

**FINAL**

# **EVALUATION OF SECTOR APPROACHES IN THE WATER SECTOR**

## **COUNTRY REPORT**

### **YEMEN**

**5 February 2008**

**CDP Utrecht**

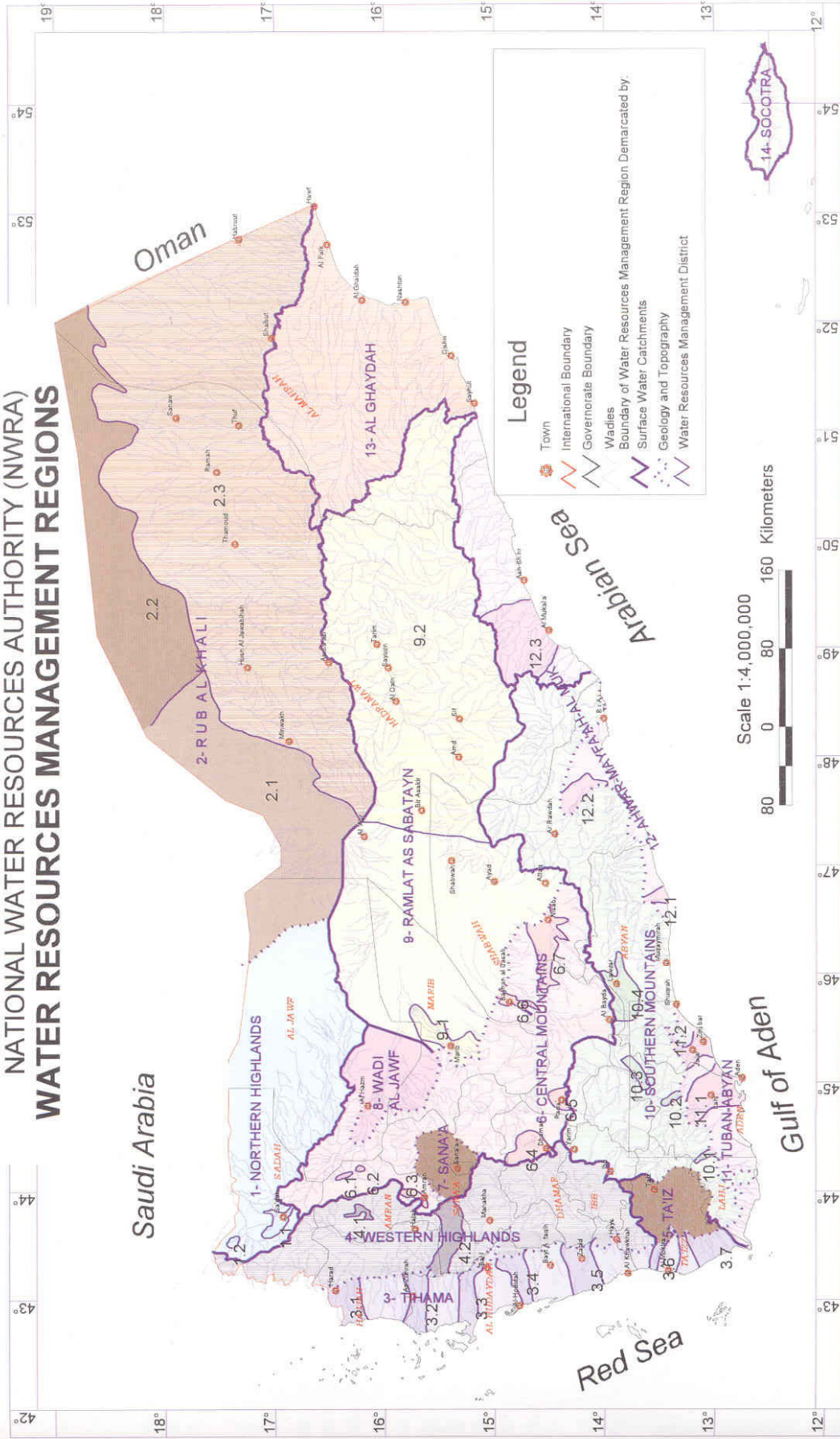
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# NATIONAL WATER RESOURCES AUTHORITY (NWRA) WATER RESOURCES MANAGEMENT REGIONS





## LIST OF ABBREVIATIONS

AFPPF	Agriculture and Fisheries Production Promotion Fund
A21A	Agenda 21 Program for Agriculture
CAS	Country Assistance Strategy
CPIA	Country Policy and Institutional Assessment
CWRAS	Country Water Resources Assistance Strategy
DPPR	Socio-Economic Development Plan for Poverty Reduction (PRSP-2)
ESW	Economic Sector Work
EU / EC	European Union / European Community
GARWSP	General Authority for Rural Water and Sanitation Projects
GTZ	Gesellschaft für Technische Zusammenarbeit
GON	Government of The Netherlands
GOY	Government of Yemen
GSCP	Groundwater and Soil Conservation Project
IIP	Integrated Irrigation Improvement Project
IRAI	IDA Resource Allocation Index
KfW	Kreditanstalt für Wiederaufbau
LC	Local Corporation (for Water Supply and Sanitation) (= WSSLC)
MAI	Ministry of Agriculture and Irrigation
MCM	Million Cubic Meters
MDGs	Millennium Development Goals
MoF	Ministry of Finance
MPIC	Ministry of Planning and International Cooperation
MTRF	Medium Term Results Framework
MTEF	Medium Term Expenditure Framework
MWE	Ministry of Water and Environment
NRA	National Reform Agenda
NWRA	National Water Resources Authority
NWSA	National Water and Sanitation Authority
NWSSIP	National Water Sector Strategy Investment Program
PAP	Program Aid Partners
PAWS	Program Aid to the Water Sector
PRSC	Poverty Reduction Strategy Credit
PRSP	Poverty Reduction Strategy Paper
PWP	Public Works Project
RNE	Royal Netherlands Embassy (in Yemen)
RWSS	Rural Water Supply and Sanitation
SBWMP	Sana'a Basin Water Management Project
SFD	Social Fund for Development
SWAp	Sector Wide Approach
TWSSLC	Ta'iz Water & Sanitation Local Corporation
UWSS	Urban Water Supply and Sanitation
WEC	Water Education Centre
WSSLC	Water Supply and Sanitation Local Corporation (= LC)
YRL	Yemeni Riyals



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## INTRODUCTION

In 2004 the Netherlands cooperated with seven partner countries in their water sector: Bangladesh, Yemen, Egypt, Indonesia, Yemen, Mozambique and Vietnam. Within the context of the evaluation field visits will be paid to at least three countries, amongst which Yemen.

The Sector-Wide Approach (SWAp) in Dutch bilateral aid was introduced in 1999. In recent years it has been attempted to gradually transform bilateral cooperation in the “partner countries” in accordance with these principles. The most common definition of a sector programme is “all significant funding for the sector supports a single sector policy and expenditure programme, under government leadership, adopting common approaches across a sector, and progressing towards relying on government procedures to disburse and account for all funds”.

The specific motivation for the evaluation is the need to obtain greater insight into the potential for applying the SWAp and the Paris Declaration in the water sector. The objectives of the evaluation are: i) *Policy development*: to contribute to policy development intended to promote the application of the SWAp in the water sector and; ii) *Accountability*: to obtain insight into the results of the efforts made by the Environment and Water Department (DMW) and the missions to implement the sector policy.

The principle questions to be addressed by the evaluation are: a) What progress has been made to date in implementing the SWAp in the water sector, and what factors account for this and; b) What lessons can be learned from experiences to date and how can these be used :in the implementation of the SWAp?

For the evaluation of progress the following definition will be used:

- Contributions to the fulfilment of the conditions for SWAp in terms of policy formulation and operationalisation towards the meso and micro levels, improved public-private partnership, institutional strengthening and streamlining of the project portfolio towards sector support.
- Intensification of coordination with other donors towards harmonization and alignment.
- Changes in aid modalities in terms of decrease of project aid and a shift to basket funding, pooled funding and sectoral budget support.

This desk review follows the main lines as described in the terms of reference and evaluation matrix for the overall study (see appendix 1) and contains a number of specific research questions to be answered during the field visit to Yemen (see appendix 4). Specific terms of reference for a possible Public Finance Management (PFM) component as well as terms of reference for the local consultant are included in appendices 2 and 3).



## 1. CONTEXT

### 1.1 Yemen's Strategic Vision

The Government of Yemen (GoY) published a Strategic Vision 2025 in 2006.

In its introduction it states: .... *a conviction materialised that continuing the process of preparing typical plans would no longer succeed in breaking the noose and surpassing the challenges. Moreover, the need was evident for adopting new approaches based on the following three necessities: i) long-term policies, ii) comprehensive policies that mobilize all the wherewithal of society and iii) combining typical and innovative policies .....*

The Vision does not dedicate a specific section to water management and water services. Indirectly the water scarcity is mentioned in the chapter on "Developing and Rationalizing Agriculture" stating the need to use water more efficiently and the need to address the "Qat issue". The chapters on Poverty and on Health mention the notion of basic services, but do not specifically mention water supply and sanitation. Other policies which may have an impact on the water sector are general statements on the need to expand the private sector as an economic engine and the need for decentralization and enhancing local authority.

In the early years of the 21<sup>st</sup> Century, GOY reviewed many of its policies, often with the help of donors. For the Water Sector, the formulation of the National water Strategy and Investment plan (NWSSIP) in 2005 was a major achievement and is subscribed to by all departments of GOY and the development partners alike. Contextual to the NWSSIP is the *National Reform Agenda (NRA)*<sup>1</sup>. The NRA has the following chapters:

- *Enhancing transparency and fighting corruption*, with actions: national anti-corruption awareness campaign, Financial Disclosure Law, procurement manual, Anti-corruption Law, manuals of government service, biometric ID system, independent Central Organisation for Control and Audit, extractive industries transparency initiative, public finance management strategy
- *Judicial reform*, with actions: separation of powers, restructuring of the Supreme Judicial Council, women in Judiciary, accountability, role of Ministry of Justice, etc.
- *Developing freedom of the press*, with actions: new Draft Press law
- *Improving the performance of government*, with actions: reforms mentioned above plus electronic government services
- *Democratic process*, with regulations on presidential and local elections

### 1.2 National Reform Agenda and Public Sector Reform

The progress report on the National Reform Agenda (NRA) of November 2006 shows that most reforms started in earnest only recently in the year 2006.

In early 2006, Yemen embarked on a set of ambitious and interconnected reform measures named the National Reform Agenda (NRA), with the support and coordination of international development partners. The overall objective of this agenda was improving Yemen's investment climate and strengthening democratic institutions.

In parallel, a Good Governance Policy Group (GGPG) was established in December 2005 to bring together representatives of the Donor Community and of relevant ministries. Four working groups were set up to examine key reform areas (transparency and anti-corruption, business-enabling environment, rule of law, improving political participation) and to reach consensus on a set of measures.

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<sup>1</sup> Ministry of Planning and International Cooperation. The National Reform Agenda: a Progress Report. Paper prepared for the Consultative Group Meeting, London, November 2006.

Anti-corruption measures pursued by the Government of Yemen encompass reforming administrative procedures, modernizing the civil service, restructuring the public financial management system and parts of the judiciary, and enhancing the role of the legislature. In July 2006, Financial Disclosure Law was ratified by Parliament. In September 2006, the government signed an agreement with USAID to finance the first phase of the Procurement Management Information System. an anti-corruption law: The draft law's centrepiece lies in the creation of a National Supreme Anti-Corruption Authority (NSAA), an independent body separate from the executive formed of key figures of outstanding competence, unquestioned integrity and national stature, including representatives of the civil society, NGOs and the private sector.

In September 2006 the official election platform of the president included a measure to increase the independence of the Central Organization for Control and Audit (COCA), in charge of auditing government accounts and performance.

In May 2006, the ministry of Finance inaugurated the first phase of the Public Finance Management Strategy. An Action Plan and Partnership Agreement were signed between government and donors outlining clear agenda forward and specific requirements for full implementation.

The NRA document does not mention the most important reforms for the Water Sector, which can be (indirectly) derived from different documents such as the NWSSIP and various Donor Country Strategies. These refer to:

- consolidation of water management functions under NWRA (achieved 1995)
- formation of the MWE (achieved 2003), which means that all agencies dealing with water and environment, except irrigation are within the field of one ministry
- formation of Branch Offices of GARWSP (achieved in all Governorates in 2006, 10 of which have sufficient capacity to implement their tasks autonomously)
- formation of Local Water Supply and Sanitation Corporations in all Governorates (achieved in all Governorates in 2006, fully operational in 2010), which corporations will become self-financing.
- GoY to withdraw from the role as sole investor and service provider towards that of facilitator and regulator

Generally the donor documents are cautious to rather critical about the progress of the reform, although there are statements that the water sector is progressing comparatively well.

### **1.3 Public Finance Management (PFM)**

PFM is a recognized issue in Yemen. All documents reviewing PFM are critical and generally mention slow progress in improvements. Since early 2006, PFM gets dedicated attention of GoY (see also above under PSR). The MPIC paper on Aid Absorption Capacity states that such condition leads to donors establishing their own Programme Implementation Units (PIU), imposing and carrying out their own Procurement Rules, etc. A general exception is made for the SFD and the PWP. The PIUs working parallel to government agencies and being different for different donors, are mentioned to lead to high inefficiencies, both in management and in implementation. Specific issues mentioned are:

- *procurement*: corruption, cumbersome procedures, inadequate staff numbers
- *monitoring*: poor reporting and monitoring of development assistance and financial management (including discrepancies between donor requirements and GoY requirements)
- *commitments*: GoY commitments to co-finance loans are not always met or not on-time
- *policy-budget*: the policy-making process and budgeting processes are de-linked

RNE is rather positive about COCA processes in GARWSP. WB in its SWAP study also mentions that Water Sector is on the brink of being ready for SWAp-type of approaches on aid modalities.

In 2005 the Cabinet approved the PFM Reform Strategy. A Partnership Agreement on Public Financial Management has been signed between the GoY and several members of the donor community in May 2006. The Partnership Agreement has been inspired by a joint workshop a year earlier which resulted in greater mutual awareness of the benefits of (i) aligning donor activities in PFM reforms to a government-led action plans and (ii) the links between PFM reform and wider public sector management reforms.

The Partnership Agreement emphasises that the GoY has overall responsibility for the implementation of the PFM reform programme and the performance of the proposed governance arrangements (task force and technical committees). As part of the agreement, donors may seek a ministerial meeting to address impediments in case the reform programme loses its momentum. Donors are under obligation not to withdraw their funds unilaterally in event of a slow-down in the reform process; funds can only be withdrawn jointly if problems are not resolved at the ministerial level.

*(maybe to mention as well: the Civil Service Modernisation Strategy, supported by amongst others World bank, EU and Netherlands; includes the development of an Accounting and Financial Management Information System, which is as yet not successful?)*

#### **1.4 Decentralization**

The 2003 Law of Local Authorities (LAL) kick-started the decentralisation process. The Ministry of Local Administration (MoLA) to take the lead. The LAL envisages a significant range of important services and other functions to be assigned to the district level, with the governorate taking up functions that have significant externalities. Furthermore, the LAL gives considerable discretion to local authorities in service delivery, including related planning, financing, implementing and monitoring and reporting functions. The functional assignment in Yemen is complex, with multiple arrangements in the same sector (education) and corporate forms (water) alongside local authorities with unclear connections between these. This issue has been compounded by donors too readily accepting sectoral frameworks over the LAL. The arrangements of project implementation units often do not keep with the LAL and interact with various actors that are counter to the spirit of decentralisation. This issue partly reflects a lack of a clearly articulated implementation strategy of how to make the principles contained in the LAL a reality.

The impact on the water sector is above all felt in the rural water supply sub-sector. It will improve the status and facilities of the water user associations, which are registered under MoLA, and which play a central role in the sustainable delivery of water services in rural areas, and it will give the local councils a responsibility towards the service provision. MoLA targets water user associations as pilot demonstration organisations to raise awareness and capacity for decentralisation. In the UWSS sub-sector the formation of the WSSLCs is the most tangible result and proof of decentralisation. In the WRM sub-sector the basin management committees are a form of decentralised water management, but these are only in their very early stages.

#### **1.5 PRSP**

The Poverty Reduction Strategy Paper (PRSP) addressing the period 2003-2005 was published in May 2002. It was followed in October 2006 by the Socio-Economic Development Plan for Poverty Reduction 2006-2010 (DPPR), which incorporates the PRS. "The Third Socio-Economic Development Plan for Poverty Reduction (DPPR, 2006-2010) is the

second in a series of national plans designed to fulfil Yemen's Strategic Vision 2025 (YSV), which aims to raise the country's international ranking from a 'least developed country' to one of 'medium human development'".

The DPPR, in its Chapter 6 on Basic Infrastructure Sectors, duly pays attention to the Water Sector under the headings i) Water Resources and ii) Water Supply and Sanitation Systems. The document pays specific attention to Groundwater Depletion, Potable Water in Rural Areas and to Decentralization and the Role of Local Communities.

The DPPR outlines a vision and strategy on Water Resources management and Sanitation (see Annex 1). The vision and strategy of the DPPR is in line with the NWSSIP.

The DPPR document does not provide a detailed implementation and financing plan, while PRSP1 of 2003 had some figures. The NWSSIP does indicate the investment requirements. The Public Investment Plan 2007-2010, (MPIC, 200#) as presented to the CG meeting of November 2006, provides figures.

The DPPR does not really research the link between poverty, water resources management and the provision of watsan services. Also the DPPR does not set priorities, for example with respect to the sub-sectors or region. In water resources management, the DPPR mentions the link to the agricultural sector with the need to review trade and agricultural policies.

In the Section on Agriculture, the DPPR pays attention to the limited water resources, mentioning that agriculture mainly depends upon developing rain-fed agriculture. It mentions the low production in agriculture, the inefficiencies in irrigation and water harvesting. In its strategy it indicates the clear relation between water management and agriculture. The "Qat phenomenon" receives special attention in the same wording as in other documents, mentioning the steadily increasing production of qat, the impact on water resources and the complexity of dealing with the "issue", which has economic, social, health and environmental dimensions.

In the Section on Health, the DPPR does not pay specific attention to water, only indirectly where the spread of Bilharziasis is concerned.

## **1.6 Foreign Aid**

GoY / MPIC formulated an Aid Policy paper, September 2006. It notices that Yemen receives only a modest level of aid (\$12.7 per capita, or 2.2% of GDP as compared to \$33.4 per capita and 18.7% of GDP for all Less Developed Countries (LDC). It states that the Fiscal framework for the Third Five year Development Plan implies a substantial increase in net Foreign Financing (mainly Aid) from 1.1% of GDP to 7.8% of GDP in 2010. To achieve this, Yemen will continue on its road in reform, the paper mentions a number of specific items also mentioned above on PFM and PSR. Besides that the paper stresses the need for Harmonisation and Alignment, in which the GoY should take a lead. Some figures on ODA to Yemen are given in Tables 1.1, 1.2 and 1.3 on the following page.



**Table 1.1 – Characteristics of ODA to Yemen**

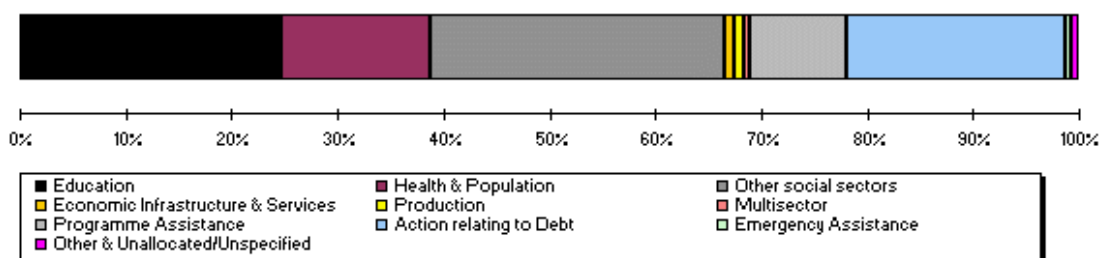
**Yemen**

Receipts	2003	2004	2005
Net ODA (USD million)	234	253	336
Bilateral share (gross ODA)	47%	51%	55%
Net ODA / GNI	2.2%	2.1%	2.6%
Net Private flows (USD million)	157	- 59	- 23

For reference	2003	2004	2005
Population (million)	19.7	20.3	21.0
GNI per capita (Atlas USD)	530	570	600

Top Ten Donors of gross ODA (2004-05 average) (USD m)	
1 IDA	111
2 Germany	39
3 France	37
4 United States	31
5 Netherlands	31
6 EC	25
7 Japan	25
8 United Kingdom	16
9 Arab Agencies	14
10 Korea	13

**Bilateral ODA by Sector (2004-05)**



Sources: OECD, World Bank.

