme for the first six years of implementation and is referred to as "The Action Plan".

The six year period covered by the Action Plan coincides with the National Programme for rural water supply and sanitation (RWSS) and will be an integral part of that programme. The National Programme is a large scale intensive programme which targets particularly needy areas and it aims to increase the coverage of domestic quality water supplies to 80% by the year 2005. The NSSP activities described in this Action Plan will form part of the National Programme and are designed to allow the National Programme to not only achieve its targets but also to establish the framework for the strategy.

The Action Plan deals with the *support* framework that needs to be established by government (the NSSP) in order to allow users to construct RWSS facilities in line with the strategy. It is the intention that developing and introducing this support framework will be done in an action oriented way and will be closely integrated with construction activities. The following diagram summarises the relationship between the strategy, the NSSP Action Plan, and the National Programme:

Relationship Between the Strategy, the Action Plan and the National Programme



Chapter 8 of Volume 1 gives a more detailed description of the relationship between the different elements.

This volume is intended to be a practical guide to what needs to be done. Volume 2 gives the more theoretical background to the NSSP activities and it is assumed that readers are already familiar with Volumes 1 and 2. Because the Action Plan is a practical manual with long lists of tasks, including plans and programmes, it may look like a traditional, centrally organised, supply driven plan. It is important for the reader to continually remember that the Action Plan is for a supporting framework - actual implementation will be done in a demand responsive way.

The Action Plan is divided into two parts. The main report describes, in fairly general terms, the work that will be carried out, whereas Annex A gives a more detailed explanation of the key tasks.

The work programme has been presented using specific calendar years because this is clearer and easier to understand than using Year 1, Year 2 etc. This does mean, however, that if the start date changes then the programme needs to be adjusted accordingly.

The work that needs to be done has been grouped by disciplines into four major components:

- IEC (information, education and communication).
- Capacity Building (organisational changes, administrative systems, HRD, legal improvements etc).
- Financial.
- Technical.

These components are described in chapters 3 to 6 and group together all the short term activities that are described in Volume 2.

#### 1 1.2 ASSUMPTIONS & GENERAL APPROACH

The NSSP Action Plan will be part of the National Programme and should start as soon as possible. It is assumed that the Action Plan will start in January 2000 and that the National Programme will start some time during 1999. The whole of 1999 will therefore be used to establish the Action Plan.

The National Programme will develop and expand existing projects such as WATSAN and will therefore carry out implementation in most provinces right from the start, although the main focus will be on the most needy areas. This initial implementation will be adjusted as much as possible to be in line with the strategy, through national interventions to the ongoing projects. This is referred to as *Modified Existing Implementation*. (see Fig 8.2 in Volume 1).

Introduction of the Action Plan will be done in two ways. Firstly by changes at national level (national support) and secondly by detailed introduction within provinces (provincial support). Provincial support will be introduced in six groups of provinces. A year will be spent introducing each group of provinces so that at the end of six years the NSSP is fully operational.

The first two groups of provinces will be considered to be pilot provinces, and during this two year period the following activities will be carried out:

- Resolve all outstanding professional issues and decisions.
- Develop detailed systems.
- Carry out pilot implementation following the strategy approach and implementation guidelines in the pilot provinces and monitor the results.

Introduction of the Action Plan will be done by a Project Management Unit (PMU) which will be based in MARD but which will work with all the relevant ministries and other organisations. The PMU will report to the Management Board of the National Programme and will be assisted by a donor or donors through a single technical assistance (TA) project. This project will assist with all three types of activities described above.

## 2 1.3 PREPARATORY WORK IN 1999

Although the preparatory work that government (and donors) will need to do in 1999 does not form part of the Action Plan, the following summarises the activities that need to be completed before the Action Plan can start:

- The strategy is informally accepted by relevant ministries.
- Resources are made available for the NSSP Project Management Unit (PMU), including staff, budget, offices and equipment.
- The PMU is formally established and preliminary agreement is reached on the outline mandates and roles of the main organisations that are involved in the sector.
- A donor supported Technical Assistance (TA) project is agreed and signed and TA staff or company appointed
- Funding is available from government to start up the grant and loan funds.
- Pilot provinces are identified and initial organisational arrangements and decisions made in these provinces, based on lessons from the Pilot Project in Ha Tinh Province.

## 1 2. PILOT IMPLEMENTATION

The Action Plan will be action oriented and will support concrete implementation. Initially this concrete implementation will be pilot implementation in selected provinces and this chapter describes that pilot implementation. It must be understood, however, that certain preliminary tasks (such as capacity building) need to be done before implementation can start. These preliminary tasks, and the other tasks which make up the Action Plan, are described in Chapters 3 to 6. How the Action Plan will be organised and staffed is described in Chapter 7.

## 32.1 BACKGROUND AND PURPOSE

Implementation of the strategy will start in 15 provinces during the first two years, with 5 provinces in 2000 and 10 in 2001. This implementation will also be pilot implementation in the sense that it will be used to test the overall concept and the systems that will be developed in the first two years.

The purpose of pilot implementation is to:

- Demonstrate that the strategy is realistic and to identify areas of the strategy that need modification.
- Start up national implementation and serve as a demonstration programme for other provinces.

The time schedule for pilot implementation has been deliberately set at a very fast pace in order to meet the urgent demands of government for concrete action and to tie in with the National Programme. The intention is to start up implementation in groups of provinces as quickly as possible, and then to continue to develop and support the process as lessons are learnt.

#### **42.2 ACTION IN YEAR 2000**

1) Select the 15 Pilot Provinces

This will be done by the sector as soon as possible and preferably before the NSSP starts (see 1.3). When selecting the pilot provinces the following will be taken into account:

- The provinces should contain a lot of difficult areas and areas with a low coverage of domestic quality water.
- They should be provinces that donors are interested in supporting.
- The 9 survey provinces used in the NRWSS Strategy Study now have a well documented RWSS situation and could be given priority.
- Each province should be representative of its region, and also the total of 15 provinces should be representative of the country as a whole.
- The provinces should have a mixture of strong and weak RWSS organisations.
- The provinces should be suitable to be used as demonstration provinces for their region; this suggests that they should be easily accessible.

It will not be possible to meet all of these criteria in all provinces and the above criteria are in order of reducing priority.

2) Agree Detailed Responsibilities of Each Department in Each of the 15 Provinces

Each province needs to decide what is the best organisation for them for RWSS. The strategy assumes that DARD will normally be the main implementing agency at provincial level, but this need not always be the case. Similarly, at lower levels each province needs to decide what is the most appropriate organisational structure.

3) Prepare Provincial RWSS Plans of Operation in Each of the First 5 Provinces

Each province will prepare a short provincial RWSS plan of operation which is based on the national strategy and these plans shall be integrated into the normal provincial planning process. The plans of operation will not only modify the national strategy in order to take into account local conditions, but will also develop it in more detail. They will, for example, include each province's approach to: the private sector; management of piped schemes; operation of the loan and grant systems; approach to HRD; approach to IEC; how to deal with existing RWSS programmes; and technical considerations. The PMU will provide considerable support to the provinces in preparing their plans of operation. In line with the decentralised approach of the strategy, the provincial plans of operation will ultimately be each province's responsibility and will not require formal approval at national level. However, the PMU must be satisfied that a provincial plan is generally in line with the strategy approach if grant and loan funds are to be made available.

- 4) Select 3 Districts for Implementation in Each of the First 5 Provinces
- Selection of the districts will use similar criteria to selection of the provinces, although particular weight shall be given to including districts with a high need for RWSS.
- 5) Prepare Annual Action Plans for 5 Provinces
- These will be practical plans which show exactly what will be done, who will do it, what it will cost, and where the funding will come from. They will be part of the present provincial annual planning process.
- 6) Establish District Advisory Services in Each of the 15 Districts in the 5 Provinces
- This includes physical facilities, staff, terms of reference and other resources such as transport and equipment.
- 7) Design and Implement Monitoring and Evaluation Systems to Assess the Pilot Programme This needs to be done at the start of the programme so that any baseline data that may be needed can be collected.
- 8) Start Implementation in Line with the Strategy in 5 Provinces
- This includes IEC, HRD and actually providing loans and grants to users.
- 9) Carry Out Demonstration Activities for Other Provinces in the Region
- This is a very important activity which needs to be carefully planned at the start of the project, with input from the HRD staff. It will mainly consist of inviting staff from other provinces to participate in key workshops and inviting them to visit and inspect different aspects of pilot programme implementation.

## **52.3 ACTION IN YEAR 2001**

The activities numbered 3), 4), 5), 6), 8) and 9) in section 2.2 will then be repeated in the 10 provinces that are to be covered in the second year. The following additional task will be carried out.

10) Review Implementation at the End of 2 Years and Prepare a Pilot Implementation Review Report.

This is also a very important activity and will be critical to the long term effectiveness of the national strategy. It will be done by a combination of PMU staff, sector staff and the Technical Assistance consultants.

## 2 3. IEC COMPONENT

#### 63.1 INTRODUCTION

As mentioned in Volume 1, a change in the present water, sanitation and hygiene practices of rural households is vital for the success of the strategy. This will require well designed IEC activities to take place at all levels - from village to national level. Several means of communic ation will be used in order to reach different target groups and several ministries, departments, organisations and People's Committees (PCs) will be involved. There will be information on: water and sanitation related diseases and hygiene; appropriate water and sanitation models and their costs; possibilities for obtaining grants and loans; how households can organise themselves for different purposes, etc.

March 1999

The IEC component has the following 6 sub-components:

- 1) overall IEC approach and guidelines;
- 2) face-to-face IEC;
- 3) mass communication and national campaigns;
- 4) improved health education in schools;
- 5) construction of water and sanitation facilities in public institutions (as explained below, this is not only for IEC purposes); and
- 6) IEC monitoring and evaluation system.

This chapter provides a short description of the tasks that are to be carried out in years 2000 to 2005 - a more detailed description is included in Annex A.

## 73.2 KEY TASKS

## **03.2.1** Overall IEC Approach and Guidelines

The starting point for future IEC work will be to formulate an overall approach and to establish coordination of all IEC tasks to ensure coherence, integration and co-operation between the
ministries/departments and organisations involved. As the lead ministry for the implementation
of the NRWSS strategy, MARD will have the overall responsibility for the formulation of the
IEC approach and guidelines. However, it is important that MOH, MOET,(MOC), MOCI,
VWU, other mass organisations, international organisations and NGOs working with IEC are
also involved in the whole process. Normally, DARD will have the overall responsibility at
provincial level.

The key tasks that need to be carried out are:

- Develop an IEC approach and guidelines at national level. (IEC Task 1)
- Develop and introduce an IEC approach and guidelines within the provinces. (IEC Task 2)

## 13.2.2 Face-to-Face IEC

At the overall level, MARD will co-ordinate the development and implementation of face-to-face IEC. However, the detailed development, planning and implementation will be left to individual ministries/departments and organisations, with MOH/DOH being responsible for IEC by health staff, VWU for the WSS network at village and ward levels and MARD/DARD for the district advisory services. Other mass organisations will also be involved. Furthermore, there will be close co-operation with Commune and Town People's Committees and other

community leaders in connection with the implementation of face-to-face IEC. The key tasks that need to be carried out are:

- Review and revise the existing IEC materials and develop new materials. (IEC Task 3)
- Select and train WSS motivators in villages and wards and establish systems to supervise and provide support for the motivators, who will do IEC on all aspects of water, sanitation, health and hygiene. (IEC Task 4)
- Train commune health staff and village health workers and volunteers to carry out IEC activities, especially on water and sanitation related diseases and hygiene. (IEC Task 5)
- Assist with the development of district advisory services to users, WSS motivators and local contractors, including in-house and extension services. (*IEC Task 6*)

## 23.2.3 Mass Communication and National Campaigns

- MARD and the IEC Task Force will be responsible for the development and implementation of national mass communication within their respective areas of expertise and for the development and implementation of national IEC campaigns on water, sanitation and hygiene. The key tasks that need to be carried out are:
  - Develop messages for mass communication, prepare a mass communication implementation plan, including a description of organisational responsibilities and start mass communication. (*IEC Task 7*)
  - Develop guidelines for future campaigns (including integration of activities to take place from national to village level and co-ordination mechanisms) and implement further campaigns. (*IEC Task* 8)

## 33.2.4 Improved Health Education in Schools

MOET, with support from MOH, will review the present health education in schools and develop and implement improved basic health education in primary schools.

The key tasks that need to be carried out are:

- Review the present curriculum on basic health education in schools, train primary school teachers (1<sup>st</sup> level) in "active" teaching methodologies. (*IEC Task 9*)
- Assist mass organisations to further develop their basic health education activities in schools. (IEC Task 10)

## 43.2.5 Adequate WSS Facilities at Public Institutions

Appropriate WSS at schools, health facilities, markets and other public institutions are essential for demonstration purposes. However, they are also important because the risk of water and sanitation related diseases is high at places where many people gather.

MARD/DARD, together with MOC, MOET, MPI and PCs, will be responsible for ensuring adequate WSS facilities at public institutions. The commune PC and the commune Health Station will have very important roles in the implementation phase.

The key tasks that need to be carried out are:

- Prepare regulations and guidelines for construction of WSS facilities at all public institutions, including enforcement mechanisms. (*IEC Task 11*) This process must be supported by the preparation of appropriate technical designs for sanitation units.
- Prepare provincial Action Plans, outlining how to ensure that at least 90% of all existing
  public institutions have adequate WSS facilities by year 2005, and carry out IEC on proper
  operation and maintenance. (IEC Task 12)

## 53.2.6 IEC Monitoring and Evaluation System

In order to evaluate the impact of IEC and other NSSP activities on behavioural changes, an overall IEC monitoring and evaluation system will be developed, based on both qualitative and quantitative indicators. MARD, together with the IEC Task Force, will be responsible for the development and implementation of the overall IEC monitoring and evaluation system.

The key task that needs to be carried out is:

• Develop guidelines for studies on KAP, carry out KAP studies in selected provinces and adjust the overall IEC approach and guidelines. (*IEC Task 13*)

## **83.3 ACTION IN YEAR 2000**

This section (and similar sections in the following chapters) summarises the planned status of each task by the end of the first year (2000). It should be understood, however, that the NSSP is a dynamic programme and all the tasks will continue to be developed over the full 20 year period. Use of the term "completed" does *not* mean that no further developments should take place. The task descriptions are short summaries, see section 3.2 or Annex A for full descriptions.

No	Task	Status
1	IEC approach at national level	Completed
2	IEC approach at provincial level	Completed in the five initial provinces
3	Face to face IEC materials	Completed
4	Select and train motivators	Completed in the five initial provinces
5	Train health staff	Completed in the five initial provinces
6	Assist with district advisory services	Completed in the five initial provinces
7	Mass communication messages and planning	Started
8	Guidelines for future mass campaigns	Started
9	Review schools curricula and train teachers	Started in the five initial provinces
10	Assist mass organisations with health education in schools	Started in the five initial provinces
11	Guidelines for WSS at public institutions	Completed
12	Provincial plans for public institutions and IEC	Completed in the five initial provinces
13	KAP studies and adjusted IEC approach	Started

## **93.4 ACTION IN YEAR 2001**

No	<u>Task</u>	<u>Status</u>
1	IEC approach at national level	Reviewed
2	IEC approach at provincial level	Completed in the next ten provinces
3	Face to face IEC materials	Reviewed
4	Select and train motivators	Completed in the next ten provinces
5	Train health staff	Completed in the next ten provinces
6	Assist with district advisory services	Completed in the next ten provinces
7	Mass communication messages and planning	Reviewed
8	Guidelines for future mass campaigns	Reviewed
9	Review schools curricula and train teachers	Completed in the next ten provinces
10	Assist mass organisations with health education in schools	Completed in the next ten provinces
11	Guidelines for WSS at public institutions	Reviewed
12	Provincial plans for public institutions and IEC	Completed in the next ten provinces
13	KAP studies and adjusted IEC approach	Completed

## 103.5 ACTION IN YEARS 2002-2005

The main tasks at national level will be to review and adjust the overall IEC approach at regular intervals and to refine and adjust the different types of IEC activities, based on the experience from implementation in the pilot provinces. The same type of tasks will be carried out in the remaining 46 provinces as were carried out in the pilot provinces.

## 3 4. CAPACITY BUILDING COMPONENT

#### 114.1 INTRODUCTION

The strategy requires substantial and fundamental changes in the way administrative and sector staff think and operate. Most staff will need to develop new skills and expertise. For example, public sector organisations need to change from functioning as top down detailed planners and construction administrators to (a) advisors and facilitators to the public (ministries and departments) and (b) constructors competing with private sector enterprises (SOEs such as Provincial Water Companies). There are three main types of organisational change needed:

- Changes in the way the public sector organisations operate (their organisational structures, regulations and mandates).
- Substantial human resource development (HRD) in both the public and private sectors.
- A new approach to managing shared water supply facilities.

The work that will be required to implement the se changes has been referred to as capacity building activities and these take two, interrelated forms. Firstly changes in regulations, mandates, systems and physical capacity, and secondly increased human resource capacity. It should always be understood that the improvements in systems and physical capacity on the one hand and improvements in HRD on the other cannot be separated, they need to take place together and reinforce each other. There is also a close interlinkage between IEC and capacity building. Users' abilities to take on their new implementation role will be mainly strengthened through focused training supported by IEC campaigns. Training related to IEC activities is not covered in this chapter.

A fast implementation schedule for the Action Plan causes particular problems for the capacity building component - changing organisations' mandates, regulations and operating systems and developing technical and communication skills all takes time. Some of these changes are needed before widespread developments can take place. The preliminary process of setting up the PMU should clarify mandates, roles and requirements as much as possible before the Action Plan formally starts (see Section 1.3).

This chapter provides a short description and schedule of the tasks that need to be carried out in 2000 to 2005 but in order to get a real understanding of the capacity building tasks, the reader needs to consult the more detailed description provided in Annex A of this volume.

#### 124.2 KEY TASKS

## 64.2.1 Develop Public Sector Organisation, Regulations and Management Procedures

The proposal for organisational adjustment to suit the strategy is to build on existing sector organisations but, where practical, concentrate responsibility in a single organisation in order to simplify co-ordination and minimise problems resulting from overlapping responsibilities and mandates (see Section 5.1 in Volume 1). MARD will be the lead ministry within the sector and will establish within its organisation an agency with responsibility for implementation and the day-to-day co-ordination of activities in the RWSS sector. MOH, MOC, MOET, MOSTE, VWU and other mass organisations will retain significant supporting roles. Decentralisation is another key element of the strategy. Detailed planning and implementation will be managed by individual provinces based on user demand, and will have considerable flexibility to adjust the approach to suit local conditions.

The key tasks that need to be carried out are:

- Adjust the mandates and organisational structure of ministries and departments at national and provincial levels. (*Capacity Building Task 1*)
- Improve national and provincial legislation and regulations. (Capacity Building Task 2)
- Improve enforcement structures and procedures. (Capacity Building Task 3)
- Improve RWSS implementation programme management. (Capacity Building Task 4)
- Improve strategy and programme monitoring. (Capacity Building Task 5)

## 74.2.2 Develop HRD Activities

The strategy requires a new approach with which to deal with sector development and will only be fully effective if government staff are able to provide the required guidance and support to users. In addition SOEs and private contractors need to be given the opportunity to develop and function efficiently in a competitive environment. The changes require that a large amount of human resource development (HRD) needs to be undertaken in order to strengthen both the quality and quantity of human resources. During the NRWSS Strategy Study an initial assessment was made of the HRD situation in the sector. This will serve as a basis for the NSSP work.

The main task areas follow:

- Preliminary HRD needs assessment at national and provincial levels. (Capacity Building Task 6)
- Design and implement an *initial* HRD plan to meet urgent needs, including the anticipated needs of the users, the operators and the private sector. (*Capacity Building Task 7*)
- Design and implement a comprehensive HRD plan. (Capacity Building Task 8)

## 84.2.3 Improve the Management of Shared Water Supply Facilities

In accordance with a demand responsive approach, the detailed management and ownership arrangements for all rural water and sanitation will be left to the users of the facilities to agree upon. The management of shared facilities is more complicated than the management of a household facility, and consequently more comprehensive arrangements have to be made to ensure the users are able to manage the systems in a sustainable manner. Shared facilities fall essentially into three categories, (a) full piped water supply schemes often with treatment works, (b) simple piped gravity water supply schemes and (c) small piped and other shared water supply facilities.

In order to support development of shared water supply facilities, which the government strongly promotes as the way forward for the sector, the following tasks need to be carried out:

- Review the existing situation, including legislation, management arrangements, community participation and tariffs for shared water supply schemes. (*Capacity Building Task 9*)
- Develop basic structural guidelines for establishing and operating shared water supply facilities. (Capacity Building Task 10)

## **134.3 ACTION IN YEAR 2000**

<u>No</u>	<u>Task</u>	Status
1	Adjustments to mandates and organisational structure	Completed at national level and in the first 5 provinces
2	Improve national and provincial legislation and regulations	Draft additions or changes proposed at national level and in the 5 initial provinces
3	Improve enforcement structures and procedures	Initial suggestions proposed at national level and in the 5 pilot provinces
4	Improve management of RWSS implementation programmes	Completed at national level and in the first 5 provinces
5	Improve strategy and programme monitoring	Completed at national level and in the first 5 provinces
6	Preliminary HRD needs assessment at national and provincial levels	Completed at national level and in the first 5 provinces
7	Initial HRD plan to meet urgent needs	Completed at national level and in the first 5 provinces
8	Design and implementation of a comprehensive HRD plan	Started at national level
9	Preliminary review of the existing situation of shared water supply facilities	Completed at national level and in the first 5 provinces
10	Develop guidelines for shared water supply facilities	Started

## **144.4 ACTION IN YEAR 2001**

<u>No</u>	<u>Task</u>	<u>Status</u>
1	Adjustments to mandates and organisational structure	Extended to the next 10 provinces
2	Improve national and provincial legislation and regulations	Additions or changes at national level and the 5 pilot provinces finalised. Proposed changes in a further 10 provinces.
3	Improve enforcement structures and procedures	Completed in 15 provinces
4	Improve management of RWSS implementation programmes	Extended to the next 10 provinces

5	Improve strategy and programme monitoring	Extended to the next 10 provinces
6	Preliminary HRD needs assessment at national and provincial levels	Completed in a further 10 provinces
7	Initial HRD plan to meet urgent needs	Completed in a further 10 provinces
8	Design and implementation of a comprehensive HRD plan	Started at national level and in 15 provinces
9	Preliminary review of the existing situation of shared water supply facilities	Completed
10	Develop guidelines for shared water supply facilities	Completed

March 1999

## 154.5 ACTION IN YEARS 2002-2005

Capacity building will continue with emphasis on:

- Continued strengthening of support through the NSSP in the 15 pilot provinces.
- Widespread and effective HRD at local, regional and national levels to support and strengthen sector activities.
- Introduction of strategy tasks into new provinces, in a similar way to that described above for the year 2001 but with revisions.
- Monitoring, evaluation and revisions to the tasks.

## 4 5. FINANCE COMPONENT

#### 165.1 INTRODUCTION

The strategy approach requires that most users organise and fund construction of RWSS facilities themselves with only limited assistance from government. It is proposed in the strategy that the users or business enterprises pay the largest proportion of costs associated with the construction of water facilities and pay all the costs of operation and maintenance. Finding adequate financial resources will be required prior to planning any RWSS activities. Funding for such household improvements traditionally comes from various sources, such as user's or family savings, private loans by entrepreneurs and existing banking and credit systems. However it is believed that these sources are not sufficient to support the anticipated large level of spending required by the strategy if it is to achieve sector objectives by 2020. It is also true that in many cases traditional sources would not consider funding such household investments as they do not generate income or create collateral. It is therefore a prerequisite for successful implementation of the strategy that all users have access to additional funds set aside specifically for the construction of RWSS facilities. Poorer users will receive grants from government to assist them to construct their desired level of service (see Chapter 6 of Volume 1), whereas the less poor will be eligible for loans. The size and nature of the loans probably means however, that it is unlikely that they will be available through commercial finance from the banking sector. Therefore it is necessary that, within the Action Plan, a Loan Fund and a Grant Fund are established to support RWSS construction. This chapter deals with these two funds. Other funding sources will be investigated as tasks within the Action Plan. IEC campaigns and district advisers will assist users applying for the funding options available.

The principles that will be used to establish these funds are described in The Strategy, Volume 1, but two points are important. Firstly, the intention is to use the banking system as much as possible to manage and allocate the funds rather than government departments. Secondly, it is expected that a significant amount of funding will be provided by donors (either multilateral loans or bilateral grants) and that this support will be available to fund the financial mechanisms.

The main sub-components are:

- Establish the legal basis and the operating procedures for the grant and loan funds.
- Set up the funds at national and provincial levels.
- Develop ongoing monitoring systems to determine the level of funding required and the effectiveness of distribution.

### **175.2 KEY TASKS**

## 95.2.1 Establish the Legal Basis and the Procedures

The following tasks need to be carried out early in the strategy and should follow the guidelines laid out in Volume 1. The procedures must be sufficient to: ensure transparency in the allocation and payment procedures; guarantee that the funds are used to construct RWSS facilities; allow donors to fund/support particular provinces; and minimise bureaucracy and administrative costs.

The key tasks are as follows:

- Review all potential sources of funds and review the strengths and weaknesses of existing loan and grant schemes, including income generating credit schemes. (*Finance Task 1*)
- Establish a policy and regulatory base for the loan and grant funds. This includes forecasting future funding requirements. (*Finance Task 2*)
- Develop lending and grant allocation criteria and on-lending policies. This task deals with how the system will react to applications for funds. (*Finance Task 3*)
- Develop lending and grant disbursement procedures, ie. the systems for paying out (and in the case of loan repayments, receiving) money. (Finance Task 4)
- Develop tariff systems and guidelines for rural piped water supply schemes. (*Finance Task* 5)

## 105.2.2 Set up the Funds

Once the legal basis and the procedures have been established, the two funds need to be physically set up and money allocated. The key tasks are:

- Set up grant and loan funds at national level. (Finance Task 6)
- Set up grant and loan funds within the provinces. (Finance Task 7)

## 115.2.3 Establish Monitoring and Adjustment Systems

• Develop monitoring procedures and a mechanism for modifying the operation of the funds. (Finance Task 8)

#### **185.3 ACTION IN YEAR 2000**

<u>No</u>	<u>Task</u>	<u>Status</u>
1	Initial review	Completed nationally and in the first 5 pilot provinces
2	Establish policy and regulatory base and set up funds	Completed nationally and in the first 5 pilot provinces
3	Lending and grant allocation criteria	Completed nationally and in the first 5 pilot provinces
4	Lending and grant disbursement procedures	Completed nationally and in the first 5 pilot provinces
5	Develop tariff system	Draft completed
6	Set up national funds	Completed
7	Set up provincial funds	Completed the first 5 pilot provinces
8	Monitoring procedures	Completed nationally and in the first 5 pilot provinces

## 195.4 ACTION IN YEAR 2001

Extended to a further 10 provinces and modifications made to take account of lessons learnt through the monitoring system.

## 205.5 ACTION IN YEARS 2002 - 2005

Extended to the remaining 46 provinces and modifications made to take account of additional lessons learnt and user demand.

## 5 6. TECHNICAL COMPONENT

## 216.1 INTRODUCTION

There are two main types of action needed regarding technology. Firstly, technological developments and secondly presenting technology to users and other relevant parties. New developments include finalising outstanding technological issues, developing technological processes (ie. how technology decisions are made) and developing new technologies.

This chapter deals with specific tasks that are needed to standardise the technological approach to the sector and improve technological tools for the NSSP. New technologies and presentation of technologies to users are described below, but are not included in the technical tasks.

## New Technologies

New technologies and improvements to existing technologies will be an important element of future implementation. Several new technologies are currently being investigated, developed or introduced. These include: floating latrines for flood prone areas; solar warming of DVC latrines to speed up composting; upward flow water filters using floating media; community mini piped schemes using existing tubewells; Thai rainwater jars; and electric pumps specifically designed for tubewells. These developments will be encouraged and supported by the NSSP which will evaluate demand for the technologies. Their appropriateness will be measured primarily against user acceptability and sustainability. There are no additional tasks related to new technologies since this is covered in *Tasks 5 to 8*.