**Table 1.2 - Total ODA to Yemen in the years 2000-2005**

	2000	2001	2002	2003	2004	2005
Total ODA (US\$ million)	265	461	584	234	252	

Source: MPIC, October 2006

**Table 1.3 - Percentage of funds using Government execution in FY 2005**

DFID	EC	France	Japan	Netherlands	UNDP	World Bank	Global Fund
0	16	0	16	30	16	0	0

Source: MPIC, Aid Absorption Capacity, September 2006

**1.7 Assessment of the contextual conditions for SWAp**

In describing their country strategies, the donor generally report in a critical fashion about progress in the advocated reform process in Yemen; for example, the World Bank Country Assistance Evaluation (August, 2006) is extremely critical, when it introduces the following Table (World bank, 2006a, pg14) with wordings like “little or no progress has been achieved” and “ while Yemen stood still” and “CPIA ratings dropped”.

Objective	Indicator	Outcome
Civil service reform	Manpower information system in place	Achieved
	Pay strategy	Not implemented <sup>Ψ</sup>
	Survey of client satisfaction*	Not achieved
	Re-engineering of 3 agencies*	Not achieved
	Staff size reduced by 30,000*	Staffing increased
Fiscal management	Independent commission on corruption	Not achieved
	Medium term framework established	Not achieved
Fiscal decentralization	Financial management system adopted*	Not implemented <sup>Ψ</sup>
	Local financing standards established	Not achieved
Judicial development	Half of judges retrained	Achieved
	Timely availability of rulings	Not achieved
	Alternative dispute resolution	Not achieved

Notes: Symbol \* = indicators appeared in both CAS99 and CAS02; Ψ = design was completed.

Source: World Bank 2006c

The CPIA ratings are given in Table 1.4 below.

**Table 1.4 - CPIA / IRAI scores Yemen by World Bank 2001-2006**

	CPIA – Quintile*					IRAI**
	2000	2001	2002	2003	2004	2005
Economic Management	2	2	1	1	1	
Structural Policies	4	4	4	4	4	
Social Inclusion Equity	4	4	4	3	4	
Public Sector	4	4	4	3	4	
Yemen						3.3

Source: World Bank

\* CPIA: 1 = high, 4 = low \*\* IRAI: 1 = high, 6 = low

The GON track record scores for Yemen are given in Table 1.5 below, and show also that generally there is considered to be little progress.

**Table 1.5 - Governance Ratings for Yemen by RNE 2001-2006**

	Indicator	2006	2005	2004	2003	2002	2001
A1	Poverty reduction policy	B	B	C	B	B	B
A2	Political commitment to poverty reduction policies	C	C	C	B	B	C
B1	Macro-economic (stabilisation) policies	C	C	C	B	A	C
B2	Business climate and structural reform	C	C	C	B	B	C
C1	Public finance management	C	C	C	C	C	C
C2	Basic conditions for good governance	C	C	C	C	C	C
D1	Quality of policy dialogue	B	B	B	B	B	B
D2	Harmonization and alignment	B	B	B	C	B	B

Source: RNE

A = Good, B = Satisfactory, C = Unsatisfactory and D = Poor.

Also the World Bank Yemen Development Policy Review (November 2006) is very critical. The report dedicates a full chapter to the water sector and is less critical on the opportunities in the water sector than on other sectors, although it is negative about GoY handling the “water crisis”.

The GON in the water Sector Institutional and Sectoral Analysis of the Water and Environment Sector (RNE, 2005) is more positive. It is discussed further in Section 3.1

### **Overall assessment of contextual conditions for SWAp**

The overall conclusion is that the policy framework is sufficiently well developed and appreciated to make substantial progress on the “road to SWAp”, but that the elaboration of policies still progress requires continuing attention and monitoring. The operational framework to implement water sector programmes is in a transition stage of institutional development and capacity building, and the potential to progress on the “road to SWAp” depends upon the interpretation of this transition and the trust placed in organisations. The level of trust differs from organisation to organisation and from place to place.

## 2 THE WATER SECTOR

### 2.1 Water in Yemen<sup>2</sup>

#### Introduction

Yemen is a water-scarce country, situated in an arid region with no permanent rivers. The annual per capita share of renewable water resources is estimated to be 125 m<sup>3</sup> per capita per year, which is one of the world's lowest: a generally accepted norm is that an availability of less than 1,000 m<sup>3</sup> per capita indicates water shortage. The annual consumption is about 170 m<sup>3</sup> per capita per year. As a result, water resources are being depleted, which is most obviously evident from the steady and drastic decline of the groundwater tables.

Historically, the population depended upon rainfall, springs, hand dug wells and water harvesting in ponds, and behind dikes and dams of various sizes. Mountain terraces, which cover most Yemeni mountains, are in fact water harvesting structures innovated by Yemeni farmers to retain scarce rainwater along with the precious fertile soil that sweep down the barren mountainsides. Groundwater well depths didn't exceed few tens of meters and their water was lifted, in small quantities, by muscular, animal or human effort. No mechanical drilling rigs or pumps were used until the 1960s.

The opening of Yemen to modern well-drilling technology in the early seventies, coupled with the large cash inflow that followed during the oil boom, led to an extensive expansion of irrigated farming and a rush to drill water wells and buy pumps. In the absence of any regulatory controls on drilling, these developments led to the mining of groundwater aquifers in most water basins in the highland plateaus and in the coastal plains. This mining is still going on.

Although the symptoms, causes and even the required remedies for the water crisis in Yemen have been diagnosed and became well known since the mid 80s, as a result of numerous studies that mapped the water basins and estimated the rainfall replenishment and quantity of water-use, however, this did not stop the problem from continuing and worsening, unabated, to reach an all-the serious level today. That is why the prevailing impression in informed circles about this problem is that the failure lies in implementing the solution measures rather than in diagnosing the causes of the problem and prescribing measures to solve it.

#### Strategic Water Sector Issues

The National Water Sector Strategy and Investment Plan 2005-2009 (NWSSIP) addresses 19 strategic issues. A selected number of issues is briefly listed below<sup>3</sup>.

Rapid modernization has outpaced evolution of social adaptive capacity: the advent of modernization characterized by population increase, rapid urbanization, industrialization, and availability of modern technology such as pumps and drilling rigs, took place in just two to three decades in an essentially very traditional society, also in a decade of political instability. These changes happened, too rapidly for the still traditional society to define an appropriate response. At present there is inadequate capacity at community and central levels to regulate water resource development, or improve water use patterns and environmental practices.

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<sup>2</sup> The following section leans heavily and often literally quotes the National Water Sector Strategy and Implementation Plan 2005-2009 (NWSSIP), which is a comprehensive plan endorsed by all levels of GOY and the development partners.

<sup>3</sup> NWSSIP issues which are not mentioned here are 'dams policy', 'population policies' and 'water governance'. The latter issue is discussed in Sections 2.2 and 2.3.

Water use based on resource capture is unsustainable: the lack of adequate mechanisms to regulate groundwater extraction has led to the depletion of groundwater and its use has become unsustainable. Water conflicts resulting from growing competition are also becoming more and more frequent. Low water use efficiency (especially in irrigation) and excessive pumping of groundwater are the result of direct and indirect incentives that make water cheap and do not encourage its conservation. Water rights have not yet been defined well.

Equity concerns over surface water allocation: It is estimated that by 2015 an extra 100 million cubic meters per year will be needed for urban water supply. Therefore, the re-allocation of water resources from agricultural to domestic use and from rural to urban is inevitable. However, no institutional mechanism exists at present to implement such a scheme. And in agriculture, both competition between wells and greater control over surface water flows has come at the expense of water equity, favouring upstream over downstream users

Unsustainable environmental practices: groundwater pollution by wastewater: cities and industries discharge untreated domestic and industrial wastewater into aquifers in peri-urban areas. Hence, rural and small town sanitation requires high priority.

Water use in all sectors is inefficient: the irrigation efficiency in agriculture is indeed low - in some cases only around 35%. The proportion of unaccounted for water of urban water supply utilities is very high, sometimes approaching 45-50 % of water production.

Poverty and access to water: there are complex links between poverty and access to water. The poor living in areas not adequately served by public water supply are forced to use lower quality water or buy expensive water supplied by tankers or private networks. Diseases resulting from use of poor quality water reduce the employment opportunities of the already poor families.

Markets in water services are not based on a recognized system of water rights: there are thriving markets in water services: irrigation water services, urban privately owned bulk-water outlets and also private sector water supply networks, tanker delivery services for water. These markets are essentially based on resource capture. Essentially, it is the lack of clear water rights that causes unsustainable use because higher demand for water services drives a 'race to the bottom of the aquifers' in the absence of prices which reflect the scarcity value of water and which could induce conservation.

Legislative framework and decentralization process: basically the legislative framework is in place, but for all of this to translate into effective water management, communities have to be mobilized in support of the water resources management plans because without their consent, water plans and policies cannot be implemented.

Basin co-management approach is still on the drawing board: concerted efforts need to be made for translating this from a management model into reality. To date, only the Basin Committee in Sana'a has been formed, as well as an interim Basin Committee in Sa'adah that will be formalized soon.

Regional water plans cover few catchments: The pace of plan preparation is slow, in part because technical capacities for integrated water resources management are still weak, and the infrastructure to gather information has only very limited coverage.

Is qat the culprit? Although qat contributed to rural stability by transforming water resources to financial wealth, however, the qat crop has earned quite a lot of notoriety as being responsible for water resource depletion. Qat now occupies at least half of the irrigated area

in Yemen, growing at an annual rate of 9 %. Also the area under other crops, particularly grapes and coffee, has expanded annually at nearly 3% and 5%, respectively. If the existing situation continues as it is, without intervention, then qat farming will in the end deplete the water in the rural areas.

Macro economic and resource policies need to be better integrated: Discussion of pricing, subsidies and macroeconomic policies, particularly policies affecting agriculture and water, is often completely missing from the discourse on economic incentives for water conservation. Therefore, there is a need for compatibility between water development and management policies and plans, on the one hand, and other sectors' development policies and plans, on the other (particularly agriculture, energy and urban development policies).

Human resources development in the sector: Professional and competent human resources to carry out the huge management and development tasks in the water sector are very scarce in Yemen, to such an extent that the shortage of qualified human resources constitutes the biggest constraint to building the capacities necessary for sound water, management.

### **Policy implementation approach**

The NWSSIP presents a logical framework of objectives, policies and policy implementation approaches. The implementation approaches are given below for the different sub-sectors and sector management.

Sector Management and Coordination: The approach proposed for implementing these policies comprises: 1) consolidating MWE institutional structure; 2) improving the quality of sector investment and of AFPPF financing; 3) formulation of a clear policy on institutional responsibility of each concerned body regarding water quality and its suitability for various uses, and regarding the assessment and control measures of such quality; 4) follow-up of implementation of the necessary measures to establish control over groundwater abstraction through an integrated package that includes economic incentives, regulatory measures, clear definition of 'water use rights and assisting farmers to enhance the economic and financial returns from water use (getting more income with less water).

Water Resources Management: The proposed approaches to implement water resources management policies include consolidating the basin co-management partnership with local communities. For its part, the government assumes the responsibilities of 1) clearing an enabling institutional framework, providing information, raising awareness and clearing a water management vision; 2) providing water related public infrastructure 3) protecting water rights, implementing the water law, and 4) creating a conducive macro-economic environment. The Strategy also adopted the implementation of integrated water management plans for water basins based on this co-management approach with local communities to assist them in solving their water management problems.

Urban Water Supply and Sanitation: The proposed approach to implement these urban WSS objectives and policies includes: 1) expanding coverage; 2) continuing and deepening the reform program after evaluating it; 3) developing regulatory, monitoring, support and policy functions; 4) achieving financial sustainability of water utilities, with due consideration to the low income segment of the population; 5) promoting private investment and public private partnerships; 6) continuing capacity building, and performance improvement; 7) enhancing community participation; 8) securing additional water sources for cities; and 9) formulating a policy for sea water or brackish groundwater desalination.

Rural Water Supply and Sanitation: The approach proposed to achieve the general objective of this sector, includes: 1) setting up sector strategy and coordination of its activities; 2) improving project/ scheme implementation; Fetching water in rural areas 3) broadening the

range of partners; 4) broadening technology choices and adopting appropriate ones; 5) integrating sanitation and hygiene in rural water schemes; 6) ensuring and protecting water resources and their quality; 7) improving targeting and sustainability by adopting bottom-up approaches throughout and mainstreaming gender issues; 8) promoting sustainability through broadening the range of partners so as to include, for instance, more NGOs and community institutions; and 9) directing available finance to the greatest need (targeting).

Irrigation and Watershed Management: The proposed approach for this sub-sector includes: 1) reducing groundwater mining; 2) securing farmers' water rights; 3) getting incentives light; 4) refocusing agricultural research and- extension; 5) .cost recovery on public irrigation schemes and developing water user associations (WUAs) as main partner; 6) treating qat as a crop; 7) reviving watershed/water basin management with an integrated approach; 8) reviewing and revising the dams program; repositioning MAI through reviewing and redefining the roles of government and private sector in the agricultural sector; 10) enhancing institutional coordination on agricultural water use; 11) improving the effectiveness of AFPPF; 12) increasing the role of community organizations and civil society; and 13) implementation of the agricultural agenda A21A.

Human and Environmental Aspects: The following approach has been adopted by NWSSIP to achieve the objectives and policies in this sub-sector; namely: 1) strengthening EPA work in the field of water so as to reduce poverty through improved environmental management; 2) act on water quality through a broad front; 3) protect water sources; and 4) operationalize environmental monitoring and regulation.

## **2.2 Institutional framework**

### **Overview of actors in the water sector**

The government is the main actor in the sector, with two ministries involved in policy making and implementation: the Ministry of Water and Environment and the Ministry of Agriculture. Authorities and departments under the ministries are responsible for the five sub-sectors: i) urban water supply and sanitation, ii) rural water supply and sanitation, iii) water resources management, iv) environment and v) irrigation. The urban water and sanitation sector is largely decentralised towards autonomous corporations at governorate level for the delivery of services. The linkages between the different sub-sectors do hardly exist. Funding is mainly through government institutions and cost recovery is still at a low ebb. Donors play an important but not dominant role in funding<sup>4</sup>. A myriad of private suppliers complement the government services.

Next to these government institutions, three funds need to be mentioned, which contribute importantly to the financing and implementation of rural water supply projects: the Social Fund for Development (SFD), the Public Works Project (PWP), and the Agriculture and Fish Production Promotion Fund (AFPPF). All three funds receive important contributions from GOY, but for the SDF and PWP the foreign loans and grants are highly important.

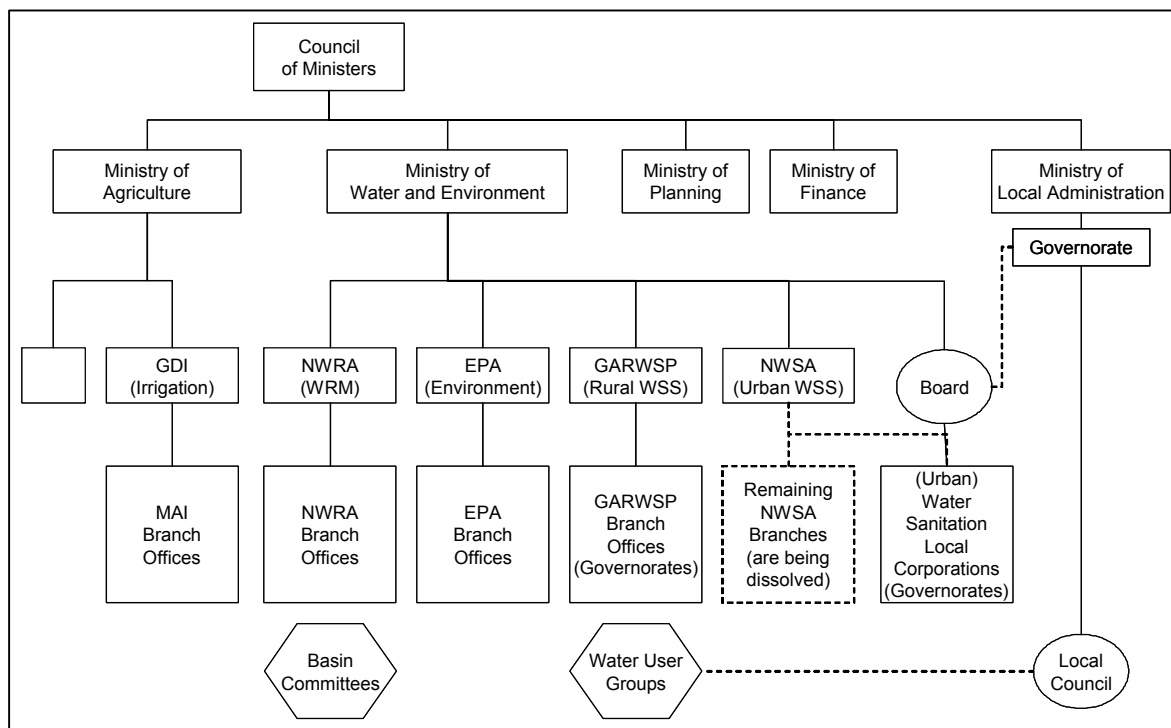
The role of NGOs, both national and international, is still comparatively small, but slowly increasing.

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<sup>4</sup> As indicated in sections ## and ##, donors provided an estimated ##% and ##% of the investments in the sector in 2005 and 2006 respectively.

## Institutional set-up

The Institutional set-up of the Sector was consolidated in 2003 with the establishment of the Ministry of Water and Environment and is depicted below in Figure 2.1. In name there is also an Inter-ministerial Steering Committee for the water sector under the Council of Ministers, but the committee is not active.



**Figure 2.1 – Main institutional framework**

The roles and responsibilities of the different organisations are briefly characterised in Table 2.2 and are briefly described in subsequent chapters.

**Table 2.1 - Present roles & responsibilities of water stakeholders**

Organisation	Water Resources Management	Irrigation	Urban Water Supply and Sanitation	Rural Water Supply and Sanitation
Ministers Council	Overall policy formulation and approval			
Ministry Water & Environment	Policy formulation Approval of budget and financing proposals to MoF Monitoring of government institutions and sector performance			
Ministry of Agriculture and Irrigation	Policy formulation Approval for Irrigation Investment Programme Implementation			
National Water Resources Authority (NWRA)	Policy formulation and implementation Basin studies	Licensing, monitoring and control of water resource use TA for locating of wells		
NWRA Branch Offices		Implementation of NWRA programs Establishment and guidance of Basin Committees		
Basin Committees				
General Authority for Rural Water Supply Programs (GARWSP) Central office				Studies, Planning and Investments Monitoring
GARWSP Branch Offices				Planning and investment implementation
Water User Groups				Operation and Maintenance

Organisation	Water Resources Management	Irrigation	Urban Water Supply and Sanitation	Rural Water Supply and Sanitation
National Water Supply Authority			Policy Formulation, Investments, Operation and Maintenance in remaining branches	
Water Supply and Sanitation Local Corporations (WSSLC) (in Governorates)			Investments, Operation and Maintenance	

The Table shows that responsibility for policy setting and implementation is rather well defined for RWSS and UWSS. However for WRM and irrigation, the responsibilities of the MWE and MAI are interlinked, while there are no formal coordination structures in place. In practice this sometimes leads to conflicts of authority and ineffectiveness, such as regarding the policy on groundwater extraction control and the policy on dams. The possible role of basin committees has not yet matured in this respect.

## 2.3 Water Sector Policy

### *The Policy Framework*

Since the mid 1990s Yemen has gone through a number of policy reforms and institutional re-arrangements in the water sector, triggered by a general dissatisfaction with the results achieved in the previous decades and triggered by increasingly serious concerns about the general state of water resources in the country. These were brought together in a World Bank Report entitled “Yemen: Towards a Water Strategy – An Agenda for Action” (1997). At that time the first steps towards a comprehensive water sector strategy were already taken, notably with the creation of the National Water Resources Authority (NWRA). The institutional framework went through several re-adjustments and was consolidated in 2003 with the establishment of the Ministry of Water and Environment (MWE), which is responsible for all major water resources and water services activities, except irrigation, which is the responsibility of the Ministry of Agriculture (MAI).