#### Presentation of Technologies to Users

This will be done at two levels.

- The first will be the general presentation of options as part of the IEC function of mass organisations and government support staff, in particular the Advisory Centres. Guidelines and manuals will be developed to assist these activities in community mobilisation and participation.
- Secondly, more technical guidelines and manuals will be required for the Advisory Services
  which present interdisciplinary methodologies for, evaluation of technical options and
  resources, feasibility studies and guides to monitoring and appraisal of completed schemes.
  These are particularly needed where users express interest in shared facilities such as mini
  piped schemes or full piped schemes. The advisory services will assist in conducting
  feasibility studies, using the manuals and guidelines described above.

#### **226.2 KEY TASKS**

## 126.2.1 Outstanding Technical Definitions and Decisions

There are many technical innovations being tried in Viet Nam and many areas of remaining technical difficulty, for example, how to supply water in saline areas. The demand responsive approach, together with support to the private sector and improved research co-ordination will help to solve many of the outstanding technical problems. However, there are some specific outstanding technical issues which need to be resolved before the sector can advance with a common approach. These issues (which are mainly about definitions and agreement within the sector about what is acceptable and what is not) are:

• Developing a practical definition of what constitutes "fresh" excreta so that the existing ban on the use of fresh human excreta as fertiliser can be implemented. IEC will strongly advise

people against using human excreta as fertiliser, but at the same time the sector needs a common understanding of the degree of treatment that is acceptable before composted excreta can be used. (*Technical Task 1*)

- Agreeing on what are acceptable sanitation technologies for flood prone areas. (*Technical Task 2*)
- Agreeing on guidelines for the use of soakaway types of latrine. (Technical Task 3)
- Developing improved and uniform water quality testing arrangements. (Technical Task 4)

#### 136.2.2 Technical Standardisation

The technological processes that need to be developed and standardised are:

- Clear national guidelines on technical "policy" issues, ie. national standards on what can and what cannot be done, and quality of services to be provided.
- Preparation of checklists of what needs to be considered when making technical evaluations of areas or of particular schemes.
- Preparation of technical manuals and guidelines at national, provincial and district levels to avoid duplication of work.

The standardisation that is described above refers to standardising the approach and process to be used when evaluating technologies. It is *not* the intention to decide on certain "best" technologies that should then be used in all cases. There will also be scope for innovation by the private sector and for changes to suit local conditions. A total of 22 separate technical manuals and guidelines have been identified and are described in more detail in Annex A. For convenience, these have been grouped into tasks as follows:

- General guidelines and manuals. (Technical Task 5)
- Water resource manuals and guidelines. (*Technical Task 6*)
- Water supply manuals and guidelines. (Technical Task 7)
- Sanitation guidelines and manuals. (Technical Task 8)

## 146.2.3 Construction Management Systems and Private Sector Participation

Construction management refers to the whole process of hiring, supervising and paying a contractor. Until fairly recently construction has been an exclusively government function and existing construction management systems are designed for this type of work. In the future construction will be done by competitive tendering and maximising profit will be an important consideration for contractors. In that new environment different systems will be needed and MOC and MPI have already issued a variety of decrees and guidelines for construction and tendering generally (ie. not just RWSS). The existing decrees need to be evaluated and adapted for RWSS and four areas need to be considered:

- Prequalification and tendering procedures.
- Contract law.
- Technical specifications and supervision.
- Measurement and payment systems.

The task is to review existing construction management documents and develop improved documents, and to assist with developing an improved business environment for private contractors. (*Technical Task 9*)

## **236.3 ACTION IN YEAR 2000**

<u>No</u>	<u>Task</u>	Status
1	Enforcement of the ban on the use of fresh excreta as fertiliser	Completed nationally and implemented in the first 5 pilot provinces
2	Sanitation in flood prone areas	Completed
3	Guidelines for soakaway latrines	Completed
4	Water quality control	Completed
5	General manuals and guidelines	Complete three of the manuals described in Annex A (5.2.2) - 1) Equipment, 2) RWSS at public institutions, 4) Approval procedures
6	Water resource manuals and guidelines	Complete two of the manuals described in Annex A (5.2.3) - 1) Water quality testing policy and framework, 2) Water resource assessments
7	Water supply manuals and guidelines	Complete three of the manuals described in Annex A (5.2.4) - 1) Guidelines on planning and feasibility studies, 2) Checklist for design, construction and management, 3) Rules for the planning, siting and construction of wells
8	Sanitation manuals	Complete two of the manuals described in Annex A (5.2.5) - 1) Planning and feasibility studies, 3) Rules for planning, siting and construction of latrines
9	Construction management documents	Complete the review and analysis of existing documents, identify gaps and start preparing revised documents

## **246.4 ACTION IN YEAR 2001**

<u>No</u>	<u>Task</u>	<u>Status</u>
1	Enforcement of the ban on the use of fresh excreta as fertiliser	Fully implemented in all provinces
2	Sanitation in flood prone areas	Already completed
3	Guidelines for soakaway latrines	Already completed
4	Water quality control	Already completed
5	General manuals and guidelines	Complete the remaining manuals described in Annex A

6	Water resource manuals and guidelines	Complete the remaining manuals described in Annex A
7	Water supply manuals and guidelines	Complete the remaining manuals described in Annex A
8	Sanitation manuals	Complete the remaining manuals described in Annex A
9	Construction management documents	Complete the revised documents

## 256.5 ACTION IN YEARS 2002 - 2005

At national level, action will consist of refining and developing the manuals and guidelines in the light of the experience from the first two years. At provincial level the action will consist of repeating the procedures established earlier in the pilot provinces and following any refinements made nationally.

## 6 7. ORGANISATION AND STAFFING

This chapter deals with how a temporary organisation will be established to help the sector implement the Action Plan. It does not deal with the overall organisation of the RWSS sector and it should be understood that most of the practical implementation of the Action Plan will be done by existing sector organisations at national, provincial, district and commune level, as described in Chapter 4.

#### 267.1 GENERAL APPROACH

There are several ways in which the work of introducing the NSSP could be organised. The general approach that will be used is as follows:

- 1. A temporary Project Management Unit (PMU) will be set up with its base in MARD and this unit will be responsible for introducing the NSSP *throughout the sector*, not just within MARD.
- 2. The PMU will *not* be a large independent unit working in parallel to existing organisations. Instead the members of the PMU will work as members of existing sections and units within MARD and other sector organisations.
- 3. The PMU will, however, be large enough to carry out most of the initial work that is needed from its own resources and from other existing staff within MARD and other sector organisations. However, some work may be contracted out (for example the PMU *may* decide to contract out the production of design manuals to design companies) or it may hire short term specialists for particular tasks. In addition, some existing staff in relevant ministries are expected to be made available part time to assist with NSSP work where this work forms a natural part of their present terms of reference.
- 4. The PMU will be *supported* during the first two years be a Technical Assistance (TA) team of consultants. The TA team will mainly assist the PMU with organising the work (ie. management support) and with specialist professional knowledge in selected fields.
- 5. The PMU will be a temporary organisation which will only exist for the first six years of the NSSP (2000 2005). After 2005 all implementation will be done by the new sector organisation.

#### 277.2 ORGANISATION AND STAFFING OF THE PMU

The organisation and location of the PMU within MARD cannot be specified at this stage since this is an internal question for MARD. The following description is therefore deliberately rather general. The staff described in this section refer to government employees and they could be either existing government staff or new appointments. Although the PMU is based in MARD, the staff, as mentioned above, will not necessarily all be located in MARD nor will they necessarily all be provided by MARD. Other ministries and organisations such as MOH and the Women's Union may also be relevant.

The PMU will be led by a senior manager (this position is provisionally referred to as the Project Manager) who will report directly to a senior officer in MARD. As part of the National Programme, the PMU will ultimately be responsible to the Management Board of that Programme. The Project Manager will be supported by a Chief Technical Adviser (CTA) from the TA team and by a small team of support staff. These staff will form the central or general part of the PMU and will have the following responsibilities:

- Planning and programming the work.
- Liaison with other organisations.

- Staff planning, including selection and allocation.
- Budgeting and financial control.
- Monitoring and supervision, including preparing progress reports.

The PMU will also contain specialist staff located in existing units within MARD. These staff will carry out most of the work that has been outlined in earlier chapters and which is described in more detail in Annex A. The staffing requirements are provisionally estimated to be as follows:

## IEC Component

- A senior IEC specialist with extensive experience of rural information activities.
- A health specialist with experience of water and sanitation related diseases and hygiene.
- A sociologist with experience of community organisations and grass roots financing systems.

## Capacity Building Component

- An administrator with experience of government operations.
- A senior training specialist.
- Two training assistants.
- A lawyer.

## Financial Component

- A senior rural credit or banking specialist.
- An accountant.

## Technical Component

- A water resources specialist.
- Two water engineers.
- A sanitation engineer.
- A contracts specialist.

The above staffing assumes that much of the actual IEC and HRD work will be done by other, existing organisations such as MOH who already have a capacity in these areas, whereas much of the technicalwork will be done by the PMU. The staffing is an estimate of the people required in the first two years, when the work will be particularly intensive. After that time it may be possible to reduce the numbers somewhat. The total number of full time professional staff will therefore be 16 people (including the Project Manager). This is considered to be the absolute minimum staff that are needed in order to achieve the large amount of work that is programmed in the first two years.

## 7 8. TIME SCHEDULE AND COSTS

## 288.1 TIME SCHEDULE

The strategy is a radical change from the existing approach to RWSS and will be introduced gradually. 1999 will be used to start the National Programme and to establish the NSSP. The period 2000 to 2001 will be used to resolve outstanding issues, develop detailed systems and implement pilot programmes in 15 provinces. Although implementation will start under the National Programme in all provinces in 1999, it will only be fully in line with the strategy by 2005.

The time schedule is shown in Fig 8.1

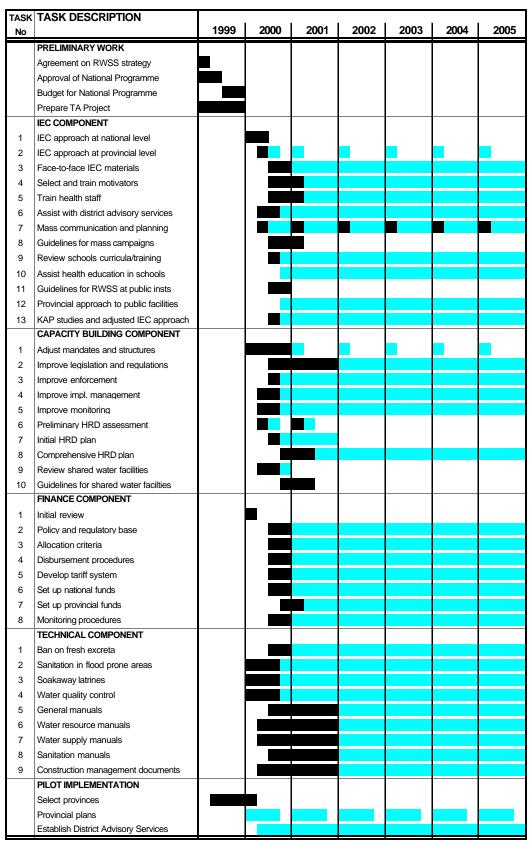
## 298.2 COST ESTIMATE

The estimated cost of implementing the Action Plan is very dependent on users' decisions on which technologies they want to construct and their level of interest in constructing RWSS facilities. The following estimate is based on a target scenario which is described in Annex B.1 of Volume 2.

Table 8.1 - Cost Estimate

Figures in bn VND Component **Pilot** Non Total Total as % Prog. Pilot 2000-05 of Const. 2000-01 2002-05 Cost 1) IEC 113 225 338 3% 2) HRD 6 86 92 1% 3) Sub Total - Govt Support (1+2) 119 311 430 4% 3.172 4) Grant Fund 183 3.355 27% 5) Loan Fund\* 377 6,529 6,906 55% 6) Sub Total - Govt Const (4+5) 560 9,701 82% 10,261 7) User Contribution 122 2,094 2,658 18% 8) TOTAL CONSTRUCTION (6+7) 682 11,794 12,476 100% 9) Donor TA Project 64 0 64 1% 10) TOTAL SUPPORT COSTS 183 494 4% 311 (3+9)11) GRAND TOTAL (8+10) 865 12.105 12,970 105%

<sup>\*</sup> Note that this is the amount of funding initially required, ignoring repayments. It is therefore the gross amount paid through the loan fund rather than the long term cost to government. During the period of the strategy all funds distributed through the loan fund should return to the lender ie. bank or government (less any defaults due to non-repayment).



Implementation primarily at central level
Implementation primarily within the provinces

Annex A
OUTLINE OF KEY TASKS

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## 8 1. INTRODUCTION

The main activities that need to be carried out in order to implement the strategy over 20 years are described in Volume 2. Some of these activities are long term ongoing ones and some are short term activities that are needed in order to introduce the NSSP over the initial 6 year period. This annex provides a description of the key tasks that need to be carried out as part of the short term activities.

The tasks have been grouped together under the four main components of the NSSP - IEC, Capacity Building, Financial and Technical and are an expansion of the brief descriptions provided in Chapters 3 to 6. The pilot implementation tasks, which are described in Chapter 2, are not covered in this Annex because these tasks deal mainly with provincial processes and management systems, neither of which can be specified in advance. However, it should be understood that the professional aspects of pilot implementation are covered by the four components in this Annex, and the organisational support for pilot implementation is covered in Annex B.

The work that needs to be done can be divided up and described in a variety of ways. This Annex uses the term Task to mean a self contained unit of work that will probably be carried out by a single team of people. Work that can be logically grouped by location (ie. national work and work in the provinces) or work that can be grouped by time may also be gathered together in a single task. Many of the tasks are, however, closely related to other tasks and need to be carried out in close co-ordination.

The description of the tasks is intended to act as a basis for further work in developing formal TOR for projects or as a basis for the PMU to produce its annual work plans.