Currently, the water sector avails of the following official documents:

- a National Water Policy (2001)
- a Water Law (2002)
- a National Water Sector Strategy and Investment Program, 2005-2009 (NWSSIP)
- a (draft) Rural Water Supply and Sanitation Reform Policy Agenda (2007 at Cabinet discussion level).

In addition, the Law on Local Administration (Law 4/2000) constitutes an important basis for the agenda of decentralisation.

### *The Water Law*

The Water Law was approved in 2002. At present the necessary by-laws are under preparation. The long duration of this process is an indication of the complexity of the matter. The Water Law determines the organisation, management, development and rationalisation of water use. In the law, domestic drinking water is given the absolute priority. As to the use of water resources, the Law respects and maintains the rights that existed before the Law was issued. Legislation on water extraction and well drilling is ambiguous. The Water Law prescribes well licensing through the National Water Resources Authority (NWRA), but the Yemen Civil Law grants the landowners the right to exploit whatever water that may exist underground<sup>5</sup>. Moreover, wells that were drilled before the water law was passed can remain in production.

<sup>5</sup> NWSSIP 2005, page 5



## ***The National Water Sector Strategy and Investment Program***

The National Water Sector Strategy and Investment Program, 2005-2009 (NWSSIP) is the leading document accepted by the water sector at large.

The NWSSIP is a comprehensive strategy and it is accepted by GoY and all major donors as their reference<sup>6</sup>. Development partners mention that it is a unique achievement for Yemen to prepare a strategy on which all major stakeholders agree. Also the Socio-economic Development Plan for Poverty Reduction (DPPR, also seen as PRSP-2)<sup>7</sup> refers to the NWSSIP.

However, the NWSSIP does not have specific considerations on poverty beyond the general notion that the poor are the first to suffer from poor services. The DPPR mentions the priorities of the NWSSIP, duly mentions the MDGs and makes a specific notion that increasing agricultural production is key to poverty alleviation. The NWSSIP Document shows there still is a substantial financing gap<sup>8</sup> (see also Section 2.5 below), but it does not indicate priorities in case of scarcity of funds, for example in the choice between specific activities, regions or between sub-sectors. The Ministry of Finance has stated that it cannot commit itself to the indicative investment plan of NWSSIP as it depends too much on the (uncertain) world market price of oil. Consequently, the plan has not yet been translated into a Medium Term Expenditure Framework (MTEF)<sup>9</sup>.

### **2.4 Water Sector Reform**

The GoY and the specifically the water sector have agreed upon a number of important reforms, which are currently being implemented. The reforms especially relate to the delivery of water supply and sanitation services in rural and urban areas, with deconcentration and decentralisation as key-notions. Contextual reforms concern public finance management and civil service reform. The reform agenda in water resources management focuses on river basin committees. The reform in the irrigation sub-sector is less pronounced. The reforms in RWSS and UWSSS are briefly described below, the reforms in PFM and CSR have been mentioned in Section 1.#.

#### ***Main reform in Rural Water Supply and Sanitation***

The General Authority for Rural water Supply Projects (GARWSP), the major agency responsible for the investment in new schemes and rehabilitation of existing schemes, is establishing 23 branch offices in all of the 20 governorates. By 2010 all these branch offices are expected to have sufficient capacity to carry out their tasks autonomously: planning, tendering and implementing investments, monitoring and evaluation. Currently 11 of the 23 branch offices have obtained that status of autonomy. The main financing will remain to come from MoF through MWE and GARWSP Central Office. At community level, legally established Water User Groups, supported through the governorates, are responsible for operation, maintenance and tariff setting<sup>10</sup>. The long-term vision as presented in the Rural Water Supply and Sanitation Reform Policy Agenda is that the GARWSP Branch Offices will become autonomous governorate-based Rural Water Authorities (RWA). The Agenda is

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<sup>6</sup> Joint donor "Declaration of Support", Sana'a, 18 January 2005, and as witnessed from the NWSSIP Joint Annual Reviews, both with respect to donors as GOY

<sup>7</sup> Ministry of Planning and International Cooperation, 2005.

<sup>8</sup> Actually in 2006, the estimated investment expenditures were USD , which are higher than the expected expenditures in NWSSIP (JAR, 2007, see also Section 5.#)

<sup>9</sup> MoF, MoPIC and MWE intend to pilot an MTEF for the water sector 2008 as follow-up to the pilot in the Education Sector (sub-sector basic education), see also Section 5.#.

<sup>10</sup> In support of this, the decentralisation programme of MOLA plans to use these WUGs as the pilot demonstration groups at local level, supported by the Local Council (MOLA, Decentralisation and Local Development Support Program, Annual Report 2006).

under discussion at Cabinet level. One fundamental point of discussion is to which agency will be responsible for sanitation, which in the proposed Agenda is allocated to GARWSP, while MoLA and MoF would prefer to have this responsibility vested in the local councils and communities.

**Main reform in Urban Water Supply and Sanitation**

In all governorates, Water Supply and Sanitation Local Councils (WSSLC) have been established and are taking over the operations of the NWSA, which used to be the central organisation running urban water supply systems through its branches. It is expected that by 2010, all urban water supply is vested in the WSSLCs. The WSSLC are governed by a Board chaired by the Governor and are to a large degree autonomous in their decision making in staffing, planning, tendering, contracting and tariff setting, subject to administrative controls and approval of budgets by the MWE, MoF and MoPIC. The WSSLC are to become self-sufficient in operation and maintenance. The main financing line will come from the MoF through MWE. The WSSLC are eligible for foreign investments, which require approval from MoF and MOPIC.

**Main reform in Water Resources Management**

In WRM, the main reform relates to the formulation of integrated river basin plans, which have to lead to better integrated resource management, and to the formation of Water Basin Committees<sup>11</sup>, Water Users Associations and Water User Groups<sup>12</sup>. By the end of 2006, 3 WBCs are established and meet monthly under the local governor in Sana'a, Taiz and Sa'da. WUAs have been established across Yemen, with a total of 79 WUAs and 614 WUGs. Licensing and monitoring of well-drilling is high on the agenda of the NWRA. To be more effective, the NWRA is setting up branch offices, of which 7 were established by 2006.

**2.5 Operational policies and practices**

**Rural Water Supply and Sanitation**

A rural water supply scheme typically consists of a borehole with a diesel driven pump, a balancing tank, a distribution network and optionally individual house connections with water meters. The scheme is operated by a water users group. Project implementation is organised on the basis of these components. Different stakeholders may be responsible for funding and implementation of the different components of the project. The sanitation component of the projects is practically non-existent. There are no investments for sanitation as yet.

Next to GARWSP, a number of other agencies are active, such as SDF, PWP and WB-RWSS. They all apply to a major extent the same policies and practices.

**GARWSP**

Under the provisions of the Water Law, the Ministry of Water and Environment (MWE) has given the responsibility for rural water supply and sanitation to the General Authority for Rural Water Supply Projects (GARWSP). GARWSP was established in 2002 and took over the activities of the General Authority for Rural Electrification and Water (GAREW), which was disbanded one year earlier. The level of responsibility and autonomy of the GARWS Branch

<sup>11</sup> WBCs. The first basin management committees are being set-up on a pilot basis to ensure involvement of the different stakeholders and reach forms of self-regulation of groundwater users.

<sup>12</sup> WUAs ....., while WUGs .....

Offices differs with the level of organisational capability of the branches as described in Section 2.3.

GARWSP provides training for the WUG. For the technical and financial / administrative aspects, GARWSP has sufficient capacity. For training in social mobilisation and for aspects such as the involvement of women and hygiene education, GARWSP has very limited expertise and budget available. This deficiency is acknowledged by all stakeholders, including GARWSP itself.

#### *Water User Groups and Project Selection*

The selection of project interventions by GARWSP has been reformed in the past years and is based on what is termed the Demand Responsive Approach (DRA). A local community formulates a request, submits it to the local District Council, which after approval forwards the request to the GARWSP Branch Office. Before a community is eligible for a project, it has to establish a Water User Group (WUG), which needs to be legally registered with the Ministry of Social Affairs. On the basis of this legal status, the WUG acts as a partner to GARWSP and takes over legal ownership and responsibility for operation and maintenance. The WUG also has to ensure a community contribution in support of the investments. The Local Council often plays an active role in the process and sometimes participates in project implementation.

The application process is much more transparent than before when it was basically an arbitrary process of honouring individual requests directly addressed at GARWSP, often at Central Office. Presently all requests are duly registered in a yearly planning cycle, while progress of request processing is monitored and reported upon.

#### *Poverty Focus*

In the selection process for rural interventions, there is no clear sign of a specific poverty focus. Neither communities nor districts are targeted based on poverty indications. Some donors target specifically poor districts<sup>13</sup>. The general assumption is that rural water supply servers poor people. The DPPR subscribes to the fact that poverty is most prominent in rural areas.

#### *Budget Process*

The Branch Office prepares an annual plan and a budget. After approval, the GARWSP HQ combines the plans and budgets to be included in the annual plan and budget of MWE. The MWE submits the budget to the Ministry of Finance (MoF) and the MoF informs the MWE in December of each year about the approved budget allocation. The allocation by MoF depends very much on the level of the price of oil on the international market. That is the main reason for the MoF not to commit itself to long term budget commitments.

#### *Project Completion and Sustainability*

Generally there are positive reports on the implementation process and the quality of completed schemes<sup>14</sup>, and there are clear signs of improvements as compared to the past. Although there are clear signs of improvement in the RWSS sector, there are still important improvements to be made. The different components of the rural water supply schemes are financed from different sources and this may lead to delays. Together with the fact that there

<sup>13</sup> e.g. USAID; GON does not target specific districts, see Section 3.#

<sup>14</sup> e.g. ISOA, RNE 2005, and Value for Money Audit of GARWSP, COCA 2006 and implicitly in WB-RWSS intent to move towards partial budget funding at GARWSP (interview WB task manager, Sana'a, July 2007 and personal communication RNE, September 2007)

is a natural tendency to honour many requests partly, spreading investments over a few years, rather than fewer requests fully, this lead to a long duration of project implementation. GARWSP is slowly able to reverse this approach and is catching up with as yet unfinished projects. Quality control of the implementation activities is not yet systematic<sup>15</sup> and there is no clear monitoring of the sustainability of the schemes<sup>16</sup>. Support for the community organisation must improve, to increase the local capacity for O&M, which is crucial for the sustainability of the projects.

### *Roadmap for RWSS*

There is not yet an adequate comprehensive base-line survey available, which shows the presence and condition of all schemes both from technical as well an organisational management aspect. The lack of such a base-line renders long-term planning and priority setting difficult. The absence of an adequate M&E system and base-line survey is acknowledged throughout the sub-sector. GARWSP mentions it as one of the most urgent priorities for improvement<sup>17</sup>.

### *Other Agencies next to GARWSP*

GARWSP is the most important organisation in RWSS, but a number of other organisations are active as well. The most important ones are:

- the Social Fund for Development (SFD)
- the Public Works Programme (PWP)
- the World Bank Rural Water and Sanitation Project.

Apart from these, there are a number of NGOs that implement RWSS projects, but these are small.

All organisations have adopted the “demand responsive approach” as the principle for implementation of projects, all help to establish water user associations and all follow more or less the same technical designs, except SDF.

The SFD differs from GARWSP because they do not consider groundwater based mechanised schemes as sustainable. Therefore, they concentrate on rainwater harvesting.

The PWP’s main focus is to provide employment for unskilled and semi-skilled labour in rural areas. With that objective, they have an extensive RWS programme. The prioritisation of potential projects has a strong pro-poor focus in the PWP.

The WB-RWSSP is organised as a completely parallel structure to GARWSP. There is a central PMU in Sana’a and there are PIU’s in the six governorates where the project implements activities: Ibb, Abyan, Hajja, Dale’e, Lahje and Amran. The reason for this organisational set up is that at the time of the start of the project, the World Bank did not have any trust in the capacity of GAREW to implement the project adequately. As mentioned above, there is a lot of difference between GAREW and GARWSP. The improvement is acknowledged by the World Bank<sup>18</sup>. In practice there is quite some cooperation at governorate level between the WB-RWSSP and the GARWSP branches, including work on

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<sup>15</sup> GON introduced the Value for Money Audit (VMA), as described in Section 3.# for its budget at GARWSP. The intent is to apply the VMA to a sample of all projects in RWSS

<sup>16</sup> For example in the Asana Village Scheme, TA’iz Governorate, visited in July 2007, several major repairs to pumps could only be accomplished with new outside funding; the local committee was well organized, well documented and knowledgeable, but was hesitant to raise prices sufficiently to afford major, but not excessive repairs.

<sup>17</sup> JAR for the year 2006

<sup>18</sup> Personal communication with WB task manager, July 2007

the same project. At present, ideas are being developed that WB-RWSSP will take over the community training in all GARWSP's projects in the six governorates.

### ***Urban Water Supply and Sanitation***

The institutional framework of the Urban Water Supply and Sanitation (UWSS) sub sector is changing. In the past, the National Water and Sanitation Authority (NWSA) used to be responsible. NWSA had branch offices in the governorates, but the process was centralised. Now, there are autonomous Local Corporations for Water Supply and Sanitation (WSSLC) in 13 governorates. In some governorates, the smaller towns are incorporated in one WSSLC, in other governorates, autonomous utilities are established for every town. There are only 8 NWSA branches left and before 2010 these branches must be developed into autonomous Local Corporations. There is no clear agreement on the mandate of NWSA after 2010. Training, capacity building and monitoring may be the future role. There is an agreement that the UWSS sector needs a regulatory authority, but it is not decided whether NWSA will get that role.

#### *The WSSLCs*

The autonomous WSSLCs prepare their own budget and work plan, including an investment plan. The WSSLCs submit their budget to the MWE, which after approval submits to the MoF. After budget allocation in December, the budget is managed directly by the WSSLC. However, the LC is bound by the normal procedures of GoY: payments to contractors have to be signed by the MWE before disbursement by MOF. Tariffs are set by the WSSLC, but tariff adjustments must be approved by the Minister. Tariffs differ from one WSSLC to another<sup>19</sup>.

The WSSLCs are guided by a Board of Directors. The Governor is the President of this Board. There are reports of interference in the autonomy of WSSLCs, by the authorities, e.g. in the employment policy: the Governor wants to employ people that are not required by the WSSLC. It might be a challenge for the planned regulatory authority to safeguard the professional autonomy of the WSSLCs.

WSSLCs are supposed to have full cost recovery for O&M. However, that is not always the case. It was reported<sup>20</sup> that in some governorates cost recovery hardly reaches 50 %. Moreover, as the cash situation is tight, expenditure is limited to less than the acceptable minimum, especially for maintenance and repair. There is no reliable information system to monitor the performance of the WSSLCs.

#### *Water supply*

The first priority for the LCs is to provide as much water as possible. Still, the LCs are not able to provide sufficient water. In Taizz, the customers receive water on the average once every three weeks. In most other governorates the situation is less desperate, but 24 hours a day for 7 days a week is nowhere possible. The Sana'a WSSLC does not cover the complete urban area. Reportedly only 50 % of the city can be supplied. To make up for the inadequate supply of the LCs, private vendors sell bulk water to consumers. They obtain the water from private wells.

The Taizz LC admits that it is not possible to provide water of acceptable quality for drinking. Also in Sana'a the public water is not fit for consumption. There are many small shops where

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<sup>19</sup> In Taizz, the customers pay a fixed amount of 500 YR per month; this fixed amount covers the first 5 m<sup>3</sup> of water that is consumed. If the customer consumes more water, it is charged at a progressive rate: YR 50/m<sup>3</sup> for the first 5 m<sup>3</sup>, to YR 320/m<sup>3</sup> for consumption over 31 m<sup>3</sup>/month.

<sup>20</sup> JAR for NWSSIP Year 2006, July 2007

water is treated to reach drinking water quality. From these shops, consumers buy water in jerry cans for about 5 YR per litre (equivalent of YR 5000 per m<sup>3</sup>).

From the above, it is clear that the private sector plays an important role in urban water supply. This is acknowledged by the government, but not really enthusiastically welcomed. The role and intentions of the private sector do not fit in the policies and plans of the government. According to the Water Law, only the LCs are responsible for urban water supply. However, as there is no alternative, the private sector is tolerated. There is no regulation on the private sector activities. Only the water quality of the drinking water treated and provided by the shops, is checked. If the quality is not adequate, the shop is fined. According to what we were told, the water quality of these shops is good.

In Taizz there is a start of cooperation between the public LC and the private sector. With financial support from the RNE, cooperation is set up between VITENS from the Netherlands and the TWSSLC. Until now this cooperation is concentrated on improving the drinking water sector (resource management, rainwater harvesting, network maintenance). In the near future, waste water treatment will be included.

### *Sanitation*

According to the Law, the Local Corporations are responsible for sanitation in the urban areas. However, sanitation does not yet receive much attention. In Sana'a, the sewerage system and the waste water treatment plant are being upgraded with financial support of the Arab Fund. In Aden, the waste water system is recently upgraded with assistance from the KfW. In Taizz, the World Bank has a project to improve and extend the sewerage network.

### **Water Resource Management**

Yemen consumes much more water than technically acceptable: the groundwater extraction is far above the recharge level. This fact has been acknowledged for more than 20 years. Still, over-extraction is going on. For an outsider, it seems as if every discussion in Yemen on water starts with the statement of this fact. After that, it is business as usual: no tangible actions are taken to reduce groundwater extraction.

By Law, the National Water Resources Authority (NWRA) is responsible for the management of water resources. It is not permitted to drill new wells or to increase the capacity of existing wells without a license from NWRA. However, it is reported that many wells are drilled without a license. Even if this violation of the law is recorded, court prosecution follows in less than 25 % of the cases. In Governorates like Sana'a and Dhamar, this percentage is even much lower (below 5 %). The total fines collected after court prosecution are negligible<sup>21</sup>.

NWRA is a regulatory/supervisory agency. NWRA has the role to enforce the Water Law, but it hardly has the power or the resources to do so. According to the Deputy Chairman<sup>22</sup>, NWRA can not prevent GARWSP, NWSA, the LCs, or the Ministry of Agriculture from drilling wells or from constructing dams. The costs of licensing have to be covered by the organisations that need a license. Dug wells are not subject to the obligation to be licensed. Therefore, there is an increase in the number of dug wells.

The only tangible activities that were mentioned at the NWRA branch office in Taizz, were related to public awareness. Specific activities were organised for different target groups: schools, mosques, local councils.

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<sup>21</sup> JAR for NWSSIP Year 2006 – Annex 1 on indicators for water resources management).  
<sup>22</sup> Personal communication, July 2007

NWRA has branch offices in # of governorates, which are sub-ordinate to the NWRA HQ in Sana'a. The operational budgets for the NWRA branches are transferred to the governorates, but it can only be disbursed after approval from the MoF representative in the Governorate. NWRA depends for 80% on donor funding, as detailed in section 2.5

### ***Agriculture and Irrigation***

Although the MWE is responsible for managing water issues, more than 90 % of water consumption is for irrigation (i.e. agriculture). In the framework of an institutional reform programme, the General Department for Irrigation (GDI) was established. There is an Inter-Ministerial Steering Committee for the Irrigation Sector; and an Inter-Ministerial Water Committee. However these committees never meet and there is not yet consensus on their mandate and members<sup>23</sup>.

GDI can play a role in influencing the demand for water, but can not control extraction, which is the responsibility of NWRA. Dams are the responsibility of MAI. Dams help to preserve water, especially the shallow water table. MAI does not understand criticism on its dam programme, it is always good to build dams.

The most important contribution of the irrigation sector to water saving can be the introduction of modern irrigation techniques. GDI never reaches the targets for the areas for which modern irrigation techniques are planned. The reasons for this, as mentioned by the Deputy Minister of Irrigation are:

- Insufficient capacity in MAI. The Ministry needs further restructuring of GDI; support with equipment and skill development; training of staff; Irrigation Advisory Services.
- Insufficient funds available: the donor support is too low and the GOY contribution is not sufficient to meet the needs. 400,000 ha should be targeted, but only 28,000 ha is under consideration.
- Planning of the introduction of new techniques has to improve: until now there is consistent under-estimation of the costs.
- The farmers must have incentives to apply the modern techniques.

The discussion focuses on qat growing. Many donors do not agree to include qat farmers in the programme to introduce new irrigation techniques. Only in the Sana'a basin, the World Bank has agreed to consider qat as a normal crop, which should be taken into account when water saving through modern irrigation techniques are implemented. That is unfortunate from a water saving point of view, as qat consumes a lot of water and large quantities of this water could be saved through more efficient irrigation.