## 9 2. IEC TASKS

#### 302.1 BACKGROUND

It was found during the NRWSS Strategy Study that the majority of rural households give very low priority to improved sanitation, while the priority attached to improved water supply varies. Furthermore, in general people have little knowledge about the possible causes of water and sanitation related diseases, with the level of knowledge often being related to their economic situation and level of education. Whatever the level of knowledge, actual hygiene practices were found to be almost invariably bad. Achieving a change in practices is therefore essential. It is, however, international experience that this is difficult and requires a joint effort of many parties. It is not sufficient to just provide people with messages of what to do; they also need an *explanation* as to why behavioural changes are needed. Well-designed information, education and communication (IEC) activities are therefore vital for the success of the strategy.

The NRWSS Strategy Study also found that generally very little information is provided in rural areas and small towns on water and sanitation. Some information is, however, provided as part of various programmes. MOH thus integrates its IEC on water and sanitation with other health activities and also co-operates with mass organisations, MOET and other sector organisations. The Women's Union has established a network of motivators in communes included in the WATSAN programme, supported by UNICEF, and other mass organisations, like the Youth Union, are sometimes involved in IEC relating to water and sanitation. It is, however, essential that much more emphasis is put on IEC in the future.

IEC will be designed to serve four purposes:

- Encourage an increased demand for clean water and hygienic latrines in particular a major increase in the demand for latrines.
- Increase the willingness to pay for clean water and hygienic latrines which is one way of developing a sense of ownership and responsibility for the facilities.
- Provide users with sufficient information to make an informed choice between different WSS technologies.
- Create a much higher awareness of hygiene and the link between water, sanitation, hygiene practices and health.

The IEC tasks have been grouped under the following 6 sub-components: (1) overall IEC approach and guidelines; (2) face-to-face IEC; (3) mass communication and national campaigns; (4) improved health education in schools; (5) construction of water and sanitation facilities in public institutions (as explained below, this is not for IEC purposes only); and (6) IEC monitoring and evaluation systems.

#### 312.2 OVERALL IEC APPROACH AND GUIDELINES

The starting point for future IEC work will be to formulate an overall approach and to establish co-ordination of all EC tasks to ensure coherence, integration and co-operation between the ministries/departments and organisations involved. Mechanisms will also have to be established to co-ordinate and integrate IEC with other tasks under the NSSP.

Most of the tasks connected with the formulation of an overall IEC approach and guidelines will take place at national level, but with the involvement of departments, mass organisations and People's Committees in the first five pilot provinces. Furthermore, it is important that the

development of an overall approach is seen as a process, which is closely linked to the detailed development and testing of individual IEC activities. As the lead ministry for the implementation of the strategy, MARD will have the overall responsibility for the formulation of the IEC approach and guidelines. However, it is important that MOH, MOET, MOCI, VWU, other mass organisations, international organisations and NGOs working with IEC are also involved in the whole process. Normally, DARD will have the overall responsibility at provincial level.

#### 152.2.1 IEC Approach at National Level

IEC Task 1

The following work will be carried out at <u>national level</u> (with participation by representatives from the first five pilot provinces):

- Conduct a workshop to initiate the discussions on the overall IEC approach. The workshop shall include participants from MARD, MOH, (MOC), MOET, MOCI and VWU as well as participants from other mass organisations, international organisations and NGOs involved in IEC. Other organisations which indicate an interest in participating in the process should also be invited to attend. The workshop will examine the future role of IEC in the RWSS sector and will be based on the experience of different ministries and mass organisations. This will include discussions on the IEC content and the means of communication needed in order to reach the different target groups.
- 2. Review the experiences from existing IEC programmes. This includes a review of the IEC component of the WATSAN programme, other projects with water and sanitation related IEC (including NGO supported projects) and other types of programmes, e.g. the family planning programme. The review will focus especially on the impact achieved by these IEC programmes and components and will ty to identify lessons learnt negative as well as positive and main points to be taken into account when designing the IEC activities under the NSSP.
- 3. Review existing studies on people's Knowledge, Attitudes and Practices (KAP) in relation to water, sanitation, health and hygiene. Many KAP studies were reviewed during the preparation of the NRWSS strategy, but further information is needed in order to determine the appropriate levels of complexity of IEC content for different target groups. The review will focus especially on people's knowledge about health and hygiene and on obtaining additional information from Southern Viet Nam.
- 4. Define the overall types of information to be provided to different users and target groups. The IEC content can be divided into two main areas: (a) water and sanitation related diseases and hygiene; and (b) appropriate water and sanitation models and their costs, possibilities for obtaining grants and loans and how households can organise themselves for different purposes. Within both areas, it will be specified which overall messages are to be delivered and the level of complexity appropriate for different target groups.
- 5. Define the different means of communication to be used at different levels and for different target groups. In order to achieve the best possible results and also to reach the different target groups, IEC will take place at all levels, from village to national level and several communication channels will be used. Furthermore, IEC on water, sanitation and hygie ne will be integrated with IEC carried out under other programmes. When designing IEC activities, differences between ethnic minority groups, socio-economic groups and age groups, etc. will be considered. To ensure a comprehensive IEC programme, an outline linking the different types of information and the different means of communication will be developed.
- 6. Prepare guidelines for making the IEC approach operational. The guidelines, which will also describe the overall approach, will be used at both national and provincial levels, and will include an outline of the division of tasks and responsibilities among different ministries and organisations. The guidelines will describe adequate co-ordination mechanisms, such as the establishment of IEC task forces at different levels, and reporting procedures.

- 7. Conduct a workshop in order to inform about, and discuss, the approach and guidelines. The proposed approach and guidelines will be discussed and feed-back provided on necessary adjustments. The workshop will aim at achieving consensus among the implementing ministries and organisations.
- 8. Finalise the overall IEC approach and guidelines. After the workshops at national and provincial levels (see below) and after receiving possible additional feed-back, the approach and guidelines will be finalised and presented in a final document.
- Establish an IEC task force at national level, consisting of MARD, MOH, MOET, MOCI, VWU, the Youth Union and other organisations which indicate an interest in participating in the process, and formulate clear terms of reference outlining the tasks and responsibilities of the task force.

## 162.2.2 IEC Approach at Provincial Level

IEC Task 2

The following work will be carried out at provincial level:

- Conduct workshops in the first 5 pilot provinces in order to inform about, and discuss, the
  overall IEC approach and guidelines. The workshops shall include participants from the
  Provincial People's Committee, DARD, (DOC), DOH, DOET, DOCI, VWU, other mass
  organisations, international organisations and NGOs involved in IEC in the respective
  province. The provincial workshops will be important inputs to the overall IEC approach and
  guidelines and shall take place when the discussions have started at national level.
- 2. Establish IEC task forces in the first 5 pilot provinces and formulate overall provincial IEC plans. The provincial IEC plans will be based on the overall approach and guidelines, but will take into account the specific situation in the individual provinces. There will inter alia be variations in people's KAP (e.g. in relation to the use of fresh human excreta for agriculture or aquaculture) and in the capacity of different provincial departments and organisations. This will lead to some variations in the types of information to be provided, the means of communication to be used and the departments and organisations to be involved.
- 3. Conduct workshops on the overall IEC approach and guidelines and establish IEC task forces in other provinces (10-12 new provinces each year).

When the overall IEC approach and guidelines have been formulated, it will be possible to develop the different types of IEC activities and materials in more detail. The detailed development of the individual IEC activities will take place at both national level and in the 15 pilot provinces. At national level, it will be possible to draw on the experience from different parts of the country, while in the pilot provinces it will be possible to go into more detail about the practicalities of implementing IEC and to test the individual activities and materials. The experience from the pilot provinces will be used to adjust the IEC activities and materials.

#### 322.3 FACE-TO-FACE IEC

At the overall level, MARD will co-ordinate the development and implementation of face-to-face IEC. However, the detailed development, planning and implementation will be left to individual ministries/departments and organisations, mainly MOH/DOH (IEC by health staff), VWU (WSS network at village level) and MARD/DARD (district advisory services). Other mass organisations will also be involved. Furthermore, there will be close co-operation with Commune and Town People's Committees and other community leaders in connection with the implementation of face-to-face IEC.

#### 172.3.1 Plan and Implement Face to Face IEC

The following work will take place at both <u>national and provincial levels</u>:

- 1. Review existing IEC materials, revise them in accordance with the overall IEC approach and develop new IEC materials. *IEC Task 3*
- 2. Select and train WSS motivators. IEC Task 4
  - Develop task descriptions for WSS motivators, select motivators in villages and wards in pilot provinces and identify their training needs. Develop an adequate training approach and training materials for motivators, including review and revision of existing materials.
  - Establish and train WSS training teams at national level and at provincial and district levels in the pilot provinces and train motivators in these provinces.
  - Establish systems to supervise and provide support for the motivators.
  - Motivators in the pilot provinces carry out IEC on (a) water and sanitation related diseases
    and hygiene; and (b) appropriate water and sanitation models and their costs, possibilities
    for obtaining grants and loans and how households can organise themselves for different
    purposes.
  - Select, train and support motivators in other provinces (11-12 new provinces each year).
  - Do follow-up training of motivators, when required.
- 3. Train commune and village health staff. IEC Task 5
  - Review job descriptions for commune health staff in relation to water, sanitation and hygiene and identify their training needs. Develop appropriate training approach and training materials for health staff, including review and revision of existing materials.
  - Train commune health staff in pilot provinces.
  - Develop task descriptions for village health workers and volunteers in relation to water, sanitation and hygiene and identify their training needs. Develop appropriate training approach and training materials for village health workers and volunteers, including review and revision of existing materials.
  - Train health staff (TOT training) at province and district levels and train village health workers and volunteers in the pilot provinces.
  - Health staff at all levels in the pilot provinces carry out IEC on water and sanitation related diseases and hygiene.
  - Train health staff in other provinces (11-12 new provinces each year).
  - Do follow-up training of health staff, as required.
- 4. District advisory centres. IEC Task 6
  - Assist with the development of district advisory services to users, WSS motivators and local contractors in the pilot provinces. This includes assistance in establishing in-house information services and extension services, especially through participation in community meetings.
  - District advisory centres in the pilot provinces carry out advisory services.
  - Assist with the development of district advisory services in other provinces (11-12 new provinces each year).
  - Continue to support the district advisory centres, as required.

### 332.4 MASS COMMUNICATION AND NATIONAL CAMPAIGNS

MARD and the IEC Task Force will have the responsibility for the development and implementation of national mass communication within their respective areas of expertise and for the development and implementation of national IEC campaigns on water, sanitation and hygiene.

The following work will be carried out at <u>national and provincial levels</u>:

Develop mass communication messages, prepare an implementation plan and carry out initial national mass communication. *IEC Task 7* 

- Review existing programmes and extract relevant experience for use in designing and planning mass communication on water, sanitation, health and hygiene.
- Develop messages for mass communication on water and sanitation related diseases and
  personal hygiene, the strategy in general, water and sanitation models, the possibilities of
  getting grants, loans etc. Messages will be developed for different mass media and other
  means of communication. For each message there may be several forms of presentation
  (for example a short TV spot, a longer in-depth TV-programme and a bill-board) and for
  each means of communication there may be several messages.
- Prepare a mass communication implementation plan, including a description of organisational responsibilities for broadcastin g and dissemination of messages.
- Carry out initial mass communication at national level, with particular emphasis on the 15 pilot provinces.
- Develop guidelines and implement future mass communication campaigns. IEC Task 8
- Review previous campaigns, including materials and communication channels used, as well
  as the level of integration of activities conducted by different organisations and at different
  levels. The review will include campaigns on water, sanitation and hygiene, but also
  campaigns conducted within other areas, e.g. family planning, EPI and HIV/AIDS.
- Develop guidelines to be used in connection with future campaigns, including the length and number of campaigns to be carried out each year, the integration of activities to take place from national to village level and the co-ordination mechanisms to be established.
- Carry out national campaign(s) on water, sanitation and hygiene, with particular emphasis on activities in the pilot provinces.
- Carry out mass communication and national campaigns on water, sanitation and hygiene at national level, with particular emphasis each year on the new provinces where the Action Plan is being started.

#### 342.5 IMPROVED HEALTH EDUCATION IN SCHOOLS

Basic health education is included in the national curriculum for grades 1 to 5 and some schools implement campaigns on health and sanitation on a regular basis. MOET, with support from MOH, will review the present health education in schools and also develop and implement improved basic health education in primary schools.

#### 182.5.1 Improved Health Education in Schools

The following work will be carried out at national and provincial levels:

- 1. Develop health education in schools. IEC Task 9
  - Review current school curriculum, teaching materials and methodologies and develop appropriate training approach for teachers on basic health education.
  - Train primary school teachers (1<sup>st</sup> level) in the pilot provinces in "active" teaching methodologies.
  - Train primary school teachers (1<sup>st</sup> level) in 11-12 new provinces each year in "active" teaching methodologies.
- 2. Assist mass organisations with health education in schools. *IEC Task 10* 
  - Review activities carried out by the Pioneer Association, the Youth Union, the Red Cross
    and possibly other mass organisations, which are involved in campaigns and festivals in the
    schools.

- Assist mass organisations in the pilot provinces in further developing basic health education
  activities in schools. Such activities can include competitions and games, composing songs
  about water, sanitation and health, etc.
- Assist mass organisations in 11-12 new provinces each year in further developing basic health education activities in schools.

#### 352.6 WSS FACILITIES AT PUBLIC INSTITUTIONS

Adequate WSS facilities at public institutions are essential to allow school children to put their basic health education into practice and are also important for demonstration purposes in other public institutions. However, appropriate WSS facilities at public institutions are not for IEC purposes only; they are also important because of the high risk of transmission of water and sanitation related diseases at places where many people gather.

## 192.6.1 National Approach to Public Facilities

IEC Task 11

At <u>national level</u>, MARD, together with MOC, MOET, MOH and MPI, will be responsible for the following tasks (with participation by representatives from the first five pilot provinces):

- 1. Review the existing regulations for construction of WSS facilities at public institutions and the enforcement mechanisms for this sector. The review will include a review of the experience from the school component of the WATSAN programme and from other relevant projects.
- Prepare regulations and guidelines on construction of WSS facilities at all public institutions.
  They will inter alia specify whether MARD/DARD and MOC/DOC will arrange for
  construction or whether the individual institutions will receive a grant to cover parts of the
  cost and will arrange for their own construction. They will also specify the enforcement
  mechanisms.

## 202.6.2 Provincial Approach to Public Facilities

IEC Task 12

At <u>provincial level</u>, DARD (with DOET and the Provincial PC) will have the overall responsibility for the following tasks. The District and Commune PC and Health Station will also have an important role in implementation:

- 1. Based on the national regulations and guidelines, prepare provincial Action Plans in the pilot provinces. These will outline the practical steps to be taken to have appropriate WSS facilities at 90% of all existing public institutions by year 2005, with the aim of having 100% coverage of key institutions such as educational and health establishments. The Action Plans will include detailed construction schedules, cost estimates and cost allocations, and will specify how People's Committees are to enforce the regulations.
- 2. Construct appropriate WSS facilities at public institutions in the pilot provinces.
- 3. Carry out IEC in relation to public institutions in the pilot provinces on proper operation and maintenance of WSS facilities. This may include the distribution of leaflets or other materials.
- 4. Prepare Actions Plans, construct appropriate WSS facilities at public institutions and carry out IEC on proper operation and maintenance in other provinces (11-12 new provinces each year).

Technical guidelines on WSS facilities at public institutions will also be prepared (see Technical Key Task 5, Section 5.2.2).

#### 362.7 IEC MONITORING AND EVALUATION SYSTEM

The day-to-day monitoring of the individual IEC activities will be done by the ministry/department or organisation responsible for these activities. In order to evaluate the impact of IEC and other NSSP activities on behavioural changes, an overall IEC monitoring and evaluation system will be developed, based on both qualitative and quantitative indicators. MARD, together with the IEC Task Force, will be responsible for the development and implementation of the overall IEC monitoring and evaluation system. *IEC Task 13* 

The following work will take place at national and provincial level:

- 1. Develop guidelines for studies on knowledge, attitudes and practices (KAP). The guidelines will describe the types of methods to be used, the size of the studies, criteria for selection of study areas, how often to carry out the studies, which organisations are to be responsible etc.
- 2. Plan and implement KAP studies in some of the pilot provinces where IEC activities have been implemented for some time. The results of the studies will feed into the revision of the overall IEC approach and guidelines and into the more detailed planning of future IEC activities.
- 3. Review and adjust the overall IEC approach and guidelines.
- 4. Plan and implement KAP studies in further the provinces where IEC activities have been implemented for some time.
- 5. Review and adjust the overall IEC approach and guidelines at regular intervals based on the results of the KAP studies.

## 103. CAPACITY BUILDING TASKS

#### 373.1 BACKGROUND

The NRWSS Strategy Study identified main areas that could benefit from capacity building to create the desired enabling environment for the implementation of the strategy. The first is the sector organisation which because of the large number of stakeholders needs to be developed to increase management efficiency through enhanced co-ordination and improved regulatory measures. The second area is human resource evelopment which because of the change in approach introduced by the strategy and the anticipated increased volume of work needs to be greatly strengthened. The third area to be addressed is the need for a set of new principles and guidelines, supported by training, on the management of piped and other shared water supply facilities.

## 213.1.1 Purpose of Key Tasks

The capacity building tasks will be designed:

- 1. To increase the effectiveness of the demand responsive approach to the RWSS sector through supporting legislative and regulatory measures which will include enforcement procedures.
- 2. To educate users, and strengthen public and private sector organisations and staff through introducing a comprehensive HRD programme at national, provincial, district and grass root level.
- 3. To develop clear guidelines on ownership and management options for different types of shared water supply facilities.

## 223.1.2 The Sub-components

Each key task is divided into sub-components focusing on different areas of capacity building. Each task is described separately and includes activities at national, provincial, district, and commune level. Organisation and timing however, are described together for all components.

## 38 3.2 DEVELOPMENT OF PUBLIC SECTOR ORGANISATION, REGULATIONS & MANAGEMENT PROCEDURES

The RWSS sector has made great progress in rationalising its organisation and concentrating its management within the Ministry of Agriculture and Rural Development (MARD), though the ministries of Health, Construction, and Science & Technology still play important roles. The creation in 1998 of a National Programme for RWSS has further strengthened the organisation of the sector. MARD established a management committee for the programme and has prepared guidelines for implementation. There is still, however, a need to review and update the respective mandates of the ministries and departments and clarify the boundaries between them both between and inside the ministries involved. The requirement for adjustment of the organisational framework is highlighted by the needs of the National Programme and the National Strategy Support Programme which direct action to the provincial and lower levels of administration and, particularly with the NSSP, at the district and commune level which are the main levels of implementation.

During the strategy study the existing legislation and regulations pertaining to the RWSS sector were reviewed. The references collected in connection with the Strategy Study include details on the existing legislation and regulations. With the re-organisation of the public service portion of

RWSS sector well underway, there is, however, a need to make a more detailed review of the existing legislative and regulatory framework and identify areas where further modifications and/or new legislation and regulations are required. This process will take place at both national, provincial and lower levels.

It will also be important to address the issue of lack of compliance with the existing legislation which the strategy study found was widespread. Some of the regulations and enforcement systems which need to be examined include those related to the Water Resource Law (May 1998), the use of fresh human excreta, water quality standards and testing, construction of WSS facilities in public institutions and regulation of the private sector and SOEs.

A further area which will require attention is the management systems and procedures for public sector organisations. It is intended to minimise the re-organisation of the public sector as much as possible but there will still be major changes to the operation of existing organisations and ministries and adjustments to the boundaries between them. MARD will be the lead ministry for RWSS, while MOH, MOC, MOET, MOSTE, VWU and other mass organisations retain significant supporting roles. NSC will be responsible for the overall supervision and monitoring of the implementation of the strategy.

Decentralisation is a key element of the strategy, with the responsibility for planning and coordination of implementation placed at provincial and district levels. The different ministries, mass organisations and People's Committees will require suitable management skills and procedures in order to carry out and co-ordinate their future tasks in the most effective and efficient way. This includes the development of appropriate monitoring systems for NSC and MARD. NSC will be responsible for the overall monitoring of the strategy, including measuring the achievement of outputs and objectives, while MARD will monitor the implementation of activities and levels of input.

#### 233.2.1 Adjust the Mandates and Organisational Structure of the Sector

Capacity Building Task 1

A preliminary study of the structure of the RWSS sector will identify the issues related to the overall organisational framework and the internal reorganisation required. The study is foreseen to produce the following outputs:

- 1. A report including an outline of the future mandates of individual ministries and organisations, an organisational table and concrete recommendations on the future overall organisation of the RWSS public sector.
- A report including an outline of the future mandates of individual national departments and agencies, provincial RWSS organisations, district advisory services and associated organisational tables.
- 3. A report including an outline of the current approach of on-going and planned projects and programmes and the adjustments required to bring them into line with the strategy. This will include a timetable for implementing the adjustments.
- 4. Recommendations from a national seminar on the proposed organisation of the public sector to be forwarded to the government for appraisal.

The study will include an overall review of management systems and procedures in connection with the internal re-organisation and adjustments within ministries, mass organisations and the administration at provincial and district levels.

## 243.2.2 Improve National and Provincial Legislation and Regulations

Capacity Building Task 2

- Review the legal documents collected in connection with the NRWSS Strategy Study in order to identify areas where further investigation is required. Additional information will be collected and entered into the library in order to make it complete. Areas will then be suggested where modifications and/or new legislation are required.
- 2. Make a thorough review of inconsistencies in definitions, formulations and omissions in areas covered by separate legislation. The strategy study identified several of these which can be incorporated in the review, but more thorough research still needs to be undertaken.
- 3. Carry out similar reviews in the five/fifteen pilot provinces to those above but based on provincial laws and regulations. (Contrary to the national level, no data has been collected at provincial and district levels. This could be a considerable task although the general impression from the study is that provincial administrations usually apply guidelines issued by the central administration. Several provinces draft their own regulations to suit special circumstances in their province).
- 4. Prepare a report which includes:
  - An analysis of the existing legislative and regulatory situation.
  - Drafts of revised or new legislation and associated regulations for the national level.
  - Drafts of resolutions and circulars for the five/fifteen pilot provinces.

This draft report will be submitted to the government for further action by the ministries concerned and/or for final submission to the National Assembly.

#### **253.2.3** Improve Enforcement Structures and Procedures

Capacity Building Task 3

- 1. Review the current structures and procedures for the enforcement of legislation and identify the causes for non compliance. A number of these have already been identified by the study team such as inadequate staffing levels, inadequate equipment and a lack of standardised procedures for enforcement of the regulations. An area where additional enforcement of regulations will be required is in connection with consumer protection. Since enforcement is a provincial responsibility, this activity will only take place at this level.
- 2. Prepare provincial guidelines on enforcement structures and procedures which can be used in the five/fifteen pilot provinces in order to test their viability and usefulness. It is estimated that a trial period of two years will be needed to assess with some certainty if the proposals are effective. It is expected that the new district advisory services will play an important role in this area, which also covers consumer protection.

## **263.2.4** Improve Programme Management

Capacity Building Task 4

- 1. Make a thorough review of existing management systems and procedures both at national level and in the five/fifteen pilot provinces. An initial review will be made in connection with the Preliminary Study (indicated in *Task 1*) which will act as the starting point for this study.
- 2. Adjust existing management systems and procedures and develop new ones, where required, in order for the organisations and administrations to carry out their functions in the best possible and most efficient way.

#### 273.2.5 Improve Strategy and Programme Monitoring

Capacity Building Task 5

- 1. Review the existing monitoring systems and structures. Monitoring in connection with the RWSS strategy has been divided into:
  - Strategic monitoring of objectives and output, carried out by NSC.
  - Implementation monitoring of activities and levels of input, carried out by MARD.

In addition to this, individual ministries and organisations will have their own procedures for monitoring implementation and progress of individual activities.

2. Design and test systems and procedures for developing effective strategic and implementation monitoring. Monitoring will be based on agreed indicators that adequately measure progress or regression. The development of indicators and reporting systems will follow and be tested both at the national level and in the five/fifteen pilot provinces. The implementation of the procedures will start only after an initial training programme has been carried out. Monitoring will take place over a trial period of two years during which time necessary adjustments will be made and refresher training will be conducted. After the trial period the monitoring process will be further evaluated.

#### 393.3 DEVELOPMENT OF HRD ACTIVITIES

An initial assessment of the Human Resources Development within the RWSS sector was undertaken during the course of the study. Institutions involved in education and training were reviewed with respect to their capacity to meet current and future needs. An assessment was also carried out of the training activities of the WATSAN programme and the skills and capacities in the nine provinces included in the NRWSS study.

The present staffing situation does not support the development of the strategy. Training traditionally has emphasised technical skills in construction rather than management, planning and communication skills. The present staff are generally technicians with no training for the requirements of the demand responsive approach.

In addition poor job development, inadequate funding for staff and in some areas also scarcity of staff is a problem.

#### 283.3.1 Preliminary HRD Needs Assessment

Capacity Building Task 6

It is foreseen that a preliminary HRD study will be conducted before other activities can be undertaken. This will include assessment of:

- The number of staff and skills required at national, provincial and lower levels.
- Skills available within key ministries and organisations.
- The gaps which need to be filled.

Following this, overall HRD guidelines will be developed, covering inter alia overall staff development, career planning, training approaches and main training subjects, while an initial HRD plan will cover urgent training needs among key staff at national level and possibly within the five/fifteen pilot provinces.

A more comprehensive HRD programme will, however, need to be prepared, covering the period until year 2020. The comprehensive programme will differ significantly from the initial HRD plan. Firstly, after the re-organisation of the sector it will be possible to make a more precise description of the tasks to be carried out by various sector actors at different levels. Secondly, several sets of guidelines and manuals will have been developed in connection with different activities under the NSSP and training in the use of these will be essential. Thirdly, it will be possible to define a holistic approach to HRD where education and training activities are integrated with career planning, improved employment conditions and other forms of general staff development.

#### 293.3.2 Design and Implement an Initial HRD Plan to Meet Urgent Needs

Capacity Building Task 7

- Prepare sets of training modules for the implementation of the initial HRD plan, which
  concentrates on urgent training needs. This will start with a review of existing training
  modules and materials and will be closely co-ordinated with training modules developed under
  the WATSAN programme, the ADB-financed rural development programme and other
  programmes.
- 2. Strengthen the capacity of training institutions to carry out the training. This may for example include purchase of equipment.
- 3. Conduct training courses for different target groups at national level and within the 15 pilot provinces at provincial and lower levels. Training will commence with senior staff, with courses inter alia including general information about the strategy and discussions of how to apply a demand responsive approach in practice. These courses will then be extended in modified form to the target groups which will include government staff, mass organisations, banks, the private sector, user groups etc.
- 4. Plan and conduct study tours for national and provincial staff.
- 5. Review the present criteria and procedures used in connection with promotion and possible career planning. This will include discussions with staff at different levels within key ministries and organisations working within the RWSS sector. The review will take place both at national level and within the 15 pilot provinces.
- 6. Develop and implement career plans for key staff at national, provincial and possibly lower levels. Special focus will be on how to motivate staff to move to or stay in remote provinces and districts.
- 7. Review employment conditions within key ministries and organisations working within the RWSS sector. The review will take place both at national level and within the 15 pilot provinces. The review will inter alia include levels of remuneration and staff benefits provided. Special focus will be on the employment conditions in remote provinces and districts.
- 8. Prepare proposals for improved employment conditions and integrate them into the general employment conditions/regulations of the individual ministries and organisations. Consideration will be given to how special incentives could be given to staff willing to work in remote provinces and districts.