There are not many donors in MAI. Donor support is in the form of projects. The project staff is usually recruited from the Ministry. This staff takes leave of absence for the duration of the projects. That means that the Ministry can not fill the open posts left by these staff. In that way, projects disrupt the functioning of the Ministry.

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<sup>23</sup>

Personal communication from MAI, June 2007

## 2.6 Operationalization and monitoring of the sector policy implementation

### Operationalization

A summary assessment of the operationalization of the policies is given below in Table 2.3. The Table shows that the policies are clear except for groundwater control, that the tasks and responsibilities are well defined, but that a medium term expenditure framework and a supporting roadmap are lacking as monitoring systems are not yet mature. Also poverty focus is based on assumption that improved service delivery almost by definition serves the poor, which in Yemen is true to a very fair degree.

**Table 2.2 - Assessment of steps from PRSP to sub-sector financing strategies**

	Activity	State of Affairs	Summary assessment progress made
1.	PRSP inclusion of water sector objectives	PRSP consistently mentions water goals, but DPPR (PRSP-2) not very specific; DPPR refers to NWSSIP	High
2.	MTEF inclusion of water sector in targeting public expenditures towards poverty reduction (link between annual budget and PRSP)	Yemen does not avail of well developed MTEF; link between official plans and budgets not strong	Limited, but there is serious commitment to develop MTEF for the Water Sector.
3.	Poverty Monitoring Systems inclusion of water sector indicators in feeding into processes for reporting on performance	There is no poverty monitoring system	None
4.	Sector Policy and Strategy setting out the sectoral objectives, means, costs and broad financing strategy how to fund costs	NWSSIP, good quality, subscribed to by donors, reflects other policies; basis for PRSP	Good progress, but financing gap exists
5.	Sector Policy and Strategy	NWSSIP, good quality, subscribed to by donors, reflects other policies	High
6.	Sub-sectoral Policy and Strategy	NWSSIP, detailed up to sub-sector level. Operational policy details: <ul style="list-style-type: none"> <li>- Draft for Rural WSS in Cabinet.</li> <li>- No published strategy for Urban WSS, for IWRM and Agriculture, but UWSS and IWRM apply commonly accepted policies and practices.</li> <li>- Agreement on decentralisation</li> </ul>	high on decentralisation some progress UWSS and IWRM little progress on Agriculture: overriding problem of water shortage remains haphazard
7.	Sector Financing Strategy Sub-sector Financing Strategy	No prioritisation, strategy for the Sector institutionally not possible No prioritisation; no link between NWSSIP to budgets	Financing gap exists, options to resolve not clear; RWSS: GoY commitment to raise contribution consistently as part of programmatic aid commitment
8.	Sector Road Map Sub-sectoral Roadmap	Sector too much sub-divided and partially decentralised for common roadmap Base-line surveys still being developed. Tasks in UWS and RWS well defined, financing needs largely known, implementation schedule not clear as yet.	fair

### Monitoring

The MWE has established an NWSSIP M&E Unit, which reports quarterly. GoY and donors have a Joint Annual Review (JAR), which assembled for the first time in 2006 and again in June 2007. The JAR is a forum where the best available monitoring data are presented, based on an agreed set of sector performance indicators. The JAR has shown that there is proof of a strong commitment by the GoY to the water sector – the Prime Minister, Deputy Prime Minister (who is the Minister for Planning and International Cooperation), Minister of Water and Environment and Minister of Agriculture all participated.

A conclusion that was shared by all participants of the JAR is that the quality of the data is still far below standard and that monitoring and evaluation has to improve. This is considered a priority by all concerned in the Sector.



## 2.7 Financing the NWSSIP and the Water Sector

The NWSSIP provides an extensive overview of the water sector requirements and the commitments made in 2004, including a list of programs and projects. Table 2.2 highlights the most important figures. The table shows that there is a substantial financing gap.

**Table 2.3 – Investment Financing of NWSSIP, 2005-2009 in USD Million per year**

Sub-sector	Total Required	GOY Expected	Donor Expected	Financing Gap
Urban Water Supply and Sanitation	150	53	71	36
Rural Water Supply and Sanitation	90	20	16	54
Irrigation	38	11	13	14
Environment	4	0	2	2
Total	282	84	102	96

Source: NWSSIP, 2005

The actual investments in the sector are presented in Table 2.3 below. The investments for the years 2005 and 2006 were reported in the Joint Annual Review (JAR), while the Institutional and Sector Analysis (ISOA) conducted by RNE in 2005 gives actual expenditures on investments and recurrent costs for the years 2000 – 2004, which is based on the Yemen Water sector – Public Expenditure Analysis (draft).

**Table 2.4 – Investments per sub-sector, 2000-2006 in USD Million (rounded)**

Sub-sector		Source: ISOA, RNE 2005					Source: JAR <sup>1</sup>	
		2000	2001	2002	2003	2004	2005	2006
Urban WSS	GOY <sup>2</sup>	50	53	69	102	92	25	50
	Donor <sup>2</sup>	17	18	25	39	58	20	26
	Total	67	70	94	141	150 <sup>3</sup>	45	76
Rural WSS	GOY	33	52	15	2.3	19	18	32
	Donor	29	3	5	6.2	10	7	9
	Total	35	55	20	8.5	29	25	41
Irrigation	GOY	3.7	4.1	4.8	5.5	2.3	7	14
	Donor	0.9	1.0	1.2	1.4	0.6	22	12
	Total	4.7	5.1	6.0	6.9	2.9	30	26 <sup>1</sup>
Environment	GOY	0.2	0.1	0.3	0.3	0.5	0.4	n.a.
	Donor	0.9	0.5	1.2	1.1	2.2	1.0	n.a.
	Total	1.1	0.7	1.5	1.4	2.7	1.4	n.a.
IWRM	GOY	0.5	0.5	0.5	0.5	46.5 <sup>4</sup>	0.4	1.1
	Donor	2.2	2.1	2.0	2.0	5.4	3.0	2.5
	Total	2.7	2.6	2.5	2.5	51.9	3.4	4.4
TOTAL	Total GOY	87	110	89	111	161	23	97
	Total Donor	24	24	35	50	76	12	51
	Grand Total	111	134	124	161	237	105	158

Notes:

<sup>1</sup> – The figures in the JAR reports are not always consistent, e.g. the JAR Aide Memoire signed by all stakeholders differs from the separate sub-sector reports, and the JAR 2006 mentions figures over 2005, which are different from the JAR2005 reports; however the differences are less than 10%, except for Irrigation where the sub-sector report 2006 gives an expenditure of 26 USD Million as compared with the 37 USD Million in the Aide Memoire, and for GARWSP with figures of 28.6 and 41 USD million respectively. For irrigation, the lower figures is accepted, while for GARWSP the higher figures is accepted.

<sup>2</sup> – The share of GOY and Donors for the years 2000 to 2004 is not always clear from the reports, as donor programmes may be included in the report of the government organisation, while government may contribute to spending in donor programmes; however, the order of magnitude is correct.

<sup>3</sup> – The JAR2005 mentions a figure of 46 USD Million for UWSS in 2004, which seems more likely. The 150 USD Million is probably the committed funds, which were not all disbursed as explained in the main text.

<sup>4</sup> – The high figure of 46.5 USD Million for IWRM in 2004 comes from a one-time high reported as expenditures by MWE, the purpose of which still needs to be clarified.

The compilation of the data is quite an effort as there is no central agency tracking and reporting on the expenditures. Especially in UWSS and to a lesser extent in RWSS, the multitude of decentralised WSSLCs and donors renders it difficult to compile a complete overview. Also the investments made by private operators, which are important in the UWSS are not taken into account. Recurrent costs represent the direct expenditures of the government agencies, and do not take into account the contribution of water user associations, which especially in RWSS are substantial.. Nevertheless, it is considered that the two sources provide the best available data and that they give a fair to good reflection of the magnitude of the expenditures for the purpose of this study. It is doubtful whether the figures of the years 2000-2004 from the ISOA can be compared with the figures for 2005-2006 from the JAR; some specific question marks are noted at the bottom of Table 2.3.

Figure 2.2 below is based on Table 2.3, but the year 2004 is corrected in accordance with the remarks made in Notes 3 and 4 of the table. The figure shows that the expenditures for the water sector as a whole are increasing again after a dip in 2004 and 2005. The increase is equally significant in RWSS and UWSS. The share of the donors is fairly stable at about 20% of total investments, except in 2004 and 2005, when the share increased to 30%..

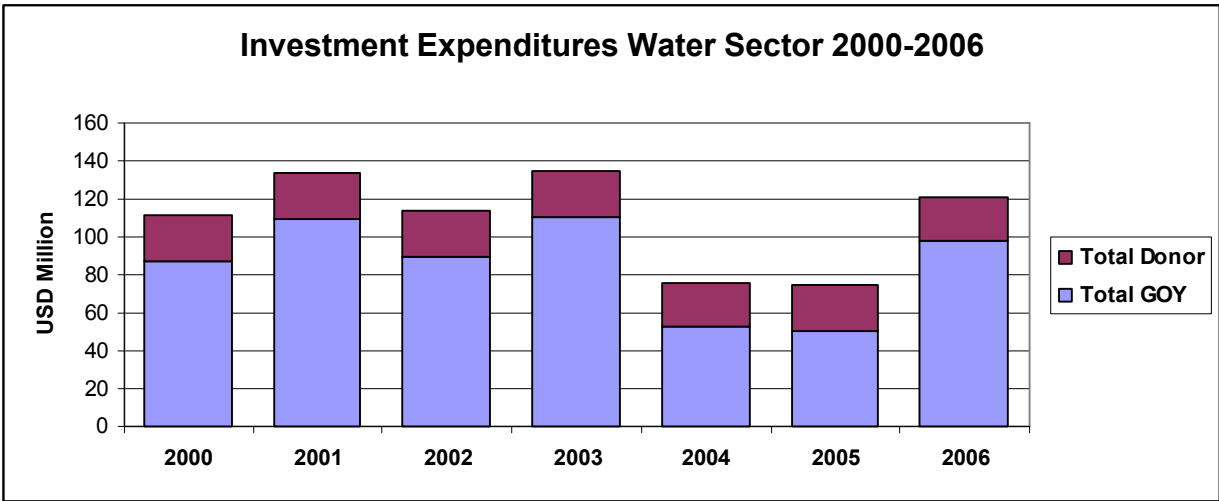


Figure 2.2

The investments in the water sector are still below the required needs as specified in the NWSSIP. Table 2.4 lists the financing gap for the different sub-sectors for the years 2005 and 2006, taking into account the corrected figures as explained in the notes to Table 2.3.

Table 2.5 – Financing Gap Investments with NWSSIP targets in USD Million

	UWSS		RWSS		IRRIGATION		ENVIRONMENT		IWRM	
Target NWSSIP	150 M USD		91 M USD		38 M USD		4.1 M USD		9.4 M USD	
Year	Actual	Gap	Actual	Gap	Actual	Gap	Actual	Gap	Actual	Gap
2005	45	115	25	66	30	8	1.4	2.7	3.4	6
2006	76	74	41	50	26	12	1.4	2.7	4.4	5

Next to the indicative targets of the NWSSIP, the performance of the sector with respect to reaching the MDG targets is another indicator of a possible financing gap. The JAR reports that in UWSS, the increase in coverage does not surpass population increase, while RWSS is catching up with increasing investments in 2006, but still will have to do more to achieve the MDGs. Reflections in the JAR on the financing gap generally state that the gap is not caused by lack of financial commitments and actual availability of funding, but by the absorption capacity of the organisations. In UWSS, typically less than 50% of the planned investments is approved and of this 75% is actually disbursed. The absorption capacity is

restrained by a number of factors, such as i) the number of ready-to-go projects is still limited, ii) the implementation capacity of the organisation is still low, iii) the administrative approval process of disbursement of the MoF is lengthy and iv) the reorganisation of the organisations of the last few years has taken up considerable energy.

It is also stated at several occasions, that since the institutional framework has matured, organisations are formally established and decentralisation is taken seriously and since the performance indicators, monitoring frameworks and inventories of state of affairs are increasingly better reported upon, that the absorptive capacity is increasing fairly well, although there remain large differences in performance between the different corporations, branch offices and basin committees.

## **2.8 Political commitment and will**

Most policy and public statement indicators show a high political commitment and will. The water sector has a high priority in Yemen and receives ample attention. An illustration of this was the high profile attendance of the Deputy Prime Minister, Cabinet Ministers and representatives from Parliament at the JAR, co-signing the Aide Memoire. This commitment is taken seriously: especially in rural and urban WSS, where decentralisation is pursued with vigour. As mentioned in Section 1, the contextual factors for improved sector performance, such as improved Public Finance Management, improved Procurement Systems and Civil Service Reform are pursued and reported upon as part of the broad GOY Reform Agenda. There are serious plans for an MTEF for the water sector.

However, on the other hand, the GOY finds it difficult to tackle the most pressing issue of the water sector: there is no comprehensive and consistent strategy to deal with the over-exploitation of the groundwater. Also unlicensed well drilling is often not penalized and political interference with corporations and branch offices is still noticed. Agreements reached in the JAR are poorly followed up and most of preparatory work, policy formulation and discussion notes are initiated and worked out by donors.

## **2.9 Assessment conditions in the water sector for SWAp**

In 2005, RNE wrote on the potential for Budget Support:

During the last part of 2004 and the first half of 2005 an institutional sector and organisational analysis has been conducted with emphasis on the rural water supply and water resources management sub-sectors. Careful analysis and appreciation of the sub-sectors and the track record gave the Embassy the conviction that earmarked sub-sector budget support was not only feasible but also acceptable. In July 2005 agreements were signed with NWRA and GARWSP in the disbursement modality of Virtual Funds. Progress in the reporting period towards sector budget support therefore has been satisfactory. An intensive dialogue with the sector on additional interventions to build capacity, improve incentives and better understand where the problems really lie and what needs to be done to address them is taking place.

In 2005, RNE wrote on the Progress for Water Sector Budget Support:

"The suitability for sub-sector budget support is close to feasible (by 2007). Sector policy and strategy, while not complete yet for every sub-sector, are in good shape, effective commitment of civil society towards sector policies and strategies has been proven. Shortcomings exist still in sector absorption capacities, which partly will be addressed by further decentralisation and more effective engagement of decentralised capacities. Other capacities will be improved during the coming years of NWSSIP implementation. GoY, World Bank, Germany and The Netherlands, the latter 3 as core donors in the sector, are converging in their dialogue within the SWAp framework as set out in the Program Aid Water Sector Memorandum of Understanding (PAWS MoU) initiated and further developed by the RNE. Effective commitment, however, still needs to be proven.

In March 2006, The World Bank published a study “Sector Wide Approach (Swap) in The Water Sector: Assessment of Readiness and Opportunities”. The findings of the report are summarized in the following table as copied from the report.

**Table 2.6 - SWAp assessment of readiness and opportunities (World bank, 2006c)**

	Comprehensive sector policy framework?	Country led partnership?	Agreement to support national program?	Fiduciary requirements aligned?	Implementation procedures aligned?
RWSS/WRM	Green	Amber	Amber	Amber	Amber
UWSS/WRM	Green	Amber	Green	Amber	Amber
Irrigation	Red	Red	Red	Red	Red

<b>Green</b>	<b>Criterion fulfilled in the short term</b> Requiring only agreement on exact program (parallel financing or joint -- either pooled or basket funding) and drafting a SWAp MOU
<b>Amber</b>	<b>SWAp is feasible but requires preparation work</b> Requires a joint preparation program and evaluation of the fiduciary requirements.
<b>Red</b>	<b>Major obstacles to SWAp – movement to green only in the long term</b> Situation not improving, no dialogue or common vision.

Based on the evaluation, four different financing modalities can be envisaged for the Yemen water sector for the immediate and medium term: (i) parallel/joint financing, (ii) basket funds for technical assistance; (iii) modified budget support (targeting a specific program with control of fiduciary aspects by donors); and (iv) budget support. The four modalities are further explained in the main report.

Most donors and GOY subscribe to the conclusions as quoted here above. However, there is also hesitance to move towards higher modalities of SWAp for the following reasons:

- the fiduciary risks as the reforms in the procurement and public finance management system still have to be proven in practice, while Yemen in general has a poor reputation on corruption in the past
- the absorption capacity of the sector policy makers and the implementing organisations, both with respect to quantity and quality
- the quality monitoring and evaluation system
- the consistent lack of a comprehensive strategy for tackling the most urgent aspect of over-exploitation of the

In September 2007, the World Bank and GOY concluded an Aide Memoire on the establishment of a new Water Sector Support Program<sup>24</sup>, with a timetable leading to Sector Investment Loan with donor co-funding in a SWAP framework with sub-sector budget support to be operational in 2009.

#### *Summary conclusion of conditions for SWAp*

The overall conclusion is that the policy framework is sufficiently well developed and appreciated to make substantial progress on the “road to SWAp”, but that the elaboration of policies still progress requires continuing attention and monitoring. The operational framework to implement water sector programmes is in a transition stage of institutional development and capacity building, and the potential to progress on the “road to SWAp” depends upon the interpretation of this transition and the trust placed in organisations. The level of trust differs from organisation to organisation and from place to place.

<sup>24</sup> Personal communication RNE, September 2007

### 3. INPUTS DONOR

#### 3.1 Netherlands policy, indicators and development cooperation with Yemen

##### *Level of Funding*

Based on The Netherlands Governments' (GON) criteria for allocating development aid to a country, Yemen would be eligible for a yearly contribution of € 33 Million. Since 2003, Yemen however only receives € 22 million annually, which is spent on the three main sectors of Education (€ 10 M), Health (€ 4.5 M) and Water (€ 4.5 M), and on the cross-cutting theme Good Governance (€4.0 M).

The reduction of the allocation from € 33M to € 22M occurred in 2002/2003, as a consequence of budget cuts in The Netherlands, which affected Yemen comparatively severely. At the time, GON communicated that an increase of Aid to the former level would be possible, but would be based on an improvement of the "governance indicators". This policy was communicated once again at the Consultative Group meeting on Yemen, in London, November 2006.

##### *The role of Indicators*

The indicators used are the CPIA/IRAI indicators of the World Bank and the ratings used in the GON/RNE track records, which often resemble the CPIA scores. Table 3.1 gives the RNE track record scores for the water sector. The track record score for the country and the CPIA scores are given in Chapter 1. The scores for the water sector are slightly higher than the scores for the sectors health and education, as is shown in Annex 3.

**Table 3.1 - Governance Ratings for the Water Sector by RNE for 2002 -2006**

Indicator	2006	2005	2004	2003	2002
Sector Objectives		B	C	B	B
Sector Budget Support		B	C	D	D
Sector Policies		B	B	B	B
Commitment Civil Society		B	B	B	B
Commitment Public Sector / Government		B	B	B	B
Commitment Donors		C	C	C	C
Capacity Public Sector / Government		C	C	C	C
Progress Budget Support		B	C	C	D

Source: RNE

A = Good, B = Satisfactory, C = Unsatisfactory and D = Poor.

The RNE indicators do not show any real improvement over the years for the country as a whole, but they show improvements for the water sector. It is noted that World Bank Reports<sup>25</sup> are very critical on progress made in Yemen, as mentioned in Section 1.# above, but the Development Policy Review Report is less critical on the opportunities for the water sector, although it is concerned about GOY handling its "water crisis". The World Bank report on SWAp opportunities in the water sector (WB, 2006c) is also rather positive on the sub-sectors of rural and urban water supply, as described in Section 2.10 above.

It is not likely that the ratings of the indicators for the country as a whole will rise very much in the years to come for the following reasons:

- the RNE and CPIA ratings are aggregated across sectors and mainly refer to macro-level policies; as a consequence positive developments in for example the water sector hardly lead to a higher overall rating

<sup>25</sup> World Bank, August 2006, Country Assistance Evaluation and World Bank, November 2006, Yemen Development Policy Review (specifically Chapter 6 on Managing Water Resources).

- the CPIA/IRAI ratings are made comparative, in the sense that they are relative to the performance of other countries; considering the overall standing of Yemen in a number of other indicators such as HDI, it is likely that the Yemen' indicators will not easily rise to sufficiently high levels.