#### 303.3.3 Design and Implement a Comprehensive HRD Plan

Capacity Building Task 8

- 1. Review the experience of the implementation of the initial HRD plan (*Task 7*) and identify key training topics to be included in the more comprehensive training plan. There will also be a review of whether training should focus on the same target groups as those included in the initial HRD plan.
- 2. Based on the review develop appropriate HRD guidelines and training methods for the different target groups and training topics. This may include training-of-trainers, overseas training for key trainers and decision makers at national and provincial levels, training courses within Viet Nam, and study tours either within Viet Nam or to neighbouring countries.
- 3. Prepare training modules and materials for the target groups, based on the earlier training needs assessment (*Task* 6) and the manuals and guidelines prepared in connection with other activities under the strategy.
- 4. Strengthen the capacity of training institutions to carry out the training, if this is required. This may for example include the purchase of equipment.
- 5. Conduct training courses and study tours, including study tours to the provinces included in the pilot programme.
- 6. Review and update the HRD guidelines, including a review of different elements of the HRD programme.
- 7. Review the different elements of the HRD programme during annual seminars.

#### 403.4 MANAGEMENT OF SHARED WATER SUPPLY FACILITIES

The demand responsive approach implies that the responsibility for construction, operation and maintenance and operation of water supply and sanitation facilities primarily falls to the users (or group of users). Users will decide on the type of installations they want and how they will finance them. The management of shared facilities (ie. piped schemes) is more complicated than household based facilities and special arrangements will therefore have to be put in place to ensure sustainability. During the study it was found that shared facilities are not common. Shared facilities fall essentially into three categories, (a) full piped water supply schemes often with treatment works, (b) simple piped gravity water supply schemes and (c) small piped and other shared water supply facilities. Comments on these technologies and the institutional arrangements required follows:

#### Full piped water schemes in towns and densely populated rural areas

Under present legislation ownership is vested in People's Committees. Most often the Provincial Water Supply Company (WSC) is responsible for operation and maintenance, including collection of payment according to a tariff set by the Provincial People's Committee. Sometimes piped schemes are handed over to the People's Committee at district, town and village level and a management committee is established to operate, maintain and collect payment. Community participation has been found to be generally low in town piped schemes.

#### Simple piped gravity water schemes in mountainous areas

Local residents have often contributed labour to the construction of these schemes, which are then handed over to District or Commune People's Committees, but have rarely been involved in the planning and design phase. Operation and maintenance is sometimes the responsibility of the Irrigation Department, sometimes the Commune People's Committee and/or the users. Users often, but not always, pay for operation and maintenance but tariffs seldom cover the full costs.

## Mini piped schemes and other shared water supply facilities

These systems provide individual connections to a small number of households using low technology and small water sources (eg a domestic tube well). These systems are constructed and managed either by a household, a group of households or occasionally a local contractor. Operation, maintenance and payment systems are arranged within the community and often a caretaker is appointed. It is assumed that there will be an increasing interest in these mini-piped schemes as they are a relatively cheap way of upgrading current systems.

Although the arrangement for ownership and management of shared facilities will be left flexible there is a need to establish some overall management principles and to develop guidelines on ownership, community participation, organisational options, tariffs and other payment options.

## 313.4.1 Preliminary Review of the Existing Situation Regarding Shared Water Facilities

Capacity Building Task 9

1. Conduct a workshop at national level to initiate the discussion of the overall ownership structures and management principles for shared water supply facilities. The workshop shall include participants from MARD, MOC, MOF, VWU, other mass organisations, selected provincial and district People's Committees, selected provincial DARD, selected provincial WSCs, selected private sector representatives, relevant international organisations and NGOs. The workshop will discuss the participants experience of ownership and management

- arrangements for different types of shared water supply facilities and identify issues and options which need to be investigated in more detail during the study.
- 2. Review existing legislation on the construction and management of piped and other shared water supply facilities. This will include the legislative basis to construct and operate water supply facilities for provincial WSCs and their branches at district level, People's Committees at different levels, user groups and private companies. Approval requirements for different types of shared schemes and facilities will be investigated, with special emphasis on small piped schemes and other small shared facilities. The review shall focus on the appropriateness of the existing legislation for rural areas and small towns and identify possible needs for adjustments and new legislation.
- 3. Review experience from different methods of organising and managing shared water supply facilities, including operation, maintenance, payment and the level of community participation. The review will include large piped schemes, piped gravity schemes in mountainous areas, mini piped schemes, pumps shared by several households etc. It will also include a review of experience from urban water supply schemes, rural electricity supply, other rural development projects etc. The focus will be on the overall lessons learnt negative as well as positive and the main points to be taken into account when advising users on organisational options. It will include field visits to different types of shared water supply facilities.
- 4. Review existing guidelines and regulations on tariffs for piped water supply, used at different levels, including the Inter-Ministerial Circular No. 02-TTLB of 28 April, 1997, between MOC and the Government Pricing Board. The review will also include relevant studies, especially the National Water Tariff Policy Study finalised in 1996. Special attention will be paid to the establishment of a progressive tariff structure for large piped schemes, including a lifeline tariff level aimed at making it more affordable for poor households to use piped water. There will also be discussions regarding how to make the tariff and other payment options flexible and at the same time avoid users being exploited by e.g. private contractors or companies. The focus will be on the appropriateness of existing tariff guidelines and regulations for rural areas and small towns and the identification of possible adjustments needed, or new guidelines and regulations.

## 323.4.2 Developing Guidelines for Shared Water Supply Facilities

Capacity Building Task 10

- 1. Establish the principles of ownership and management for shared water supply facilities, with an emphasis on the need for flexibility. The detailed arrangements should be left to the users of the individual schemes to decide upon.
- 2. Develop guidelines for making the ownership and management principles for shared water supply facilities operational. The guidelines will contain a detailed description of ownership options, legislative implications, organisational options and steps to ensure community participation, as well as issues relating to tariffs and other payment options. The guidelines will also include a description of monitoring mechanisms, including the division of responsibilities for this among different ministries and organisations.
- 3. Conduct a workshop at national level in order to present the ownership and management principles and the proposed guidelines. The workshop shall include participants from MARD, MOC, MOF, VWU, other mass organisations, selected provincial and district People's Committees, selected provincial DARD, selected provincial WSCs, selected private sector representatives, relevant international organisations and NGOs. The participants will discuss the proposed ownership and management principles and guidelines and provide feed-back for the study team on any adjustments necessary. The workshop will aim at achieving consensus among the participants.
- 4. Finalise the ownership and management principles and guidelines. After the workshop and after receiving additional comments from sector ministries and organisations, the overall principles and guidelines will be finalised and presented as a final document.

### 114. FINANCIAL TASKS

#### 414.1 INTRODUCTION

#### 334.1.1 Current Situation

At a very conservative estimate the RWSS Sector will need upwards of USD 1.5 billion for investment to meet the planned target of universal coverage of clean water and sanitation for all households by 2020. It is unlikely that there will be commercial finance available from the banking sector to meet the requirements of the credit program under the strategy.

The Viet Nam Bank for Agriculture (VBA) dominates the market for rural finance. In more than 20 provinces it is the only bank. VBA has a wide branch network extending in some instances to sub branches in communes. In addition to the VBA and operated on an agency basis through the branches of VBA is the recently established Bank for the Poor (VBP). VBA is extending its reach into more remote areas by using mobile operations. These mobile units also extend the services of VBP.

The other major source of lending is through People's Credit Funds (PCFs).

Licensed Shareholder Rural Banks (of which there are 20) are very small and generally rely for funds on VBA.

NGOs also provide funds for rural projects. They have been very successful but their overall coverage is also small.

Most lending in the rural sector is for short term agricultural production purposes. 75% of the lending portfolio of VBA is for short term purposes. All lending by PCFs is restricted to 6 months financing, although a further 6 months "rescheduling" is permitted if necessary. Banks generally look for fixed collateral for all loans, except for the VBA which has special arrangements for loans of less than VND 10 million. Up to VND 1 million can be borrowed for an approved purpose without security, and amounts up to VND 10 million can be arranged for individuals within a group lending scheme.

The main problem is the large amount of capital expenditure required, spread over a large number of individual schemes, some of which may be very small. Loan financing for very small capital inputs is not cost effective, as administration costs are high and margins very small.

Therefore it is intended that the NSSP Action Plan will mobilise its own sources of funding from international donors to supplement any GOV support and the contributions expected to come from users. However, the programme will support the domestic and rural banking sector by channelling funds through these organisations.

#### 344.1.2 Purpose of Key Tasks

The financial tasks are designed to:

- Establish both the grant and loan funds to support the NWRSS construction of facilities.
- Determine in the case of loans the onlending policies to commercial banks and to end users.
- Develop operational policies and procedures for the disbursement of grants and loans to user groups.
- Establish ongoing monitoring procedures.

The provision of grants and loans through the NSSP will be tested in the pilot provinces and the procedures and methodology refined for wider use in the whole country.

#### 424.2 ESTABLISH THE LEGAL BASIS AND PROCEDURES

#### 354.2.1 Review the Strengths and Weaknesses of Existing Schemes

Finance Task 1

MARD, through the PMU and in conjunction with MPI, MOF, SBV and VBARD/VBP will set up a working party to consider the overall development and management of the loan and grant schemes and review all potential sources of funds, the strengths and weaknesses of existing loan and grant schemes and include income generating credit schemes.

#### 364.2.2 Establish Policy and Regulatory Base for Funds

Finance Task 2

Develop the policy and legal framework to support loan and grant programmes. This will include formulation of government policy and regulations to establish these funds.

Develop the forecasting procedures for loan and grant requirements linked with IEC activities and requests for funding of construction activities. The national RWSS loan and grant funds shall be set up to cover the demand for grants and loans for investments in RWSS activities. Funds will be made available from two main sources, viz. government budgets and donors.

## 374.2.3 Develop Lending and Grant Allocation Criteria and On-lending Policies

Finance Task 3

Develop SBV lending arrangements for commercial banks and end users. It is expected that the Government will receive support from donors and multilateral agencies for the loan and grant schemes. It is expected that support from the latter will be by way of concessional loans. Accordingly on-lending policies from SBV to commercial banks operating in the rural sector and then to ultimate users need to be determined.

The on-lending terms need to take into account the higher risk likely to be associated with this type of lending. On-lending policies, in particular interest rates to user groups could be either at commercial rates similar to loans for productive purposes or alternatively more in line with loans provided for rural infrastructure. Loans to water supply companies (WSCs) should be in line with interest rates for loans provided to WSC's of larger provincial towns under, for example, Asian Development Bank projects. The level of interest rate to user groups and to groups, including WSC's, developing full piped schemes needs to be determined during the initial period.

Develop loan and grant allocation criteria. This needs to take into account the recommendations set out in the NRWSS strategy of the levels of subsidies to be applied to the poor and very poor and for full piped schemes. The grant system envisaged to be developed and formalised is outlined below:

- 1. Grants for poor and very poor households. The very poor will receive a subsidy equivalent to 80% of the construction cost for a minimum service level of WSS, while poor households will receive 60%. The grants will be paid as fixed amounts, with an increase of 50% for technically difficult districts.
- 2. *Grants for full piped water supply schemes*. The Government will pay up to 40% of the construction cost for full piped water supply schemes. In addition to this, poor and very poor households will be eligible for the household grants mentioned above.

In the case of the loan programme the following lending conditions are assumed, but will also need to be formalised:

- 1. *Full piped schemes*: credit maximum 60% of capital cost, 20 years repayment period at approved interest rates.
- 2. *Individual households*: self-finance minimum 25% with credit maximum 75% of capital cost, up to 5 years repayment period, at approved interest rates.

Commercial banks will not be liable for repayment of capital where user groups fail to repay their loans. However, for full piped schemes operated by WSC's or others, the commercial banks will be liable for repayment of capital. This means that normal bank credit approval procedures should be adhered to, but funds lent at the terms specified for the NSSP.

### 384.2.4 Lending and Disbursement Procedures

Finance Task 4

(a) Outline

The lending approval and disbursement procedures to user groups and the role of mass organisations, NGO's and People's Committees in assisting user groups, assessing user group credit worthiness and monitoring the repayment of loans needs to be outlined and agreed. It is foreseen that DOLISA or the Commune People's Committee will certify households' access to grant monies, which will be provided through user groups, and that loans will also be provided through user groups. The motivators will support the user groups with the applications for grants and loans and with monitoring of the proper use of funds etc. The objective of this is to ensure effective and transparent monitoring which is the prerequisite for sustainability.

The procedures shall be designed to maximise the involvement of existing institutions, if possible in functions familiar to them, building in an optimal level of self-discipline/peer pressure, and minimising bureaucracy.

The proper functioning of the NSSP Grant and Loan Funds will depend on their ability to forecast annual demand for grant monies per province, and to make funds available to satisfy these demands. Techniques to make such forecasts will be developed. The forecasts of annual demand shall take into consideration the capacity to carry out IEC activities, provide technical advice and do the construction.

#### (b) Detailed

The detailed procedures for lending, approval and disbursement to user groups need to be developed and tested in the pilot provinces. This includes grant and loan facilities for both individual household facilities and substantial piped schemes.

Banks will develop accessible and practical saving facilities for users and user groups. This can be in the form of individual accounts or group accounts dependent upon which is most practical and relevant.

The overall roles of mass organisations, NGO's and People's Committees will be defined in more detail.

## 394.2.5 Tariff System for Piped Water Schemes

Finance Task 5

This task consists of the financial input to the Tariff Manual for Piped Schemes (Manual No 8 under Technical *Task 7* - see 5.2.4). The financial models will take account of actual loan conditions and the level of government grant for individual piped schemes.

#### 434.3 SET UP THE FUNDS

Once all the procedures and systems have been agreed, the funds will be physically established with money from government and donors. This will involve national funds for grants and for loans (*Finance Task 6*) and, initially, two sets of five provincial funds (in 2000) (*Finance Task 7*)

#### 444.4 DEVELOP MONITORING PROCEDURES AND MECHANISMS

Finance Task 8

Outline reporting and monitoring mechanisms for loan and grant programmes (including advice to donors) so that performance of the programmes and that of the NSSP can be evaluated.

The grant and loan approval, disbursement, and repayment of loans procedures will be evaluated, modified and improved. The roles of all organisations involved in the process will be evaluated and where possible operational procedures refined and simplified. This will include the evaluation of the role of commercial banks, their performance and their interest in continuing to be involved in the two programmes. Recommendations will be made on any necessary improvements such as interest rate spread.