### 3.2 Strategic choices of Netherlands Aid programme

The strategic choices of the Netherlands Aid Programme are defined in the Multi Year Strategic Plans (MYSP) of the RNE. The MYSP still has to be put in the context of the actual year-plans, amongst others because the MYSP started on the premise that a substantial increase in aid funding would become available. A specific opportunity is the formulation of a new MYSP in 2008 and the improving governance situation in Yemen, maybe especially so in the water sector.

The essence of the strategic choices as presented in the current MYSP 2005-2008 are still valid and can be found back in the successive year plans. The year plan for 2007 pays surprisingly little attention to water. One reason could be that all funds for the water sector have been committed for the years to come. The MYSP for the years 2005 – 2008 states the following targeted strategic results for the water sector.

- Policy discourse on drinking water supply and sanitation:
  - The Demand Responsive Approach strategy are agreed upon by stakeholders (2005).
  - Rural water supply and rural sanitation issues are considered in an integrated manner in the sub-sector policy and implementation strategy (2005).
- Strengthening capacities and building professional and competent government:
  - GARWSP is sufficiently strengthened to co-ordinate implementation with the Social Fund for Development and the Public Works Programme (2005).
  - Four branch offices of GARWSP are strengthened to operate autonomously (2007).
  - A Public Private Partnership has been established between a local corporation for urban water supply and a Dutch water company (2008).
- Working towards programme based assistance:
  - The ongoing Water Supply Programme is closely aligned with GARWSP (2005).
  - Performance Indicators and baseline data are agreed upon for the rural water supply and sanitation sub-sectors (2005).
  - Rural water supply sub-sector monitoring and evaluation is sufficiently strengthened and is able to provide acceptable monitoring data to assess progress towards MDGs (2006).

### 3.3 MoU on Program Aid to the Water Sector

The current policy of GON support to the water sector is based on the Memorandum of Understanding for Program Aid to the Water Sector (MoU PAWS), signed by a broad coalition of GoY organisations (MPIC, MoF, MWE, GARWSP, NWRA, EPA) on the one hand and RNE on the other hand.

“The objective<sup>26</sup> of PAWS is to provide external support, as part of the 3rd Five Year plan (DPPR), to the implementation of the MDG-oriented NWSSIP. The provision of assistance will be clearly and transparently linked to performance at the sector and sub-sector level. Assistance will furthermore be delivered in such a way that aid effectiveness increases, sector ownership of the implementation process is optimised, transaction costs decrease, the effectiveness of the public administration increases, monitoring and evaluation improves and domestic accountability is strengthened”.

The PAWS was conceptualized in 2005, and was the consequence of i) the analysis of RNE on the conditions in the water sector<sup>27</sup> and ii) the wish of RNE to pursue progress on the

<sup>26</sup> Quoted from PAWS

<sup>27</sup> Royal Netherlands Embassy, Yemen, 2005. Institutional and Sectoral Analysis of the Water and Environment Sector in Yemen (ISOA). Baseline survey.

“road to SWAp”, and iii) the notion that such approach would be the best way to contribute to a well-functioning sustainable water sector<sup>28</sup>.

The MOU-PAWS sets out the principles and terms of the partnership. The MoU defines 13 milestones to be achieved (Table 3.3). The milestones should be seen as objectives, rather than conditions for the envisaged aid modality. The MOU-PAWS allows for an earmarked on-budget modality of aid with risk mitigation measures by means of proposing two extra audits in the agreement (a Value for Money Audit and an extra external financial audit) and required approval by GON of the annual plan.

**Table 3.2 - Milestones for implementation of Program Aid to the Water Sector**

	Milestone
1	The role of the MAI within the water sector wide approach needs to be articulated and operationalised
2	The coordination mechanism between the MWE and the MAI is developed and operationalised
3	Participatory approaches are being followed through Water User Associations, Water User Groups, Water Basin Committees, Irrigation Councils etc.
4	Transparent planning and budgeting process for the sector agencies; transparent disbursement reporting
5	Definition of baseline indicators for transaction costs; institutional efficiency and accountability
6	Definition of baseline indicators for transaction costs; institutional efficiency and accountability
7	Include annual plans of all other agencies active in the water sector
8	Include water related budget lines of all other respective agencies
9	The MOF and PAPs develop and approve a MTEF and MTRF for NWSSIP implementation
10	MWE and its relevant authorities and corporations shall be effectively incorporated in the civil service reform
11	MWE to develop a sector-wide capacity building and training concept
12	COCA to become an acceptable external audit agency for the donors
13	Approval by Cabinet in medio 2006 of sets of documents related to reform of procurement system. Once approved and rolled out the procurement system is fit for sector budget support

The following activities are the first programs under the PAWS:

- In 2005, the RNE signed an agreement for support to GARWSP through a Contribution Agreement (earmarked on-budget) of € 2.0 million for the investment budget (Activity no. 12393); the fund was ear-marked for specific investments in the years 2005-2006
- In 2006, the RNE signed an agreement for Program Aid Support (earmarked on-budget) to GARWSP through a Contribution Agreement of € 14.3 million for the years 2007-2009 (Activity No. 15279).
- In 2006, RNE signed an agreement on program support to NWRA through a contribution agreement of € 2.0 million for the years 2006-2008.

### 3.4 Netherlands contribution to the water sector 1996-2008

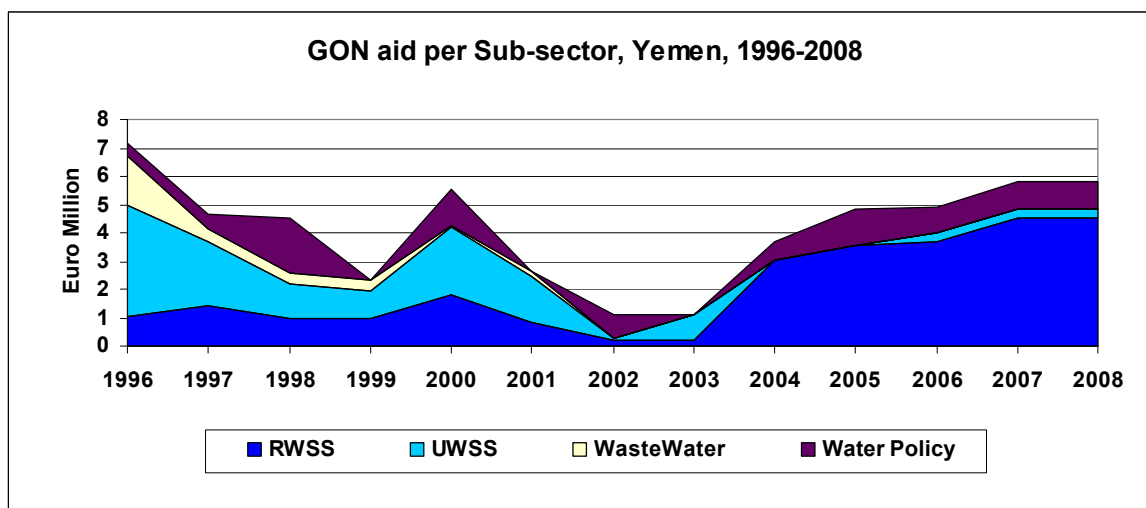
The Netherlands Aid Program has consistently played a fairly prominent role in the Yemen Water Sector. It started already in the late seventies, with a number of basin studies. One RNE document describes the GON contribution over the years as “a rich history with mixed results”. A comprehensive evaluation of activities beyond specific project evaluations has not taken place.

Practically all GON contribution to Yemen is “delegated bilateral”, i.e. managed by RNE. NUFFIC has supported Capacity Building and University Strengthening, ORET has contributes to a sea water desalination project, and there is DGIS Central co-funding of the PPP Vitens – Ta’izz WSSLC.

All GON contribution before 2005 is classified as “project” aid; since 2005 a form of earmarked programmatic aid (on-budget) has been agreed upon for practically all of Netherlands Contribution to the water sector, based on the MOU on Program Aid to the Water Sector as described above. Figure 3.1 gives an overview of aid per sub-sector.

<sup>28</sup> Interviews at RNE, July 2007

Figure 3.1 – GON aid to the water sector, per sub-sector 1996-2008<sup>29</sup>



GON contribution reached a level of almost € 5M/year in the late 90's, decreased to about € 1M for the years 2002 – 2004; the allocation is picking up again to a level of more than € 4M in 2007. GON contribution in the years 2005-2008 remains substantially below the targets of the MYSP of RNE (€ 16M over four years), mainly because of a lower than expected allocation to Yemen as a whole, as mentioned in Section 3.1.

The sun-sector of Rural Water Supply (and less so Sanitation) has always been the mainstay of the aid programme, followed by Water Resources Policy Development (NWRA), followed by Urban Water Supply (and less so Sanitation). Less attention was paid to watershed management and agriculture, which has disappeared from the program completely in recent years; GON indirectly influences the practices of the agricultural sector by supporting an integrated approach to water resources management by strengthening the NWRA.

The GON aid programme has always included elements of policy reform, within its SURWAS projects and in support to World Bank projects (RWSS and NWSA). Since its establishment in 1997, GON has strengthened the NWRA to influence water resources policies and practices, but withdrew in 2003 at the time of the budget cuts. Since 2006 GON is an important donor to NWRA again.

Table 3.4 gives a list of the Dutch program activities for the period 1996-2008.

<sup>29</sup> Source 1996-2006: DGIS/FEZ, Pyramide Database; Source 2007-2008: RNE Appraisal Documents. Figures and sub-sector classifications do not fully coincide with the data that could be derived from the Appraisal Documents of Projects and Programmes as given in Table 3.4 below, especially for the years 1996-200. Also, the database gives an extra allocation of 4.6 M€ in 1996 for water resources policy, which could not be traced, and consequently has been omitted from the graph of Figure 3.1. RNE gives higher expenditures in the years 2002 and 2003. This is probably caused by the amount attributed from the PWP to the water sector, which is lower in the database than indicated by RNE (0.26 €M and 2.4 €M respectively).



**Table 3.3 - Basic data of Netherlands funded water related activities 1996-2007**

Act. nr.	Name	Years	Amount (all to €)	Sub-sector Executing agency	Remarks/modality And Objectives
1383	Rural Water Supply Project (SURWAS-V)	1996 – 2001	€ 6,950,000	RWSS IWACO for GAREW	Water supply and sanitation schemes in Dhamar and Hodeidah for approximately 75,000 to 100,000 people
1400	Water and Environment Centre (WEC)	2000	€ 51,040	CapBldg-WSS Sana'a University	
1404	Watershed Management and Waste Water Re-use in Peri-urban areas	1997 – 2001	€ 3,780,000	Agriculture FAO	Peri-urban: Watershed management Promotion of tree plantation Forestry extension units
1417	NWSA Spare Parts and Materials Project	1998 – 2000	€ 5,450,000	UWSS MWE, NWSA	Support to NWSA branches in main cities (a.o. AlHodaidah, Aden, Dhamar, Ataq, Hadramaut); spareparts for repairs and replacement. Helps branches to get good start for autonomy status of the branches (local corporations).
1425 1426	ISFNB II + IIa: Institutional Strengthening Five NWSA branches	1999 – 2002	€ 1,220,000 € 396,377	UWSS DHV/Arcadis for NWSA	Institutional strengthening of the Branches of Ibb, Dhamar, AlHodeidah, Wadi Hadhramaut, Ataq, based on the Rada experience
1384	Technical Assistance for RWS&S	2001	\$ 37,112	RWSS Ministry of Local Administration	Vision development for restructuring and decentralisation of the RWSS Sub-sector
1427	Technical Assistance World Bank RWS&S Project	2000-2002	€ 1,125,000	RWSS GAREW through the UNDP-World Bank WSP	Formulation and implementation of a RWSS sector reform. Improved health and well-being of the rural population through provision rural water supply and sanitation.
1449 1450	Public Works Projects I and II	2001 2004	€ 13,613,407 € 11,435,261 water sector: € 2,680,000, € 611,800	RWSS Public Works Fund	Support for comparatively small public works infrastructural works
1399	Sustainable Water Resources Management, Phase 2 (NWRA)	1998 – 2002	€ 3,380,000	IWRM NWRA UNDESA and FAO	To attain sustainable socio-economic development through management and development of the water resources of the country in an efficient, equitable and sustainable manner
12396	Support to National Water Resources Authority (NWRA)	2005 – 2006	€2,000,000	IWRM NWRA	Earmarked program support to the NWRA for specific studies and policy development
13653	PPP between Taiz Local WSS Corporation & Vitens NV & RNE	2006 – 2009	€ 450,000 + € 500,000	UWSS Vitens N.V.	To improve services (quantity and quality of water provided, sanitation) to present 350,000 customers
12393	GARWSP	2005 – 2006	€ 2,000,000	RWSS MWE, GARWSP	Program Aid, Earmarked on-budget Rehabilitation of water supply schemes. Institutional strengthening of GARWSP HQ and Branches
15279	GARWSP	2006 – 2009	€14,300,200	RWSS MWE, GARWSP	Program Aid, Earmarked on-budget 301 schemes in 10 governorates completed and rehabilitated which will provide 900,000 rural populations with access to safe water.

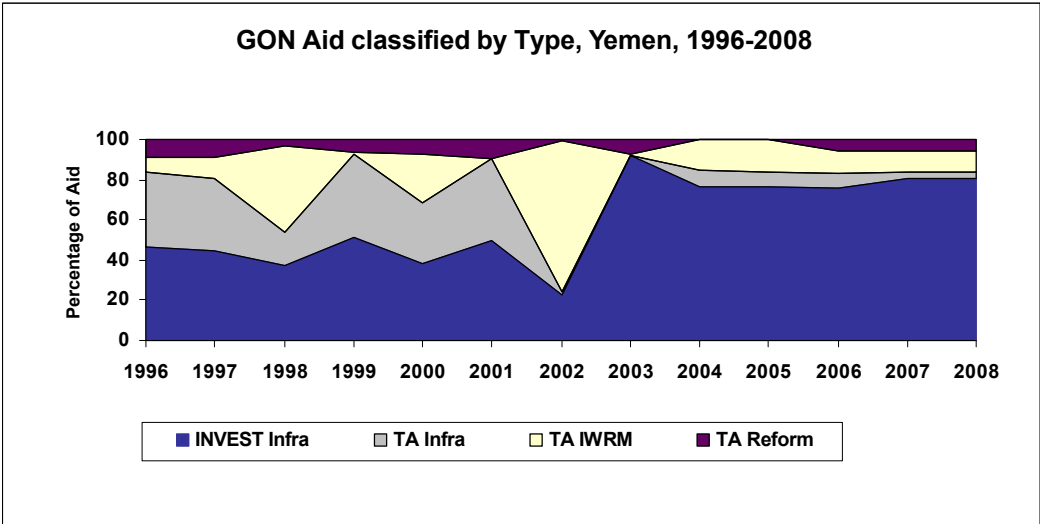
Source: Appraisal Documents of RNE

### 3.5 Type of Netherlands Aid contributions 1996-2008

A classification of GON aid by type is given in Figure 3.2 below. The following classes were distinguished:

- Investments, often related to the projects funded in RWSS and UWSS
  - TA Invest, relates to the management of implementation of (investment) projects
  - TA IWRM, relates to the promotion of IWRM and the management of resources
  - TA Reform, relates specifically to formulating and strengthening sector reform
- All TA includes capacity building components.

**Figure 3.2 – Trend of Netherlands Aid expenditures per purpose (type)<sup>30</sup>**



The main conclusion to be drawn from Figure 3.2 is that the proportion of TA since the resumption of aid in 2004 has decreased, while the proportion of investments have increased. Also, while the investments in infrastructure have increased, the TA to guide those investments have decreased as they have been given the responsibility of the implementing agency, in fact since 2005, this is mainly GARWSP. Furthermore, the figure shows that the Netherlands has always played a role in IWRM and sector reform processes<sup>31</sup>.

### 3.6 Donor harmonisation and Netherlands contribution to harmonisation

GON has over the years reasonably well worked together with programmes of other donors and with parallel financing of other donor activities. It is expected that this “harmonisation” will increase in the coming years, at least the donor statements support this expectation: in this respect a new momentum has emerged after 2003 with the institutionalisation of the MWE, the formulation of the necessary policy documents and investment plans, the decentralisation of government agencies and the corporisation of the utilities; however in practice, by 2006, the level of harmonisation / alignment beyond support to the same policies and practices is only marginally increasing.

*Formal coordination mechanisms for aid harmonisation in the water sector:*

<sup>30</sup> This type of classification is not formally reported upon, either in internal reports or in the Pyramide database. Also the appraisal documents do often not give a conclusive answer on this classification. The study team has used its best knowledge to classify the projects. The classification may be considered quite accurate from 2004 onwards, but is less reliable for the earlier period. However, the general trend emerging from the figure is correct. The source of data for expenditures is the Pyramide database, also used for Figure 3.1.

<sup>31</sup> It should be noted that the figure is interesting to detect trends: absolute percentages and expenditures do not indicate much, as investments are generally much more expensive than TA.

The Ministry of Planning and International Cooperation has established a specific **Aid Harmonisation Unit** specifically for the OECD donors. Although the unit fulfils an role in gathering information and coordinating consultations, it can only play a passive role in increasing harmonisation amongst the donors. As such its influence is considered marginal.

The **Donor Consultative Group** (DCG) for the water sector has been successful in sharing information between donors and with GOY. The DCG is hardly involved in discussing the implementation of actual projects and has not lead to higher levels of harmonisation, such as joint missions, pooled funds and joint programmes.

**Joint Annual Reviews** (JAR), held in 2006 and 2007, function as an important means to agree on joint policies and practices. It achieves in recording and joint understanding of the state of affairs in the water sector.

#### *General observations:*

In the years before 2001, consultations between the different donors have always taken place as many donors were involved in the same, limited number of water sector organisations, and had similar ideas on sector reform requirements, and all found their own place to support reform; most often this was included in a specific investment related project, sometimes in a specific sector reform projects (e.g. GTZ). In those years, GON supported the sector reform in the SURWAS projects (decentralisation) and TA to the World bank RWSS project (corporisation of NWSA), and through strengthening the NWRA. Such forms of harmonisation did not lead to other financing modalities than project funds and some modest parallel financing of activities (e.g. RWSS and PWP)

In the years 2001-2003, the GoY and donors start to consider harmonisation in a more systematic way, probably:

- triggered by a general disappointment of both GoY and donors on the performance of the GoY in managing the sector, and subsequently
- facilitated by the drastic overhaul of the Water Sector Policy Framework, leading to the Water Law, the Water Policy, the NWSSIP, the DPPR and the establishment of MWE, decentralisation of GARWSP and NWSA, and the establishment of Public Utilities and LWSSCs.

Since then, all donor “country assistance strategies” (WB, EU, DFID, UNDP) refer to each others programmes and subscribe to the NWSSIP. In November 2006, GON participated in the “successful” donor Consultative Group meeting for Yemen in London, in which a total of USD 2,200M was pledged. The increased attention to harmonisation however has not yet lead to aid modalities beyond parallel funding of projects. Modalities of pooled funding and basket funding do not consist in the GoN related programmes.

#### *Harmonisation for GON in sub-sectors RWSS, WRM and UWSS*

The number of donors in the water sector is small and most donors have found their specific niche. As such donor harmonisation beyond agreeing on policies and practices is not considered of prime importance. For GON the sub-sectors RWSS and WRM are important and to a lesser extent the UWSS. In UWSS, donors find their niche in different LWSSCs, which are not interconnected really. In NWRA, the different donors find it difficult to collaborate effectively on programme level, one reason being the comparative institutional weakness of NWRA. In RWSS, it is important to harmonise between the efforts of GARWSP, GON and the World Bank RWSS project. The somewhat strained relations have improved with the appointment of a resident sector specialist at the World Bank Office in early 2007, funded by DFID. In September 2007, the World Bank and GOY concluded an Aide Memoire

on the establishment of a new Water Sector Support Program<sup>32</sup>, with a timetable leading to Sector Investment Loan with donor co-funding in a SWAP framework with sub-sector budget support to be operational in 2009. It is likely that the GON PAWS, the JAR process and the Donor Core group activities have contributed to this development.

### *Pooled Funds*

The Social Fund for Development and the Public Works Project are both funds with a good reputation on management and a multitude of donors contribute to their funding. Some 11 different donors next to GoY contribute to the SFD. In 2005, the Fund disbursed US\$ 78.2 of which 6.9 % went to “Water”. The Netherlands did earmark its contribution to the Sectors Health and Education, excluding Water.

Some 8 different multi-lateral and bi-lateral donors next to GoY contributed to the second phase (2000-2004) of the Public Works Project<sup>33</sup>. In that period, the Fund disbursed about US\$ 116 million, of which 15 % went to water and sanitation projects. The Netherlands contributed a total of US\$ 22.9 million to the second phase, of which almost € 3.8 million was spent on water projects<sup>34</sup>.

### **Summary conclusion**

Summarizing, the specific GON contribution to donor harmonisation was:

- strengthening NWRA, also to formulate NWSSIP and actively pursuing the declaration of support to NWSSIP in 2005
- co-financing major WB-lead projects in RWSS and UWSS
- co-financing the PPP of TAIZ water supply corporation
- chairing the Local Donor Coordination Group
- initiating the MOU-PAWS, taking the step to provide on-budget support and inviting other donors to join
- being an active member of JAR.

**Table 3.4 - Paris indicators related to harmonization in the water sector**

Paris indicators	Trends	Role GON
Number of activities adopting programme based approach	GoN only, through GARWSP and NWRA	Initiator Sole implementer
Disbursements (amounts) adopting a programme based approach	€ 16.4M for 2005-2009	Sole implementer
Number of coordinated missions as % of total missions	minimal to zero	no specific role
Amount of coordinated country analytical work undertaken as % of total analytical activities	Preparation of JAR Joint working group on PFM	Active member chairs PFM working group

Source: personal communication

## **3.7 Aid alignment and Netherlands contribution to alignment**

### *Policy Alignment:*

Since the formulation of the establishment of NWRA already in 1995, but especially the MWE in 2003, the PRSP-1 in 2003, the NWSSIP in 2004, the DPPR in 2005, and the MDG Needs Assessment in 2005, there is a increasingly (high) level of alignment of water sector interventions and policy development; practically all GOY and donor funded activities respond to and fit into the plans mentioned above.

<sup>32</sup> Source: personal communication from RNE, September 2007.

<sup>33</sup> Source: Public Works Project (PWP) personal communication (June 2007) and PWP website ([www.pwpyemen.org](http://www.pwpyemen.org)).

<sup>34</sup> Source: Personal communication from Netherlands Embassy, April 2008.

### *System Alignment*

The administrative alignment of aid activities is still marginal. All donors are extremely cautious about the opportunities for increased levels of administrative alignment. There are specific hors-government institution projects administered by PMUs, especially by the main donor in the sector, the World bank; although the WB in studies indicated that the water sector may become eligible for a higher level of alignment (see Section 2.9). GON is ahead in systems alignment with the MOU-PAWES and programmes in GARWSP and NWRA as described in Chapter 3. Other donors have not yet been willing to co-sign the PAWS, citing mainly fiduciary risks and having less trust in the capacity of Yemeni organisations. A major breakthrough may have occurred in September 2007, with an Aide Memoire between World Bank and GOY on a Water Sector Support Program to become effective in 2009, as described above in section 3.6.

### *Summary conclusion*

Summarizing, the specific GON contribution to aid alignment was:

- strengthening NWRA, also to formulate NWSSIP and actively pursuing the declaration of donor support to NWSSIP in 2005
- co-financing the PPP of TAIZ water supply corporation
- chairing the Local Donor Coordination Group
- initiating the MOU-PAWS, taking the step to provide on-budget support and inviting other donors to join
- being an active member of JAR.

## 4. OUTPUTS

This chapter puts forward the Netherlands contribution to the improvement of outputs in three fields important to SWAp in Yemen, being i) the quality of the dialogue impacting on donor coordination, harmonisation and alignment, ii) contextual factors influencing the opportunities for the implementation of SWAp and iii) specific SWAp objectives such as policy operationalisation, institutional development, and sector management, as well as government ownership. The role and place of the GON contribution in the improvements in various fields cannot always be seen in isolation from the contribution of others.

### 4.1 Context

GON started to become an active donor in the water sector again from 2005 onwards, after a number of years with a low profile in the sector since 2001. In the years between 2001 and 2005 GON mainly contributed to the sector through the general PWP fund.

Consequently the expected outputs will mainly be assessed for a number of recent initiatives forming the three major components of the Netherlands water sector programme: i) the GARWSP Programme Aid (2005-2009); ii) the NWRA Programme Aid (2005-2006 and 2007-2009) and iii) the PPP TWSSLC (2005-2009). As these programmes are in their early stages, it is difficult to quantify the output.

From the year 2000 onwards, the water sector in Yemen has progressively formulated and started to implement quite a number of reforms as described in Chapters 1 and 2. Donors wishing to encourage these reforms, require a good quality of dialogue. The Netherlands has contributed importantly to this dialogue as part of preparing and implementing the three programmes mentioned above, but also parallel to these in a more general sense.

### 4.2 Improved quality of the dialogue

The contribution to the quality of the dialogue can be made explicit in five activities: i) the Donor Core Group, ii) the MOU on Programmatic Aid to the Water Sector, iii) the Joint Annual Review, iv) the GON Aid Programmes, and v) Thematic Working Groups.

#### ***Donor Core Group***

The GON plays a very active role in the Donor Core Group (DCG) for the Water Sector. One of the main achievements of the DCG is stimulating the processes leading to the Joint Annual Review (JAR). As such the DCG is a focal point in the Water Sector. The DCG is criticised by some, because it does not include all donors or it is too dominantly present in meetings.

The DCG has been successful in sharing information between donors and with GOY, in discussing and harmonising policy and it has succeeded in organising major joint events such as the JAR. However, the DCG is hardly involved in discussing the implementation of actual projects. The DCG has not lead to higher levels of harmonisation, such as joint missions, pooled funds and joint programmes.

#### ***MoU on Program Aid to the Water Sector (PAWS)***

In 2005 the GoY and GON signed a MOU for Programme Aid to the Water Sector (PAWS)<sup>35</sup>, as detailed in Chapter 3. PAWS sets the framework for the current GON programmatic on-budget support to GARWSP and NWRA, especially of importance for systems alignment and

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<sup>35</sup> PAWS was signed by MoPIC, MOF, MWE, GARWSP, NWRA and EPA and GON

ownership. The PAWS process involves an intensive dialogue between RNE and GOY and is a measure of the commitment and ownership of GOY. PAWS specifies the commitments of GOY and GON to a great number of improved operational procedures in the water sector of importance to SWAp and a commitment by GOY to increase funding for the sector. From the beginning, the RNE invited other donors to take part in the process and co-sign the PAWS. However, the GON remains the only donor signing the PAWS, with other donors taking a very cautious attitude towards committing themselves<sup>36</sup>.

The programmatic aid to GARWSP and NWRA and also the TA to TWSSLC implemented under the PAWS, facilitate an intensive dialogue with the authorities concerned, not only on the operationalisation of the Dutch programmes, but inherently on the functioning of the authority as a whole. As testified by the chairmen of the three organisations, the dialogue is felt to take place between equals and is owned by both parties.

### ***Joint Annual Review (JAR)***

Through the DCG, the GON plays a conceptual, catalytic and supporting role in organising the Joint Annual Review (JAR)<sup>37</sup> for the Water Sector as organised by the MWE in May 2006 and in June 2007. The JAR 2007 was concluded with a Joint Declaration, signed by MWE, MAI, MPIC, MOF, MLA and BRD, GON, WB, EU, UNDP, DfID, UNICEF under supervision of the GoY Deputy Prime Minister. The JAR signifies the level of ownership of the GOY, and is an important tool for stimulating harmonisation and alignment. The JAR is also a catalyst in setting and monitoring sector performance indicators. In all these aspects, the JAR<sup>38</sup> is a very conducive factor for opportunities to introduce SWAp.

### **4.3 Improved decentralisation**

Decentralisation and deconcentration are cornerstones for developing strong water sector organisations in Yemen, as described in Chapters 1 and 2.

The Rural Water and Sanitation Reform Agenda, which is currently debated at Cabinet level, was co-conceptualized with GON Technical Assistance to the WB RWSS project in the years 2003-2004. Deconcentration of GARWSP and on the long-term a decentralisation to the governorate level are part and parcel of the Agenda.

The GON Programmatic Support to GARWSP provides operational support to the Branch Offices, which are able to operate more and more independently from the GARWSP Central Office. The Branch Offices apply a so-called demand responsive approach with Local Communities and Local Council, in support of the decentralisation policies of the Ministry of Local Administration.

The GON technical assistance support to the Ta'iz Local Water Supply Corporation (TLWSSC) actually strengthens the processes of the TLWSSC to become a decentralised and autonomous corporation.

The GON supports the deconcentration of NWRA by providing operational support to the formation of Branch Offices, such as for the governorate of Ta'iz. The formation of Basin Committees as pursued by NWRA also with GON assistance, is a form of decentralisation, but is only in its initial stages.

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<sup>36</sup> Interviews with German Embassy, WB, DfID and UNDP (June, 2007)

<sup>37</sup> JAR Preparatory Papers (2006, 2007) and Joint Declaration (June, 2007)

<sup>38</sup> In one note on the occasion of establishing a Water Sector Support Program (September 2007), the World Bank describes the JAR as the single most important event in the sector.

The GoN programme does not pay direct attention to the decentralisation of local government institutions, such as the District Local Council and Local Communities as piloted by the MoLA. In its decentralisation pilots, the MoLA considers rural water supply and the formation of WUAs as one of the most potential pilot and demonstration opportunities.

#### **4.4 Improved Public Finance Management**

The RNE First Secretary Institutional development currently chairs the PFM Working Group, consisting of GoY, GON, DfID, and UNDP, which have signed a Partnership Agreement. The PFM working group is multi-sectoral, not limited to the Water Sector, with activities in MOF, MPIC, MOE and MoLA. The working group has formulated a PFM Action Plan<sup>39</sup> to which both the donors and the GoY subscribe and the working group is slowly but steadily implementing the four main components of the plan. Cabinet resolution No. 253 of 2005 approved the Public Finance Management Reform Strategy.

RNE also plays an active role in the Working Group for Basic Education, which is supported by a Partnership Declaration and a Multi-donor Trust Fund managed by the WB. The Working Group is linked to the PFM Working Group and the Education Sector has developed an MTEF, which is considered a pilot and will be extended to other ministries, notably the Ministry of Water and Environment.

GON Programmatic Support to GARWSP and NWRA tests and evaluates the PFM system with external audits to validate the annual COCA report and an additional Value for Money Audit (VMA). The extra audits were carried out for the first time in 2006 for the year 2005<sup>40</sup>. The VMA only covered a sample of the GON-earmarked projects, but will be extended in the future to cover a sample of all GARWSP projects.

#### **4.5 Improved PRSP process related to the Water Sector**

GoN did not specifically contribute to the PRSP process in the water sector. At the time of PRSP formulation (2003, 2005) and the formulation of NWSSIP, GON had a low profile in the water sector. Currently, the GON contribution targets rural water supply, which in general addresses important needs of the poorest section of the population, but within these activities there is not a specific poverty focus, for example by targeting the most poor districts or communities.

#### **4.6 Increased Public Private Partnerships**

As documented in Chapter 2, the private sector does play an important but informal and poorly documented role in the urban water supply sector.

In the plans of the GoY for the water supply sector, the private sector is not specifically mentioned, and it is understood that the long term plan of the WSSLCs is to take over the current functions of the private sector in the delivery of water services. GON supports the Tai'z Water & Sanitation Local Corporation (TWSSLC) with financing Vitens-Evides Ltd. for an advisory and co-management role in the TWSSLC. The financing of Vitens is partly performance based. The programme may be considered as a PPP, although Vitens does not have shares in the TWSSLC.

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<sup>39</sup> PFM Action Plan (2005)

<sup>40</sup> COCA Report Value for Money Audit of the Netherlands Support to GARWSP, July 2006.



#### **4.7 Improved Civil Service Reform**

The National Reform Agenda<sup>41</sup> has one chapter on Civil Service Modernisation. GoN supports this agenda only indirectly in an operational sense by its support to the TWSSLC, which has become autonomous in its staffing and human resources development policy. TWSSLC is reviewing all its management staffing positions and with GoN assistance is reorganising all levels of management including new staffing on the basis of merit-based appointments.

In the other programs there is no specific attention paid to Civil Service Reform, although they implicitly play a role in setting up and adequately staffing the GARWSP Central Office and GARWSP Branch Offices.

#### **4.8 Improved policy implementation and sub-sector management**

An important contribution of GON to the improved policy implementation is in supporting the preparation for and organisation of the JAR. The JAR is expected to lead to sector wide performance indicators, monitoring and evaluation systems and to a base-line of existing level of services, needed to make better operational roadmaps and better informed decisions on investments and operation and maintenance. The JAR is also a good platform for policy discussions and confrontations with policy.

##### ***RWSS through GARWSP***

Through its dialogue with GARWSP and the JAR, the GON pursues the need for developing a realistic roadmap for the rural water sector, rather than the current general demand responsive approach from local communities. Funds for developing the baseline survey, the monitoring and evaluation system and the roadmap, however are at the discretion of GARWSP under the programmatic aid.

GON has an indirect, implicit approach to institutional development in the context of its programmatic on-budget aid to GARWSP. GoN has a general allocation of about 5-10% for institutional development within the total program fund at the discretion of GARWSP<sup>42</sup>. Although it is too early to judge whether the Dutch contribution has led to higher quality and more sustainable rural water supply systems, the following is noticed:

- a vastly improved project selection process
- a well informed reporting and accounting system at the Branch Offices, signifying a higher level of transparency
- a Value for Money Audit, which is used to evaluate the organisational performance, and which will be expanded from Dutch projects only to a sample of all GARWSP projects.

##### ***WRM through NWRA***

GON is a major donor for the NWRA, which is still very much donor dependent with 80% of its budget provided by donors. GON supports the establishment of NWRA Branch Offices and the implementation and further elaboration of the water sector strategy by supporting NWRA in setting up information systems, finalising and implementing Basin Wide Management Plans, with the focus on Ta'iz. Through the NWRA, GoN also supports the establishment of basin committees, which is an important aspect of institutional development. All of these activities are in process.

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<sup>41</sup> MoPIC, 2006b. National Reform Agenda: A Progress Report. See also Chapter 1.

<sup>42</sup> GON influences GARWSP also by the agreement that GON has to formally approve annual plans.

## ***UWSS through TWSSLC***

GON supports the decentralisation, corporisation and civil service reform agenda of the GoY through its management support to the TWSSLC.

### **4.9 Increased leadership and ownership of GOY**

GON has importantly contributed to the GOY displaying and taking ownership for activities in the water sector. Leadership is more difficult to assess because a number of the policy and strategy documents (e.g. RWSS, Agriculture) are still initiated and being developed by the donors. Distinct and decisive leadership is probably still lacking in addressing the major concern of the water sector: the over-extraction of groundwater. The complexity of the issue and the prevailing system of water rights embedded in the country's culture prevent easy decisions to be taken, which may seem so logical to outsiders.

The following testifies the GOY ownership of water sector reform and operationalization of policies, specifically in the fields in which GON has contributed:

- GOY provides 80% of the investment budget for the sector, and the investments are increasing
- the sector avails over NWSSIP, which is subscribed to by all government institutions and major donors
- the deconcentration of GARWSP and NWRA and the corporisation of the WSSLCs are consistently taking place, and these include processes of civil service reform
- the JAR process was managed and financed by MWE; the final declaration, which addresses all major issues in the water sector was signed by all relevant ministries and authorities and witnessed by the prime minister and members of parliament
- the MPIC and MOF were co-signatories to the MWE for the MOU on PAWS
- the increasing role formally given to local communities and local councils in determining the investments in rural water supply and their taking responsibility for operations of the water supply system.

There are also fields in which the leadership and ownership of the GOY leaves room for improvement:

- the hesitance of GOY to address the over-extraction of groundwater, signified also by i) the poor coordination between the NWRA as custodian of the resource and the MAI as custodian of the control over demand and exploitation, and ii) the dominance of donors in funding of an important policy setting and implementing authority like NWRA
- slow implementation of basin studies and formation of basin committees
- the considerable financing gap in the implementation of NWSSIP and achieving the MDGs
- the dominance of donor contributions in the PFM action plan
- the lack of capacity of MWE to encourage and enforce donor harmonisation

### **4.10 Improvements of other outputs**

There is an increased interest in SWAp by other donors, partly by the consistent advocacy of GON:

- KfW is a trusted partner in the donor dialogue and encourages the use of local systems in disbursing its investment loans through the local corporations; however, KfW still considers that TA and close monitoring of its investments is very much needed
- the RWSS project of the WB is still implemented with a PMU, which is independently placed outside GARWSP; it is however agreed that a follow-up loan will be embedded within GARWSP
- the WB is contemplating a PRSC facility with the GOY to be operational in 2009
- Germany, especially GTZ does have little interest in SWAp as yet.

#### 4.11 Summary assessment of progress in output

GON is highly contributing to improving the dialogue in the water sector.

In RWSS, the GON is highly contributing to an improved implementing capacity of the organisation. In NWRA the GON is a very important donor, but the contribution still has to bear fruit. GON does contribute to improved implementation capacity in the urban sector, but the total funding is small. GON does not contribute to improved implementation capacity in the Environment nor Irrigation Sector. The lack of being involved in the irrigation sector hampers possible success to WRM.

The attention paid to institutional development and the success of the GON aid program to ensure quality depends upon the measure to which GON will be able to monitor and evaluate the performance of the institutions concerned. Formally this monitoring is embedded in the external audit and value for money audit. On the longer term the sector monitoring and evaluation system and the set of sector performance indicators as agreed upon by the JAR will be an important mechanism to judge institutional development and sector management.

A difficult challenge will be not only to monitor investments (value for money), but also to monitor the sustainability of service delivery.

Table 4.1 below gives a summary assessment of the GON contribution to improved outputs. The contribution is marked on a scale of 0 (low) to 10 (high).

**Table 4.1 - Summary assessment of GON contribution to improved outputs<sup>43</sup>**

Outputs	Contribution of GON Activities and Programmes	WRM	RWSS	UWSS
<b>1. Quality of the Dialogue</b>				
1.1 Consultations with donors	GON highly contributes to the DCG and the WG for PFM. GON catalyst in bringing sub-sector committees together. JAR major achievement. Dialogue between donors at program implementation level still poorly developed. GON attitude sometimes seen as too confident in defending own SWAp practices	8	8	6
1.2 Dialogue with GoY	GoN highly contributes to dialogue with GoY at different levels. JAR major achievement. PAWS brought dialogue to concrete tangible discussions. Programmatic aid to GARWSP and NWRA also leads to intensive dialogue. However, there is no direct dialogue with Agriculture, which is important for WRM	6	8	6
1.3 Joint Annual Review	JAR touches upon essential aspects of performance water sector, GoY involvement and role donors, and highly contributes to ownership GOY. GON very much a catalyst of JAR	8	8	6
<b>2. Contextual factors</b>				
2.1 National Water Plan	National Strategy and Plan does exist since 2005 and is subscribed to by all ministries and donors. GON did not specifically contribute to its formulation.	2	2	2
2.2 Decentralisation and deconcentration	Decentralisation and deconcentration are accepted policies. GON highly contributes to strengthen GARWSP and NWRA Branch Offices with direct investments (deconcentration). GON conceptually contributes to strengthen Local Water Corporation, with comparative modest but strategic TA in Ta'iz (decentralisation). Policies within GARWSP lead to specific role Local Council and Local Communities (decentralisation)	8	8	8
2.3 Public finance management	GON is an active member of the PFM Working Group, which has agreed upon an PFM action plan. GON tests PFM systems through an extra external audit and a value for money audit, which are used to improve sector performance.	6	8	6
2.4 PRSP process	The formulation of PRSPs (2003, 2005) was not specifically supported by GON. Choice for sub-sector RWSS is argued from poverty point of view. In choice of activities within sub-sector, GON has no specific poverty focus.	2	2	2

<sup>43</sup> GON does not have programme activities in the sub-sector Environment and hardly in Agriculture, hence the output is only indirect and not rated here. Indirect output in environment and agriculture consists of initiating dialogue, consultations on program support and encouraging MAI to take part in water sector JAR.