Develop the detailed reporting and monitoring mechanisms for the loan and credit programmes (including advice to donors) so that the performance of the programmes and of the strategy can be evaluated.

## 125. TECHNICAL TASKS

#### 455.1 OUTSTANDING TECHNICAL ISSUES

## 405.1.1 Background and Objective

Although the strategy uses a demand responsive approach and therefore leaves the choice of technology to users, there are some areas where the government will need to take the lead.

Firstly, to decide which water supply and sanitation technologies (and practices) are acceptable under different conditions and which are not. This means putting some limits on user choice and includes especially enforcing the ban on the use of fresh human excreta in agriculture. However, in order to enforce the ban it is necessary to have a clear definition of what constitutes fresh excreta, how this will be identified and the process for enforcing the ban. Definitions of fresh excreta will have to be based on composting practices and current regulatory experience in Viet Nam. The anthropological study on the use of human excreta as fertiliser in North Viet Nam, which the WATSAN programme carried out during the first half of 1998, will be important in this connection. Enforcing the ban on the use of fresh excreta will have to take place at commune level and be very closely co-ordinated with IEC activities.

Secondly, some areas present technically difficult conditions where obvious solutions for adequate water supply or hygienic sanitation may not be readily available. This refers especially to flood prone areas, where no acceptable sanitation options currently exist. A study identifying and assessing sanitation alternatives for flood prone areas is therefore needed.

Furthermore, MARD, MOH and the other ministries involved will need to develop a uniform approach to explain to the users about the different technology options available, their advantages, disadvantages and costs. In relation to sanitation technologies, however, there is considerable disagreement about the appropriateness of soakaway latrines<sup>1</sup> for different areas. Through a study on the health and environmental risks associated with the use of soakaway latrines it is hoped to clarify this issue and reach a consensus concerning recommendations about soakaway latrines.

In addition to developing guidelines and establishing a regulatory framework for water supply and sanitation technologies, the government also retains an important role in relation to water quality control, the ultimate aim of which is the protection of user interests.

Water quality control is important in relation to all water supply facilities. Widespread infection from contaminated water sources constitutes a serious threat to public health and even the individual users of household water supply facilities may want to have their water quality tested for safety reasons. However, although there are many different technologies for water quality testing, most of these are too complicated and expensive for widespread use. Reliable water quality testing is not only a service all users should have reasonably easy access to, it is also a condition for establishing an adequate monitoring system for the sector. Thus, there is a need for increasing the sector's capacity for water quality control and for developing simple and cheap technologies which may be used extensively.

The objective of these tasks is to provide the sector (including implementing ministries, organisations and users) with appropriate technology options which allow for the protection of health and the environment. There are four tasks, each focusing on different problem areas.

<sup>&</sup>lt;sup>1</sup> Soakaway latrines are any latrines that rely on liquid waste soaking into the ground: they include sulabh latrines, septic tanks (if soakaways are used) and pit latrines (particularly if a pour flush arrangement is used).

## 415.1.2 Definition of Fresh Excreta to Help Enforce the Ban on its Use as Fertiliser

Technical Task 1

This task will conclude with a report which will include a clear definition of what constitutes fresh excreta, how this will be identified and the process for enforcing the ban on the use of fresh excreta in agriculture. In general the use of human excreta in agriculture will be actively discouraged by IEC. The following work will be carried out.

- 1. Firstly a review of international experience and guidelines on composting procedures and techniques. Special attention will be paid to the relationship between composting time, temperature, aerobic/anaerobic conditions, and the chemical content of the waste versus the reduction in pathogens. Secondly the effectiveness of different regulatory systems to control the use of fresh excreta will be evaluated.
- 2. Study the current regulatory framework in Viet Nam and evaluate its effectiveness in regulating composting practices.
- 3. Review the options available for defining and monitoring fresh excreta and decide on the most appropriate approach. These may be either "process" options such as defining a minimum composting time, or "performance" options that define the nature of the excreta, by, for example, the concentration of indicator organisms, such as parasite eggs. The best option could be a combination of the two, where fresh excreta is defined as excreta that has been composted for less than a certain period, and this is monitored by the concentration of an indicator organism.
- 4. Decide on the appropriate level to set the agreed definition of fresh excreta. This should be a minimum treatment level below which people will be prosecuted, it is not proposed to be the ideal design level.
- 5. Recommend a practical enforcement system for implementing the ban on fresh excreta based on monitoring at commune level.
- 6. Produce a report which presents the results of the above activities with clear operational guidelines of how to define fresh human excreta, and how to enforce the ban.

#### 425.1.3 Sanitation in Flood Prone Areas

Technical Task 2

This task will conclude with a report giving clear guidelines on appropriate sanitation options for flood prone areas. It will involve the following work.

- 1. Review Vietnamese and international publications regarding sanitation options for flood prone areas, paying special attention to current technology, socio-economic aspects and health and environmental risks.
- 2. Study sanitation practices and existing latrine models in flood prone areas, including a desk study and field trips to flood prone areas in South Viet Nam, and possibly to similar areas in the Asian region. Common sanitation practices and the different kinds of latrines used in flood prone areas will be investigated The investigation will include an assessment of the appropriateness and affordability of the options, and their associated health and environmental risks.
- 3. Conduct a literature review and field studies on peoples knowledge, attitudes and practices (KAP) in relation to the use of human excreta in aquaculture. The objective will be to determine what advantages and disadvantages people associate with the use of human excreta in aquaculture The study will also include an assessment of the socio-economic, environmental and health impact of possible restrictions of the use of human excreta in aquaculture.
- 4. Assess the main issues surrounding the use of human excreta in aquaculture. This assessment will include technical considerations and the health and environmental impact of current sanitation practices in areas prone to flooding.
- 5. Produce a report which provides clear and practical recommendations concerning alternative technologies for flood prone areas and which reflects the official government position on the

use of human excreta in aquaculture. The report will include an outline risk assessment methodology which can be used by government staff in flood prone areas.

## 435.1.4 Guidelines for Soakaway Latrines

Technical Task 3

This task will provide an evaluation of the health and environmental risks related to soakaway latrines and develop a uniform position on their use. The following work will be carried out.

- 1. Review Vietnamese and international publications regarding soakaway latrines, with special attention to the health and environmental impact.
- 2. Study existing soakaway latrines in Viet Nam, including a desk study and field trips to communities where soakaway latrines are common. The study will examine experience in their promotion and construction, including the acceptability, affordability, use & maintenance and impact on health and environment.
- 3. A comprehensive microbiological study of the contamination of local water resources surrounding soakaway latrines. This study shall be conducted at different locations with differing:
  - Soil conditions and structures.
  - Depth of aquifers.
  - Distance to water sources.
  - Population density.
- 4. Assess the nature and scope of the technical problems and health and environmental issues relating to the use of soakaway latrines.
- 5. Produce a report which outlines recommendations on the use of soakaway latrines and which assesses their appropriateness in differing conditions.

## 445.1.5 Water Quality Control

Technical Task 4

This task consists of a feasibility study for improved water quality testing and control and will include the following work.

- 1. Review and assess the present national water quality testing capacity. This will include an assessment of equipment, staff, financial resources, methods, quality control procedures, quality of work and cost of testing at the different water quality centres at different levels.
- 2. Identify needs for improved water quality testing and quality control and propose any necessary structural changes, including institutional arrangements and distribution of tasks and responsibilities.
- 3. Review available technologies for water quality testing, nationally and internationally, and propose appropriate technologies for different levels and purposes, with special attention to low-cost, simple technologies for the lower levels.
- 4. Develop project proposal regarding improved water quality testing and control and a regulatory framework.

## 465.2 TECHNOLOGY STANDARDISATION & QUALITY ASSURANCE

#### 455.2.1 Background and Objectives

In the past implementation has either been organised centrally through government projects or has been done by users on their own initiative. In the first case the government has used a fairly rigid design approach, for example, water consumption figures have been specified nationally for all piped schemes, rather than the designers assessing the likely demand from users for a particular

scheme. In the second case, users have done pretty much whatever they want, usually based on cost considerations.

Previous planning also tended to be fairly narrow, with emphasis on technology and cost estimates rather than on organisation, operation and maintenance and available finance.

There are also differences of opinion between specialists about the relative advantages and disadvantages of different technologies.

This set of activities needs to establish a framework where provinces and districts have:

- Clear national guidelines on technical "policy issues" i.e. clear national standards on what can be done and what cannot be done, what the advantages and disadvantages are of different technologies etc.
- Checklists of the things that need to be considered.
- Technical tools to assist them in their work, i.e. to avoid each province "reinventing the wheel".
- Scope to modify technologies to suit their local conditions.
- Scope to let the private sector develop technologies, but at the same time avoid inappropriate technologies and too many alternatives.

These activities will build on the results of the initial tasks (Technical *Tasks 1 - 4*) and are mainly concerned with developing a professional framework, methodologies, guidelines and manuals. Implementing this framework will be done as part of the wider implementation process, so that the ability of staff to use the framework will be one objective of the HRD tasks.

The objective of these activities is to ensure provinces and districts have the necessary technical foundation to start sustainably implementing the strategy.

This set of activities has many outputs, grouped into categories:

- 1. General Outputs.
- 2. Water Resources Outputs.
- 3. Water Supply Outputs.
- 4. Sanitation Outputs.

A hierarchy of technical tools will be produced:

Type 1) National Technical Standards. (general guidelines for sector staff which they <u>must</u> follow)

Type 2) Technical Bye-Laws for RWSS. (for users, which they must follow)

Type 3) Demonstration Manuals. (for the guidance of sector staff)

Type 4) Example Detailed Manuals. (for the guidance of sector staff and users)

The manuals and guidelines are described below. To produce each of these the following procedures will be used:

- Review existing materials. There is a considerable amount of existing material already available from sources such as WATSAN, MOC, the NRWSS Strategy Study and from international experience. Additional material will also be available from Tasks 1-4. This material needs to be reviewed and assessed to identify areas of uncertainty or conflict and where the main areas are that need further development. This activity will conclude with a Review Report.
- Review Workshop. After the Review Report has been circulated, a workshop will be held to agree on the approach and the outstanding work. A wide range of sector professionals will be invited to attend.
- Prepare draft documents. Preparation of a first draft of each of the technical tools described above.

- *Final Workshop*. This workshop will discuss the draft documents and make recommendations for any changes.
- Finalise the documents.
- Introduce the documents. This will mainly be done in the 15 pilot provinces and will consist of putting the documents into practice and getting initial feedback on their appropriateness and effectiveness. The first set of revisions to the documents will be made during the pilot implementation, but future regular revisions will also be needed as will expansion to include other documents as further needs are identified.

#### 465.2.2 General Manuals and Guidelines

Technical Task 5

The following is a preliminary list, which may be changed at the start of the Action Plan.

- Equipment and materials for rural water and sanitation. Short guidelines that outline the
  main issues and considerations when selecting equipment and materials. They are not detailed
  specifications. Type 1.
- 2. **RWSS at public institutions**. Short guidelines on the facilities that should be provided at different institutions, including the number of facilities and the advantages and disadvantages of different technologies. It will include a summary of the minimum legal requirements. *Type 1*.
- 3. **Monitoring implementation**. Short guidelines on how the sector staff should monitor implementation, including: standardised categories and definitions of different technologies; how to get reports of the construction of new individual household systems; record systems. *Type* 1.
- 4. **Approval procedures for the planning and implementation of RWSS facilities**. Formal regulations defining the approvals needed at key stages for different types of implementation. These will be divided into three levels: individual households, groups of households, and whole villages or towns. The approvals will cover both technical and financial approvals and will include a list of the technologies that are banned for health or environmental reasons. *Type 2*.
- 5. Demonstration Manual. A detailed manual that lists the range of technologies that District Advisory Services can construct to demonstrate to users. The manual will present guidelines on how regional factors should be taken into account when deciding on which technologies to demonstrate. The manual will contain detailed construction plans for each demonstration unit. The emphasis will be on the units value as a teaching aid. This may, for example, include cut away sections to show people the inside of the system or special access facilities to make it easier for people to inspect the technology. Finally the manual will include guidelines on how to present the various technologies. Type 3.
- 6. **Construction Supervision Manual**. A manual on how to supervise the construction of different types of RWSS facilities. This will include: procedures; frequency of checks; quality control tests; safety guidelines; and how to measure the amount of work completed. *Type 4*.
- 7. **Specifications of equipment and materials**. Detailed specifications for the main materials and equipment used in RWSS facilities. *Type 4*.

#### **475.2.3** Water Resource Manuals and Guidelines

Technical Task 6

1. Water Quality Testing Policy and Framework. This will consist of a short set of guidelines which outline the government policy on water quality testing. It will define who is responsible, how and when testing should be done and who should do the testing. It will also outline the action to be taken after test results are known. The water quality standards that will have been reviewed under the earlier study will be an annex to the guidelines. Type 1.

- Water Resource Assessments for RWSS. These short guidelines will describe a standard methodology for how each province shall assess the water resources available for RWSS. It will include guidelines on:
  - Assessing existing resources.
  - Allowing for competing demands.
  - Determining the level of risk which is acceptable for rural water supply.
  - Determining what level of investigation needs to be done for differing demands.
  - Determining the main water quality parameters that need to be considered.
  - Forecasting future trends in water resource usage. *Type 1*.
- 3. **Water Testing Procedures**. A manual on methods for simple water quality tests either in the field or at district level. This will not include normal laboratory testing procedures. *Type 4*.