Outputs	Contribution of GON Activities and Programmes	WRM	RWSS	UWSS
2.5 Public private partnerships	Performance based TA with Dutch company for TWSSLC may be seen as form of PPP. GOY nor GON have specific policy nor expectations from PPP in the water sector.	??	0	6
2.6 Civil service reform	GON indirectly contributes to CSR in its support of the TWSSLC and little in GARWSP Branch Offices	4	4	6
3. Policy implementation	GON co-organises JAR, which is instrumental to confront agencies with level of policy operationalisation. Through its dialogue on its programmatic aid to GARWSP and NWRA, GON encourages both agencies to translate plans in better roadmaps and monitoring and evaluation systems (GARWSP) and establishing basin committees and effective licensing and control of drilling (NWRA), but GON does accept priority given by GOY as part of programmatic aid and support other donors.	8	8	8
4. Institutional development	GON indirectly and implicitly contributes to ID through the dialogue with GOY on the implementation of the programmatic aid, with little money actually earmarked for ID; attention paid to ID depends upon proper monitoring of sector performance, which is still only haphazardly in place	6	4	2
5. Leadership and Ownership	In JAR, the GOY has shown high political ownership of sector policies and plans. GON has encouraged ownership through OPAWS and program aid to GARWSP and NWRA	8	8	4

## 5. OUTCOME

### 5.1 Performance in Rural Water Supply and Sanitation

#### Coverage and MDGs

The current coverage and MDG targets for the rural water supply and sanitation sub sector are given in Table 5.1.

**Table 5.1 - MDGs for rural water supply and sanitation**

	2002	2009	2015
Total rural population	13.8 million	17.5 million	20.9 million
Rural population with access to safe water supply	25 %	47 %	65 %
Rural population with access to safe sanitation	20 %	37 %	52 %
Annual investment needed	50 million USD	130 million USD	130 million USD

Source: NWSSIP (2005)<sup>44</sup>

The number of new beneficiaries provided by new and rehabilitated projects with reliable, year-round access to safe drinking water at 20- 40 l/c/d is given in the Table 5.2 below. The total coverage and increase in coverage of the rural population as a percentage of the total rural population is shown in Table 5.3. There are no good coverage figures for sanitation.

**Table 5.2 - Number of new beneficiaries for rural water supply<sup>45</sup>**

Provider	2003	2004	2005	2006	Plan 2007	Total 2003-2008
GARWSP*	427,000	362,000	321,000	498,000**	881,000	2,808,000
RWSSP	41,000	42,000	137,000	84,000		
PWP	140,000	124,000	88,000	69,000		
SFD	121,000	98,000	2,000	***		
UNICEF	29,000	31,000	12,000	25,000		
Others****	7,000	2,000	21,000	40,000		
Total	765,000	659,000	581,000	715,000	1,129,000	3,920,000

\* includes contribution by GON

\*\* 202,000 from rehabilitated schemes and 396,000 from new schemes

\*\*\* SFD has adopted different standards on water quality and service provision and is not counted in the JAR statistics

\*\*\*\* CARE, COOPI, FRC, TRIANGLE

**Table 5.3 - Progress in coverage of rural water supply (in % of rural population)**

Provider	2003	2004	2005	2006	Plan 2007
Annual increase (%)	4.8	3.7	3.0	4.8	7.3
Number of people (%)	30.8	34.5	37.5	42.3	49.6

The figures show that the RWSS sub-sector is largely on track of achieving the intermediate MDG target for 2009, provided that the ambitious plans of GARWSP already for 2007 (including a doubling of the total budget) can be made reality. The performance of GARWSP in rehabilitating and expanding existing schemes and building new schemes has increased substantially. The increasing interest of the NGO sector is a positive sign.

There are positive indications that GARWSP will be able to increase the output substantially:

- the number of A-level Branch Offices is steadily increasing, through investments in staff and facilities
- the demand responsive approach and the internal operations are steadily improving

<sup>44</sup> Other documents, e.g. MPIC (2005d) differ slightly. The NWSSIP is taken as the authoritative source accepted by all stakeholders

<sup>45</sup> Tables 5.2 and 5.3: Source JAR for NWSSIP-Year-2006. Actually the JAR uses these figures under the heading of rural water supply and sanitation, but the figures probably refer to water supply only.

- the completion of as yet uncompleted schemes from the past has been given priority and will yield quicker results
- the available investment budget is increasing as indicated below, albeit not yet at the rate needed.

There is concern for the quality and sustainability of the installed schemes as explained below.

### ***Financing the Sub-sector<sup>46</sup>***

The NWSSIP estimates that for RWSSS for the period 2005-2009 a yearly investment of US\$ 90M is required for hardware and US\$ 5.6M for operational costs, salaries and wages. The actual and estimated investments in 2006 and 2007 are shown in Table 5.4. The table shows that the available investments are well below the investments requested in the NWSSIP. However, in 2006 the actual average cost per capita was US\$ 49, while the NWSSIP estimated it at US\$ 70. This would reduce the financing gap from the estimated US\$ 50M to about US\$ 20M. The figures also show that the GOY is by far the largest investor in the RWSS sub-sector.

**Table 5.4 - Actual investments and expected budgets for RWSS**

	<b>Actual 2007</b>	<b>Actual 2006</b>	<b>Expected 2007</b>
Average target defined by NWSSIP	96	96	96
Total disbursement and budget in US\$ Million	25.3	40.6	40 – 57
Share of Investments provided by GARWSP (%)		63%	66 - 60%
Share of Investments provided by GON (%)		7%	23 - 16%
Share of investments provided by others (%)		30%	11 - 14%

Source: JAR for NWSSIP year 2006

### ***Institutional and operational performance***

The sub-sector has a clearly appointed, well-mandated leading organisation in the form of GARWSP. In line with the decentralisation policy, GARWSP has established 20 Branch Offices, of which 11 have reached the A status, 5 the B status and 4 the C status. The A branches have a high level of autonomy, and from 2009 onwards will receive the investment budgets in their own account, which currently is the case for the recurrent budget only.

GARWSP is introducing job descriptions for all positions and a performance assessment system for its staff. GARWSP is steadily increasing its number of staff.

GARWSP experienced difficulties to comply with the Demand Responsive Approach due to lack of budget allocations and the weakness of local authorities. Also, GARWSP is lacking the capacity to adequately guide community mobilisation and the training of Water Users Groups. Making use of complementary experience from others, such as SDF in community mobilisation and development, would help to resolve this.

The project cycle of GARWSP is still too long, caused by i) the fact that schemes are split up in components which are often paid by different stakeholders and ii) the fact that GARWSP is enticed to split its budget over too many districts in order to satisfy as much as possible all demands, albeit sometimes only partly. This has led to a great number of schemes under construction at a given time.

GARWSP is still weak in monitoring the performance of implemented schemes. Actually, the sector does not yet avail of a good inventory of the conditions of the existing schemes and the actual coverage. Consequently it is difficult to establish an adequate roadmap for the

<sup>46</sup> Source of all data is the JAR for NWSSIP Year 2006, unless otherwise stated

sector. Because of this lack of information, it is difficult to assess the sustainability of the rural water supply and sanitation schemes. Experience from the past indicates that a critical attitude is warranted. The Value for Money Audit conducted in 2006 for Dutch projects under GARWSP will be extended to include the whole organisation.

The sector does not yet have a clear strategy for sanitation in rural areas, not only on the technical aspects, but it is also not yet clear which agency will be the custodian of rural sanitation.

However, it is noted that the sub-sector and notably GARSWSP is consistently addressing the issues raised.

## 5.2 Performance in Urban Water Supply and Sanitation

### *Coverage and MDGs*

The current coverage and MDG targets for the rural water supply and sanitation sub-sector are given in Table 5.2.

**Table 5.5 - MDGs for urban water supply and sanitation**

	2002	2009	2015
Total urban population	5.2 million	6.9 million	8.9 million
Urban population covered with water supply services	47 %	71 %	75 %
Urban population covered with sanitation services	25 %	52 %	63 %
Annual investment needed	120 million USD	150 million USD	150 million USD

Source: NWSSIP (2005)<sup>47</sup>

Access to water and sanitation in the NWSSIP is explicitly defined as houses connected to networks; it does not take into consideration that there are other types (such as water trucks, cesspits) of service, which still cover large parts of the population in a more or less acceptable manner.

According to the JAR, the water supply coverage in 2006 reached 60%, which is 13% higher than the 2002 baseline. The increase however does not yet surpass urban population growth, so in some cases the coverage is actually decreasing. In 2006 an estimated 22,750 new house connections were constructed, benefiting some 171,000 persons. The total number of house connections now is approximately 483,500. Nevertheless, the JAR concludes that MDGs in water supply are achievable.

The coverage of the sewerage network in 2006 was 23.9%, which is 7.6% higher than the 2002 baseline. The increase is far behind population growth and the NWSSIP targets need redefinition. In 2006 an estimated 15,000 new sewerage house connections were constructed, benefiting some 113,000 persons. The total number of sewerage house connections now is approximately 226,000.

### *Financing the Sector*<sup>48</sup>

The NWSSIP estimates that for UWSS for the period 2005-2009 a yearly investment of US\$ 150M is required for hardware and US\$ 9.8M for software. The actual and estimated investments in 2006 and 2007 are shown in Table 5.6. The unit cost per house connection has gone up significantly from US\$ 780 to US\$ 2,016, which is close to the NWSSIP

<sup>47</sup> Other documents, e.g. MPIC (2005d) differ slightly. The NWSSIP is taken as the authoritative source accepted by all stakeholders

<sup>48</sup> Source of all data is the JAR 2007 (for NWSSIP year 2006), unless otherwise stated

assumption of US\$ 2,170. The high unit cost reflects the increasing level of prices, but also the unit cost is factually lower: the recent increase of investments in large infrastructure takes place before house connections are completed and counted. The GoY covers about 60% of the investment costs, donors 40%.

**Table 5.6 - Actual investments and expected budgets for UWSS**

	Actual 2004	Actual 2005	Actual 2006	Expected 2007
Average target defined by NWSSIP	150	150	150	150
Recurrent Costs (US\$ Million)*	45	55	60	65
Investment Costs (US\$ Million)	40.5	58.5	76.2	94**

Source: JAR for NWSSIP year 2006

\* approximate

\*\* estimated at 75% of "approved" budget, in accordance with 2006 budget performance

### ***Institutional and operational performance***

Currently 13 WSSLCs with 28 utilities exist, while NWSA still maintains 13 (small) branches. About 91% of the total urban population is attended by independent, autonomous WSSLCs in line with the decentralisation policy.

The operational losses are on average 27.6% and are declining. Most of the utilities cover their O&M costs, but there are large differences between utilities, the data are often not plausible and the quality of O&M is not always ascertained. For proper O&M, the tariffs have to be revised regularly, but the sector is hesitant to raise tariffs when needed.

The tariffs are pro-poor in the sense that small users pay comparatively little.

UWSS has launched a Performance Indicators Information System (PIIS) monitoring system, NWSA and MWE planning departments. Also a benchmarking process has started. However, the quality of data collection varies highly and needs urgent attention.

The timely increase in coverage is reported to be hampered by i) complexity of project planning processes, ii) cumbersome disbursement processes, iii) limitations in water resources availability, iv) insufficient funds and v) low implementation capacity. It is also reported that there is much room for improvement in the quality of decision-making in investment planning and the setting of priorities. The sector still lacks a well defined capacity building strategy and human resource development and staff reform in the WSSLCs is only slowly gathering momentum.

The sector still lacks a reliable verification of the actual coverage and the functioning of the systems. The sector also lacks a policy towards the private / charity water and sanitation schemes, which play an important role in service provision.

However, it is noted that progress is made on almost all of the issues mentioned above.

### **5.3 Performance in Water for Agriculture (Irrigation)**

The total investments in the irrigation sector amount to about US\$ 28M, of which 50% is provided by donors. The NWSSIP calls for a yearly investment of about US\$ 38M.

Improved irrigation efficiency has reached only 46% of the targeted 1576 ha. The construction of piped conveyance system reached 89% of the targeted 11,250 ha. The total cost of these improvements was almost 50% higher than estimated in the plans. Water savings are in the order of 20-40% and savings of diesel fuel 25-40%. Water savings are about 2 M<sup>3</sup>/US\$ spent.



The implementation of new and rehabilitation of existing spate irrigation systems was more than 20% above target. New dam construction was 73% on target. Rehabilitation of terraces reached 73% of target. The total cost of these types of works was 2.5 times more expensive than originally planned.

The performance figures on the establishment of water user associations and water user groups are confusing. Generally the formation of the water user groups is successful in groundwater irrigation and less successful in other forms of irrigation systems.

The sub-sector is severely being criticised for the fact that it has not yet developed a comprehensive policy, strategy and subsequent roadmap, especially for tackling the over-exploitation of groundwater. Also, the "qat phenomenon" draws very diverse reactions and consequently is reported to lead to inaction. A first approach to such a comprehensive policy was presented at the JAR by the donor representative. Also the coordination between Agriculture and MWE leaves important room for improvement.

#### **5.4 Performance in Water Resources Management**

As the designated authority to guide and control water resources management in the country, the NWRA is still funded for 80% by the donors, mainly in support of investments. Recurrent costs are partly paid by donors and partly by GOY. In 2004, 2005 and 2006 the total expenditures respectively amounted to US\$ 0.45M, 0.60M and 0.85M for operational costs and to US\$ 1.05M, 3.41M and 4.45M for investments. NWSSIP calls for a yearly budget of US\$ 9.4M.

The following performance indicators describe progress:

- Only Ta'iz avails of a water resources management plan, which is being implemented. A start was made with the elaboration of water management plans in Sana'a, Sadah, Tuban-Abyan and Hadramawt. Key components of these plans (such as needs assessment and a water allocation plan) are still missing.
- In some basins (Sanaa, Sa' da, Taiz, Tuban/ Abyan and Amran), Water Basin Committees (WBCs) and/or Water Users Associations and Groups have been established, and gradually are trained how to manage locally the water resources. The Sana' a and Taiz WBCs meet monthly and the Sa'da WBC meets bi-monthly headed by the local governor. NWRA funding supports follow-up of random drilling, local public awareness activities, and training for WBC members locally and abroad. A total of 79 WUAs and 614 WUG are established
- The formulation of bye-laws to the amended water law, specifying registration of water rights and implementation of institutional structures, is delayed.
- The Groundwater Incentive Study already planned for 2004 was finally tendered in 2006, but has not yet started.
- NWRA has identified 231 unlicensed drilling contractors already some years ago, but NWRA has not yet succeeded in either licensing them or penalizing them. The NWRA 24-hrs operation rooms, where the general public can report violations / illegal drilling, registered 193 violations, while another 450 cases were registered at the NWRA offices. reported
- NWRA now avails of 179 automatic rainfall monitoring stations, 21 meteorological stations, 40 Wadi flow monitoring stations and 15 automatic groundwater monitoring stations. By 2009, these should roughly be doubled, except for groundwater monitoring, which should increase 15-fold.

The sub-sector is criticised for the fact that it has not yet succeeding in implementing in collaboration with Agriculture a comprehensive policy, strategy and subsequent roadmap for tackling the over-exploitation of groundwater. Also the coordination between Agriculture and MWE leaves important room for improvement.

## **5.5 GON contribution to sector performance**

The GON contribution to the outcome of the sector performance is identifiable in the RWSS and to a lesser extent in the sub-sectors UWSS and WRM.

### ***Rural Water Supply and Sanitation***

In the years 2002-2004, the Netherlands supported the water sector activities of PWP with about € 3.9 million. The contribution in number of schemes and beneficiaries could not be traced.

From 2005 onwards, GON supports the sub-sector with programmatic aid to GARWSP. The following figures are indicative<sup>49</sup>:

- in 2005, the Netherlands investments served 81,070 beneficiaries, with a total estimated investment of some US\$ 2.5 million.
- in 2006, the Netherlands investments served 45,611 beneficiaries with a total investment of almost US\$ 2.4 million.
- for the years 2007-2009, the Netherlands investments in RWSS are planned to serve 750,000 beneficiaries, with a total investment of about € 14.3 million.

Next to these, the Netherlands sector support has achieved improved policy development, institutional development and operational management as follows:

- strengthened the facilities of 4 of GARWSP Branch Offices
- improved the selection process for new investments in RWSS
- improved the planning and reporting of GARWSP and implicitly increased transparency

### ***Urban Water Supply and Sanitation***

The GON contribution concerns a performance based TA to the Ta'iz Water Supply and Sanitation Local Corporation (TWSSLC). By 2008, the TWSSLC is expected to have higher performance indicators for:

- energy efficiency improved with 25% (the % reduction of overall energy consumption in the operation and maintenance of the facilities per cubic meter of water produced)
- operations efficiency improved with 15% (the % increase in the total volume of water billed to customers as a percentage of the total volume of water production)
- supply of water improved with 80% (the % of connected households receiving 3 m<sup>3</sup> of water supply once in a 6 day rotation cycle )
- collection of outstanding debt improved with 60% (the % of gross collected outstanding debt of the total outstanding debt).

Next to these, the Netherlands sector support has achieved improved policy development, institutional development and operational management as follows:

- strengthened the procedures at TWSSLC
- helped to appoint new, merit-based management at TWSSLC.

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<sup>49</sup> These figures are indicative only. The main sources are the Value for Money Audit 2005 (COCA, July 2006), the Joint Annual Reviews of NWSSIP 2005 and 2006, and the GARWSP Annual Report. However, these reports are not fully conclusive on the number of beneficiaries directly benefiting from Dutch funding as the funds are often used for rehabilitation of water supply schemes, while all users are counted as new beneficiaries are counted, and in other cases other funds contribute to the projects. Especially in the first years an effort was made to finalize existing projects, which could explain the lower unit costs per beneficiary for 2005. Also the completion of the project may take longer than the period of reporting, hence the number of new beneficiaries per year is less than indicated here.

### ***Water Resources Management***

GON is an important donor to NWRA. The specific link between funding and performance cannot be quantified, but GON contributed to a major extent to the performance indicators mentioned above in Section 5.4.

### ***Water Sector in General***

Finally the Netherlands sector support has achieved improved understanding of SWAp, dialogue and government ownership as follows:

- Joint Annual Review
- improvement of the dialogue with the GOY, both in frequency and substance
- intensified dialogues with other donors on the merits of SWAp
- increased sense of ownership of GOY in general and GARWSP, NWRA and TWSSLC in particular

## 6. CONCLUSIONS

### 6.1 Aid Policy

In the (late) 90s the Netherlands was a rather prominent donor in the water sector with a total funding equivalent to about € 5M per year. Practically all aid was project based. In 2002, the Dutch aid allocation to Yemen was reduced with 33% to € 22M per year. GON indicated that an increase of aid allocation would be based on an improvement of the “governance indicators”, which policy was communicated again at the Consultative Group meeting on Yemen in 2006. The World Bank CPIA/IRAI scores for the last years however remained the same<sup>50</sup>. An opportunity for review of the level of aid will present itself in the context of the formulation of a new MYSP in 2008 by RNE. Based on the prevailing performance indicators and its present method of appreciation an increase in aid does not seem likely.

Since 2005, GON is again a fairly prominent donor in the water sector with aid increasing to about € 5M per year<sup>51</sup> in 2007. At the same time, GON changed its disbursement policy by establishing a programmatic aid modality based on a general Memorandum of Understanding with GOY on Program Aid to the Water Sector (PAWS). The aid is still earmarked for five components of the budget and an annual plan of budget allocation has to be approved by GON. The essence however is that the GOY organisations are fully in control of the implementation with checks afterwards through external audits. The aid is put in a special account at the MOF. The aid modality is often described as “a pre-SWAp”.

In applying this aid modality, the GON is well ahead of other donors in “systems alignment”. The decision to go ahead with this modality was based on a favourable Institutional Sector Organisation Analysis in 2005<sup>52</sup>. The decision is also based on the perception that this modality is the most conducive way to improve sector performance. It is believed that the personal commitment of RNE staff played an important role in moving towards the chosen aid modality.

The chosen aid modality is in line with current Dutch policy interpretation of practicing SWAp related aid modalities.

### 6.2 Conditions for applying the SWAp

The enabling environment for applying SWAp in the water sector in Yemen is considered favourable from a policy alignment and GOY ownership point of view, but opinions of the donors differ markedly on the environment for applying system alignment at a level beyond the common rather well controlled PMU based project environment.

In the rural and urban water supply sub-sectors, the conditions of policy alignment and ownership are conducive to SWAp for the following reasons:

- GOY and donors subscribe to the NWSSIP
- GOY implements a policy of deconcentration and decentralisation in RWSS and implements a policy of corporatisation in UWSS
- GOY subscribes to the findings of the JAR and supports the establishment of better monitoring and evaluation systems and sector performance indicators
- GOY is steadily increasing its budgets for the RWSS and UWSS sub-sectors.

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<sup>50</sup> CPIA (and RNE “Track record”) scores are aggregated: details show that scores are comparatively positive for the water sector

<sup>51</sup> The total annual allocation of € 22M is divided as follows: Education € 10M, Health € 4.5M, Water € 4.5M and the cross cutting theme Good Governance € 3M. The water sector budget is allocated as follows: rural water supply € 4.5M, water resources management € 0.5M, urban water supply € 0.25M per year.