## 485.2.4 Water Supply Manuals and Guidelines

Technical Task 7

- 1. **Planning and feasibility studies for rural water supplies**. Short guidelines that describe the methodology for planning water supplies with particular reference to the selection (by users) of the most appropriate technology. The guidelines will list the main points that need to be covered at the appropriate level of detail for three sizes of system:
  - Single households.
  - Groups of households.
  - Entire villages or towns.
- The guidelines will cover social, organizational, health, operation and maintenance, water resources and financing, as well as the usual technical considerations. They will include national guidelines on the advantages and disadvantages of different technologies. *Type 1*.
- 1. **The design, construction and management of rural water supplies.** Short guidelines that outline the main considerations in implementing the chosen type of technology. They are intended to be used after the technology has been selected, and will guide sector staff and users in the management of the technical aspects of implementation. They will not be a manual, but rather a checklist of the main issues associated with each technology. Type 1.
- 2. **Rules for planning, siting and construction of wells**. These will specify siting criteria (e.g. minimum distances from latrines); the main design and quality requirements; approval and reporting procedures. The rules will be short and limited to the key points that are needed to protect water resources and the users' health. The level of detail will vary with the size of the well, probably divided into wells serving a single household, wells serving a few households and wells supplying an entire village or town. *Type 2*.
- 3. **Design manual for piped schemes**. A detailed design manual covering all types of piped scheme, including mini piped and gravity schemes. The manual will cover all technical aspects such as water treatment and will show typical design figures (e.g. per capita consumption) as well as outlining the range of values and the factors that affect the values. The manual will make it clear where values should be used directly from the manual and where the designer needs to make an assessment for the individual scheme. *Type 4*.
- 4. **Manual of household water treatment and storage**. A detailed manual on the options available for household treatment of non piped water, including construction diagrams where appropriate. *Type 4*.
- 5. Operation and maintenance manual for piped schemes. A detailed manual covering the O&M of three typical piped schemes (mini, gravity and full piped). The manual will include the overall operational management of the scheme, staffing requirements, typical material requirements, costs and repairs, as well as the usual operational guidelines. The manual will include typical service instructions for the most commonly used electrical and mechanical equipment such as hand pumps, electric pumps, valves and meters. Type 4.

- 6. **Design, construction and operation manual for non piped water supplies**. A detailed manual explaining how to design, construct and operate the main types of non piped water supplies such as tubewells and rainwater systems. *Type 4*.
- 7. **Tariff manual for piped schemes**. This will explain the methodology of calculating full cost recovery tariffs, with different approaches to incremental tariffs (i.e. low tariffs for low consumption users and gradually increasing tariffs for higher consumption users). It will include examples and blank forms for calculating tariffs. *Type 4*.

## 495.2.5 Sanitation Guidelines and Manuals

Technical Task 8

- 1. **Planning and feasibility studies for rural sanitation**. Short guidelines that describe the methodology for planning sanitation with particular reference to the selection (by users) of the most appropriate technology. The guidelines will cover social, organizational, health, operation and maintenance, water resources and financing, as well as the usual technical considerations. They will include national guidelines on the advantages and disadvantages of different technologies. *Type 1*.
- 2. **The design, construction and management of rural sanitation**. Short guidelines that outline the main considerations in implementing the chosen type of technology. They are intended to be used after users have chosen the technology they want, and will guide sector staff and users in the management of the technical aspects of implementation. They will not be a manual, but rather a checklist of the main issues associated with each technology. *Type 1*.
- 3. Rules for the planning, siting and construction of latrines. These will specify siting criteria (e.g. minimum distances from wells and houses); the main design and quality requirements; composting requirements (where relevant) approval and reporting procedures. The rules will be short and limited to the key points that are needed to protect water resources, the environment and the users' health. Type 2.
- 4. **Design, construction and operation manual for latrines**. A detailed manual explaining how to design, construct and operate the main types of latrine such as sulabh, DVC and septic tanks. *Type 4*.

#### 475.3 IMPROVED CONSTRUCTION MANAGEMENT SYSTEMS

#### 505.3.1 Background and Objectives

For this project, construction management means the whole process of hiring, supervising and paying a contractor, from pre-qualification of tenderers to final hand-over of the completed works.

Until fairly recently construction has been an exclusively government function. This means that many of the existing construction management systems and regulations are not appropriate for construction by contractors through competitive tendering. There are related problems in the lack of appropriate quality control systems - under the old arrangements where government organisations constructed facilities maximising profit was not the main objective and there was no incentive to cut corners to save money. However, with construction by contractors this becomes a major issue. Lack of speedy payment systems also has a much higher priority when contractors are involved - lengthy payment delays will eventually result in prices rising to take this into account.

This problem is not unique to the RWSS sector and MOC and MPI have already considered these issues. The government has issued several decrees, including the following:

42/CP 16/7/96 - Regulation of construction investment

43/CP 16/7/96 - Regulation of tendering procedures

92/CP 23/8/97 Adjustment and complement to So 42/CP 16/7/96 93/CP 23/8/97 - Adjustment and complement to So 43/CP 16/7/96

This project will therefore only build on the work of others, with some modifications to make it appropriate for RWSS construction.

The main areas that need consideration are:

- 1. Pre-qualification and tendering procedures.
- 2. Contract law.
- 3. Technical specifications and supervision.
- 4. Measurement and payment systems.

One particular problem for RWSS is that although generally construction is on a small scale, using simple technologies, sometimes it involves major schemes. The construction management systems therefore need to be appropriate to the scale of the work. This will range from constructing a hand dug well to constructing a piped water supply scheme for a town of 30,000 people.

Another consideration is the different construction management that is needed for different types of contract. There are at least three different types:

- Traditional contracts for construction only.
- Contracts for design and construction. The contractor does the detailed design within a framework provided by the promoter.
- · Concession contracts such as one in which the contractor finances, designs, builds and operates the scheme in return for income from the scheme's operation.

The first two types are similar and the project will focus on them, since concession contracts are very specialised and are not expected to play a major role in RWSS implementation.

The objective is to provide the sector with appropriate contract management tools which allow effective and flexible management by the owner<sup>2</sup> and effective and flexible construction by contractors.

Effective construction requires a balance between control and flexibility, and a balance in sharing the construction risks between the contractor and the promoter. If the contractor is made financially responsible for all risks then inevitably his price will be higher.

#### 515.3.2 **Construction Management Documents and Private Sector Participation**

Technical Task 9

The outputs will be a combination of physical documents (sample contracts, specifications etc.), procedures and practices, and a firm legal framework. Specific outputs will be:

- Pre-qualification and tendering procedures, including guidelines for tender evaluations.
- Conditions of Contract, including: the roles of the various parties to the contract (in particular the tasks of the owner and the tasks of the contractor); payment systems and procedures for unexpected circumstances.
- Standard specifications.
- Standard methods of measuring how much work has been done.
- Procedures for settling disputes.
- A more equitable business environment for the private sector

<sup>&</sup>lt;sup>2</sup> The term owner is used to mean the organisation that is paying for the construction and will hire and manage the contractor. This organisation will usually also be the legal owner of the scheme.

Each of these will be produced in two forms, one for small scale work (for example work less than VND 5 million) and one for larger works.

The following work will be undertaken.

- 1. MARD will establish a substantial contracts team to review and improve existing tendering, contract and payment systems. This will include allocating construction professionals, support staff, offices and office facilities and transport.
- 2. The contract team will start by reviewing existing work that is being carried out at both national and provincial levels on improving construction management systems, with particular reference to low cost construction. It is known that MOC and others have already done a considerable amount of work. The international consultants will also provide examples of international construction management systems. This review will include private contractors and provincial construction departments as well as other stakeholders.
- 3. The team will then analyse the existing work and identify any gaps or areas where it needs further development to suit RWSS.
- 4. Based on this analysis the team will then prepare sample documents and procedures.
- 5. These will then be discussed at a workshop with a wide range of stakeholders, including private contractors, DARD and provincial construction departments.
- 6. Finally draft documents and procedures will be issued for use.
- 7. The team will also liase with other institutions working on private sector development to assist with developing a more level playing field between SOEs and private contractors. This will include things like equal access to credit and standardised tax regulations.

Annex B

TERMS OF REFERENCE FOR T.A. PROJECT

# TERMS OF REFERENCE NSSP TECHNICAL ASSISTANCE PROJECT

## 131. INTRODUCTION

The Government of Viet Nam is introducing a new strategy and approach for rural water supply and sanitation (RWSS). This new approach is being implemented through a National Strategy Support Programme (NSSP) led by the Ministry of Agriculture and Rural Development (MARD). Implementation will be done over a six year period by a Project Management Unit (PMU) based in MARD and will be physically carried out in two areas:

- Introducing changes at national level within two years.
- Phased implementation in all provinces, with 15 pilot provinces to be covered in the first two
  years.

These terms of reference (TOR) cover support to the PMU by a team of international and local consultants during the first two year period. Although the technical assistance (TA) input is moderately large, it is small compared to the very large scale of the NSSP work that needs to be done in the two year period. The TA team will therefore need to concentrate on (a) assisting the PMU to manage the work and (b) providing specialist inputs to key tasks.

The work that the PMU will cover in the two years is described in the main report and in Annex A. These TOR only describe the work to be done by the TA team.

## 142. OBJECTIVES AND OUTPUTS OF THE TA

Objective of the TA

By the end of two years the PMU should be operating efficiently and shall have achieved their specified outputs.

Outputs of the TA

- Agreement on the outstanding IEC, capacity building, financial and technical issues by the end of the first year.
- PMU management systems established within the first year, including external liaison and monitoring systems.
- PMU and pilot province staff able to continue implementation by the end of the second year.

## 153. ACTIVITIES OF THE TA TEAM

The team shall carry out the following activities, plus any additional activities that are needed to achieve the outputs and objectives. All the activities shall be carried out in conjunction with the PMU staff and unless it is specifically stated otherwise, the PMU will take the lead in all activities

- Prepare detailed annual workplans, including allocation of tasks. Assess the actual resources of
  the PMU against the work to be carried out and advise the PMU on any corrective action
  needed.
- Prepare and run introductory workshops for all PMU and TA staff. The workshops shall
  introduce the strategy and the NSSP and will aim to achieve a clear vision of the work that is
  to be done.

- Develop internal management systems for the PMU, including administration, finance, monitoring, reporting and liaison. These will include purely internal systems and systems for liasing with other national and provincial organisations. As a minimum the PMU will produce short monthly reports, quarterly progress and financial statements and annual reviews.
- Form small teams within the PMU to resolve the outstanding issues, with the TA staff providing specialist inputs to the teams.
- The TA team shall provide specialist inputs to the PMU to assist with establishing the new procedures and materials needed for implementation.
- Assist with the identification of the pilot provinces and with establishing a revised RWSS organisation within each of the 15 provinces.
- Develop, implement and monitor on-the-job training programmes for all PMU staff.
- Provide specialist inputs to training courses run by the PMU.

The above activities are deliberately described in a general way without a breakdown into the individual tasks needed within each discipline. The annual workplans will contain a detailed description of each task by discipline.

## 164. ORGANISATION AND STAFFING

The PMU will be established in MARD and will be led by a Project Manager (the final title may vary from this). The PMU staff will be dispersed within the relevant units within MARD. They will therefore work in two ways: firstly as line staff within the relevant unit, and secondly as members of the PMU which cuts across the line units.

The TA team will consist of the following staff:

Position	Qualifications	Input (months)
LONG TERM	(a) International	
Chief Technical	At least 10 years experience of rural water supply and sanitation in	24
Adviser	developing countries. The CTA shall have experience from several	
	disciplines including technical and institutional.	
Financial Adviser	A minimum of 8 years experience of the financial aspects of rural	24
	development projects, including large scale credit funds.	
IEC Adviser	Over 8 years experience of IEC programmes in developing countries	24
	including rural water supply, sanitation and hygiene education. The adviser	
	shall have particular experience of planning and monitoring IEC activities.	
	Sub Total - International Long Term	72
LONG TERM	(b) Local	
IEC Specialist	A practical communication specialist with at least 5 years experience of	24
•	producing IEC materials for a range of media.	
HRD Specialist	A practical training specialist with at least 5 years experience of designing,	24
	implementing and evaluating training programmes.	
Financial	Over 5 years experience of rural credit or banking.	24
Specialist		
RWSS Engineer	At least 5 years broad experience of the planning, design, construction and operation of both water supply and sanitation facilities.	24

Position	Qualifications	Input
		(months)
Water Resources	A minimum of 5 years broad experience of water resource investigations	24
Specialist	and management. The experience shall cover both surface water and	
	groundwater and shall include water quality.	
	Sub Total - Local Long Term	120

#### SHORT TERM (a) International

A pool of short term staff shall be available for the PMU to call on as required. The total input by short term staff shall be within the total inputs shown in the sub total. The following staff are a preliminary estimate of the type of staff that may be required.

<ul> <li>- HRD Specialist</li> <li>- Administration Specialist</li> <li>- Institutional Specialist</li> <li>- Lawyer</li> <li>- Private Sector Development Sector Dev</li></ul>	<ul> <li>- Media Advisor</li> <li>- Sociologist</li> <li>- Health Advisor</li> <li>- Livestock Specialist</li> <li>Specialist</li> </ul>	<ul> <li>RWSS Engineer</li> <li>Hydrologist</li> <li>Hydrogeologist</li> <li>Water Quality Spe</li> <li>Contracts Specialist</li> </ul>	cialist
SHORT TERM (b) Local	Sub Total - Internat	tional, Short Term	man month 75
SHORT TERM (b) Local			
<ul><li>Administration Specialist</li><li>Institutional Specialist</li><li>Legal Specialist</li></ul>	<ul> <li>Sociologist</li> <li>Health Specialist</li> <li>Livestock Specialist</li> </ul>	<ul> <li>Water Engineer</li> <li>Sanitation Specialist</li> <li>Hydrologist</li> <li>Hydrogeologist</li> <li>Biologist</li> <li>Chemist</li> </ul>	
	Cub Tatal I and t	CL 4 T	man month
	Sub Total - Local, S	Snort Term	80
	Total International		147
	Total Local		200
	Grand Total		347

## 175. COST ESTIMATE

The following preliminary estimate is for the advisory staff and their associated costs. It does not include costs associated with the running of the PMU, nor costs associated with fieldwork, workshops etc.

The estimate uses overall rates of USD 25,000 per month for international consultants and USD 2,500 per month for local consultants. These rates are inclusive of all personal reimbursables such as transport, air travel and accommodation and company overheads, if applicable.

<b>Description</b>	<u>Unit</u>	<b>Quantity</b>	<u>Rate</u>	<u>Amount</u>
International consultants	man month	147	25,000	3,675,000
Local consultants	man month	200	2,500	500,000
Sub Total				4,175,000
Contingencies (10%)				417,500
Total (USD)				4,592,500
Total (VND million)				64,295