<sup>52</sup> Institutional and Sectoral Analysis of the Water and Environment Sector in Yemen (ISOA), Royal Netherlands Embassy, Yemen, 2005.

In the irrigation sub-sector and to a lesser extent in the water resources management sub-sector, policy alignment and GoY ownership are less favourable for a SWAp for the following reasons:

- GOY finds it hard to address the most pressing issue in the water sector, i.e. the over-extraction of groundwater; the two responsible agencies, the MAI governing the demand of water and NWRA regulating the supply of water, still find it difficult to implement the agreed policies and to coordinate their efforts
- the NWRA is for 80% funded by donors.

The willingness of most of the donors to include a higher level of systems alignment in their aid modalities is hampered by a general mistrust in the implementing agencies in three main aspects:

- the capability of the sector agencies to set the right priorities and make the right technical decisions in the funding of investments and in operation and maintenance,
- the capability to timely implement the planned activities, which is hampered both by lack of capacity and by time consuming administrative procedures, and
- the poor transparency and accountability of the implementing agencies in their decision-making and administrative operations.

This lingering mistrust is deeply rooted and finds its foundation in the poor performance of the water sector agencies in the past, the general notion of a high level of corruption and a lingering concern for security<sup>53</sup>.

The rate of implementation of the National Reform Agenda (including PFM and CSR) will strongly determine how the conditions for systems alignment will improve in the eyes of the donors. Progress will eventually be expressed in higher CPIA /IRAI performance criteria. But even then, the recent history will remain to play a role in decision-making for some time to come.

GON subscribes to the general findings above, but draws different conclusions as described below.

### **6.3 Implementation of the SWAp**

GON is the only donor which applies a fairly high level of systems alignment without accompanying it with a strong TA component. Other donors use various forms and levels of system alignment, but have them always accompanied by strong TA. GON makes a different assessment of the capability of GARWSP and NWRA to manage their affairs than other donors do. This is documented in internal reports of different donors<sup>54</sup>. GON is of the opinion that it can manage the risks through the checks built in.

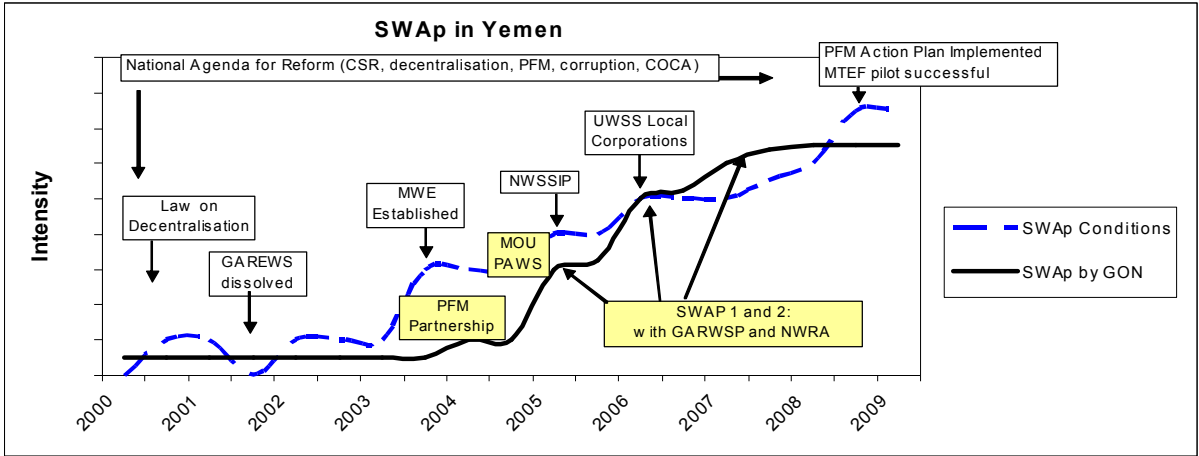
However, for RNE the main motivation for choosing the level of systems alignment is the vision that the SWAp as organising principle is the best way to practice capacity building and consequently improve the very conditions needed for higher levels of SWAp. It argues that the conditional indicators should not strictly be seen as conditions for applying SWAp, but rather as objectives of SWAp. In this vision, SWAp is put in the broad context of institutional development and capacity building leading to more sustainable interventions and results, improved and sustainable water sector performance and government ownership of activities undertaken. As a concept, the vision is supported by all donors and government alike, but GON has taken its consequences and has been much more rigorous in applying it.

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<sup>53</sup> Yemen's ranking on Transparency International's Corruption Perception List is falling (to the 111<sup>th</sup> out of 159 countries in 2006) and Yemen is classified as a "fragile state" by DfID since January 2005.

<sup>54</sup> For example the Institutional and Sectoral Analysis of RNE (2005) and the Yemen Development Policy Review of the WB (2006) differ widely in their assessment of the capacity of GARWSP; other WB documents are cautious but more positive, such as the Country Assistance Strategy of WB (2006) and the Assessment and Readiness for Sector Wide Approaches in the Water Sector, WB (2006).

The conditions for SWAp and the way the GON aid modalities have responded to these conditions are depicted in Figure 6.1. The figure shows important milestones reached and it also shows that the GON modality is currently ahead of the “conditions for SWAp” as PFM and MTEF conditions have not been met.



**Figure 6.1 – Progress in SWAp: conditions for SWAp and Dutch Aid Modalities**

It is noted that in response to the more cautious approaches by other donors and in an effort to justify its point of view, GON may tend to become overzealous and may not be sufficiently critical towards the organisations it is supporting. At the same time it relies upon these institutions to be self-critical, which generally is not the strongest point of any institution. Also the urge to deliver investments and reach MDG targets may cloud the quality issue and divert the attention from systems development, be it with or without technical assistance. In Yemen all these factors are felt to exist, but cannot be easily identified and quantified.

The first Value for Money Audit (VMA) for GARWSP (2005) was rather critical, both on the “hardware” and “software” components of the program. The VMA was fed back into GARWSP and is expected to lead to improved operations. The 2005, the VMA was applied to Dutch funded components of projects only, but will be extended to a sample of the full range of activities of GARWSP. The VMA for NWRA for the year 2005 is still being completed.

**6.4 Results of sector support**

The Netherlands support to the sector only started in 2005 and it is as yet difficult to quantify results in the form of improved service coverage. The following figures are indicative<sup>55</sup>:

- in 2005, the Netherlands investments in RWSS served 81,070 beneficiaries, with a total investment of
- in 2006, the Netherlands investments in RWSS served 45,611 beneficiaries with a total investment of
- for the years 2007-2009, the Netherlands investments in RWSS are planned to serve 750,000 beneficiaries, with a total investment of
- increased funding by GOY, yearly increase for GARWSP as part of MoU PAWS agreement: 20 % for investments and 30 % for operation and maintenance
- by 2008, the TWSSLC is expected to have higher performance indicators for
- pm for NWRA

<sup>55</sup> These figures still may to be checked as the number of beneficiaries for a specific project may have been counted on the basis of the whole project, while GON only contributed to part of the specific project

Next to these, the Netherlands sector support has achieved improved policy development, institutional development and operational management as follows:

- strengthened the facilities in all of the 20 GARWSP Branch Offices
- improved the selection process for new investments in RWSS
- improved the planning and reporting of GARWSP and implicitly increased transparency
- strengthened the facilities of all of the NWRA Branch Offices
- strengthened the procedures at TWSSLC
- helped to appoint new, merit-based management at TWSSLC

Finally the Netherlands sector support has achieved improved understanding of SWAp, dialogue and government ownership as follows:

- JAR (but recommendations first JAR not followed up / carried out)
- improvement of the dialogue with the GOY, both in frequency and substance
- intensified dialogues with other donors on the merits of SWAp
- increased sense of ownership of GOY on general and GARWSP, NWRA and TWSSLC in particular

## **6.5 Harmonisation, alignment and ownership**

### ***Harmonisation***

The harmonisation between donors has reached a fairly high level of sharing information and in supporting policy development. Harmonisation in the implementation of programmes is hardly existent beyond general information. Harmonisation is only slowly leading to joint evaluations and analyses, especially at local level through the JAR Harmonisation has not yet led to pooled funds, common funds and joint programmes.

The main bottleneck to reaching higher levels of harmonisation are i) the different views the donors have on the capacity of the government organisations to implement programs and the trust in the government administrative and management systems, and ii) the different views the donors have on whether improved capacity and management systems are conditional to higher modalities SWAp or are objectives of the higher modalities. GON advocates that SWAp is the best organising principle for capacity building (and acts accordingly), while other donors rather focus on the risks involved.

The enabling environment, the policy framework, the government ownership, the donor declared strategies are such, that there is little reason for the donors (and GOY) not to come to substantially higher degrees of harmonisation i) in defining programs and setting priorities, ii) in trusting to complement each other, iii) in pooling resources, iv) in coordinating the implementation of programs, v) in coordinating missions and sharing information, vi) in interacting with the GoY jointly and on behalf of each other and vii) in jointly supporting the GoY in achieving a higher degree of “systems alignment”

### ***Alignment***

Policy alignment is high for all donors in RWSS and UWSS, in the sense that they subscribe to the principle policies and operational approaches of the GOY. In WRM and Irrigation the donors subscribe to the chosen objectives, but there is not yet agreement on the priority setting and the operational approaches, which are not well defined.

Systems alignment is exercised primarily by the Dutch through its programmes with GARWSP, NWRA and TWSSLC, albeit with a number of safeguards and earmarking budget categories. Other donors have forms of system alignment in the sense that they make use of government administrative and procurement systems and technical implementation systems,

but importantly supported by technical assistance and in some cases with special PMUs, which are not embedded in government structures<sup>56</sup>.

The bottleneck to higher forms of system alignment is the doubt donors have about the capacity of the government organisations to deliver, and their view on the level of transparency and accountability of the government. A high level of budget support is also hampered by the lack of an MTEF. The GON approach that these bottlenecks are best tackled by actually applying a controlled form of system alignment is not supported in an operational sense by the other donors<sup>57</sup>.

The enabling environment, built by donor attitude and GOY systems, is insufficient to expect a higher level of systems alignment in the short-term: for the GON to go beyond the current level of system alignment as specified in PAWS and for the other donors beyond establishing PMUs. On the medium-term, there are positive indications, especially from the World Bank, which will probably trigger other donors as well. The enabling environment and policy framework is such that it may be expected from the donors that they constructively contribute to defining a roadmap and paving that road for establishing higher levels of systems alignment.

### ***Ownership by GOY***

GOY ownership of the policies and principle approaches is high. GOY efforts in decentralising water services delivery to rural communities and urban corporations are commendable. GOY still has to prove its commitment to operationalising many of the policies and reforms. The slow follow-up of the approved recommendations of the JAR, the slow process to improve PFM and to implement CSR, and the hesitance to really tackle capacities in the sector are all considered critical factors for progress. This progress will not only determine how SWAp will be implemented in the sector, but also how much donor funding the sector will be able to draw in the coming years.

### ***Overall conclusion***

Although GON is ahead in system alignment as compared to other donors and may seem to operate in isolation, it is justified to do so because of the following risk reducing conditions:

- the institutional arrangements in the sector have stabilised, while GOY and all donors pursue the same operational policies, independent of aid modality; the recipient organisations have a clear mandate
- GON is a comparatively influential donor in the two sub-sectors it has chosen
- the recipient organisations GARWSP and TWSSLC (and to a lesser extent also NWRA) are service delivery and investment organisations with lasting, controllable output on the ground
- GON has built in a fair level of monitoring, evaluation and feedback into the programme

## **6.6 Lessons learnt**

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<sup>56</sup> Examples of the first category are the WB and KfW investment programmes in UWSS. The World Bank RWSS project is being implemented with a PMU in parallel to GARWSP (although there is a clear indication that this approach will not be repeated in the follow-up activities starting 2009).

<sup>57</sup> In Yemen it was also noted that these different interpretations and consequences thereof taken by GON to implement "SWAp" and "be ahead of other donors" lead to tension between donors: there is a certain pressure to harmonise and align and one donor seems to do better than the others. On the other hand, it is probably true that the impact of a SWAp is increased manifold if it is carried out in harmonisation with other donors. For sector institutional development, a high level of harmonisation with other donors may in the end be more effective than practicing and preaching the ultimate SWAp (which other donors cannot honour) in isolation, provided that the other donor is like-minded in its institutional objectives to be achieved including a higher level of systems alignment.



The following lessons relevant for the development of SWAp in general and in particular for GON SWAp in the water sector can be drawn from the Yemen experience:

- There are important different definitions on what constitutes a SWAp and what is meant with the word SWAp. Most donor representatives consider SWAp as an budget support aid modality and generally call any less aligned aid modality a programme based aid.
- Most donor representatives in Yemen cite the fiduciary risks as the reason not to embark on higher levels of system alignment. Reduction of this fiduciary risk through improved PFM systems and transparent accounting systems is a condition for SWAp.
- Although most donor representatives share to a fair extent the RNE vision that systems alignment itself is a good way of institutional development and capacity building, none of the representatives wishes to take the consequence and apply the vision in practice, citing fiduciary risks. Most donors however support GON in its efforts.
- SWAp requires a high level of trust and a well organised dialogue between government and development partners, between government departments and between the development partners is a condition sine qua non
- SWAp contributes importantly to the dialogue with the government, both in intensity and substance; in the same way it has also contributed to dialogue with donors on SWAp, but sometimes it has led to donor representatives feeling to be pressed or lectured
- A well-organised JAR as is being implemented in Yemen with a the full range of stakeholders and concrete topics of sector performance based on accepted indicators contributes importantly to the dialogue; as such a JAR may be considered conditional to SWAp
- SWAp contributes importantly to government ownership of the aid programmes.
- A sector roadmap, which has operationalised the national sector policy and strategy in a MTRF, is crucial for a long-term SWAp with a high level of systems alignment, close to budget support
- A sector specialist of RNE willing to introduce SWAp requires a good understanding of the processes of “change management” and “modalities of capacity building”
- The indicators used for describing the “conditions for SWAp” are not relevant in operational terms; the indicators should be replaced by a set of indicators describing the SWAp preparation process so as to value efforts and programmes properly.

## **ANNEXES**

### **ANNEX 1 – DPPR on vision and Strategy for WRM and WSS**

The following is the text from the Socio-Economic development Plan for Poverty Reduction (2006-2010).

#### **Water Resources Management:**

The DPPR's vision is to achieve integrated management of resources, improve the legislative environment, and safeguard access to water as a right. It aims to increase the domestic and industrial shares of total water use to 15% and 4% respectively and, to reduce the depletion ratio to 25%, while increasing water resources by 5% a year. The strategy for meeting these water resource management targets is multifaceted and includes improvements to the institutional structure of the Ministry of Water and Environment (established in 2003) and its affiliated agencies and enterprises, backed by the promulgation of relevant legal instruments to rationalise task management and the division of labour. Water resource management systems and use must be rationalised and modernised, and implementation of the National Strategy for Water, the Water Act, relevant by-laws and other procedures to conserve water resources must be expedited. Water utilisation patterns need to be altered, cost-recovery initiatives introduced, and waste and pollution controlled. In addition, new and sustainable supply sources need to be identified. Plans also include expanded construction of dams, canals and dikes as well as new monitoring stations. Techniques such as water harvesting, desalination and wastewater treatment will be promoted. Other necessary measures include enforcement of measures to protect groundwater sources, and enhancement of the role of local communities in aquifer management, selection of the management and operation of projects, monitoring of water use and water conservation. Clear standards must be defined and water use for sectors with higher economic returns must be encouraged. Users' rights need to be defined and properly legislated, together with clear policies that assign roles and responsibilities with consideration for vulnerable groups. A review of trade and agricultural policies is also planned, leading to revisions in prices. These measures require adequate allocation of financial resources, including from the Fund for the Promotion of Agricultural and Fishery Production.

#### **Water Supply and Sanitation:**

The DPPR's vision is to provide safe water and appropriate sanitation services for all regions, and thus to improve the health and environmental human development needs of the country. The Government aims to increase coverage of safe water supplies to about 71% of the urban and 47% of the rural populations. Similarly, sanitation services will be extended to 52% of the urban and 37% of rural residents by the year 2010. Furthermore, water loss in the networks will be cut down to 15%, and wastewater treatment will be raised from 50,000 m<sup>3</sup> in 2005 to 100,000 m<sup>3</sup> by 2010.

In line with their differing contextual and structural needs, the Government is adopting distinct strategies for achieving its watsan goals in rural and urban areas. Locally managed and smaller-scale watsan infrastructure projects can reinforce and benefit from social cohesion and self-reliance at the community level, reduce costs, and help to empower communities within the framework of the national decentralisation policy. For this purpose, governorate-level bodies will need to be formed for planning coordination and management of watsan works in rural areas. Concurrently, the requisite legislative framework will need to be established, and the Public Enterprise for Rural Water Projects restructured and revamped so as to address rural sanitation issues also. Services will need to be better targeted at vulnerable groups and women in particular, and the private sector and local communities encouraged to fund and implement projects jointly with early involvement of intended beneficiaries in the project cycle with due attention to sustainability and environmental priorities. Moreover, water resources must be secured and protected, and use of low-cost and efficient techniques promoted. Finally, it is intended to make environmental sanitation considerations a mandatory requirement for future ventures, and to raise public awareness of such issues with women as a primary target group.

## **ANNEX 2 – Strategic Directions for GON funding as derived from MYSP of RNE**

### **Protection and sustainable use of the environment and of water in the global context and in the national context of developing countries.**

#### Strategic goal

The Ministry of Water and Environment (MWE), the National Water Resources Authority (NWRA) and the Environmental Protection Agency (EPA) have the capacity to adequately manage their programmes, in a sufficiently transparent and accountable way. They are able to enforce the regulatory framework in their sub-sectors. Donors provide programme-based, harmonised assistance to these institutions. NWRA and EPA are ready to manage budget support to their sub-sectors.

#### Strategic targeted results of the Embassy

- Policy discourse on integrated water resources management:
  - The implementation of the Taiz water resources management plan has started (2005).
  - Implementation of the environmental component of the Taiz Integrated Water Resources Management (IWRM) plan by EPA and other stakeholders has started (2006).
  - A “rational” ground water policy with rules and benchmarks has been proposed (2007).
  - Strategic Environmental Assessments (SEA) and Environmental Impact Assessments (EIA) are being incorporated in EPA’s annual planning (2007).
- Strengthening capacity and building professional and competent government:
  - A co-operation agreement has been signed between MWE/EPA and the Dutch EIA commission that will include a SEA for the Taiz water resources management plan (2005).
  - The capacity of the NWRA Taiz Branch has been strengthened through the establishment of a regulatory framework that is being enforced to conserve ground water for sustainable use (2006).
  - The NWRA branches in Hadramawt and Aden have been strengthened to the extent that they can implement the basin management plans for their regions (2007).
- Donor harmonisation and alignment:
  - Key donors have signed the joint donor declaration of support for the National Water Sector Strategy and Investment Program NWSSIP (2005).
  - Silent partnership with DFID co-financing the IWRM programme has become operational (2005).
  - A donor-donor and donor-recipient co-ordination mechanism has become operational (2005).
  - Key donors have agreed upon a road map to operational harmonisation in the sector (2006).
- Working towards programme-based assistance:
  - An ISOA has been finalised and the Netherlands strategy for the sector updated (2005).
  - Support to the implementation of NWRA’s IWRM programme has started (2005).
  - The staff incentives issue has been adequately addressed for the sector (2005).
  - An MDG-oriented key performance indicator table based on NWSSIP and monitoring system has been agreed upon (2005) and the monitoring capacity of the Ministry so that is able to undertake a benchmark assessment with respect to MDG 7, target 10 (2006).

#### Intervention strategy

The water sector in Yemen is emerging from an institutional crisis. The establishment of MWE in 2003 has greatly enhanced the chances for developing a unified sector vision, with clear targets to contribute to the achievements of the MDGs and to mobilise support. The ministry is reorganising the water sector with the aim of creating a solid institutional structure for integrated water resources management. It is preparing the necessary institutional and investment conditions to tackle the deteriorating water situation in Yemen. The Netherlands plays a vital role in the water sector in Yemen because of its long-term commitment and its efforts to work towards (sub) sector budget support, inter alia to reduce transaction costs. The establishment of the ministry, the international trend towards IWRM and the pioneering role of the Netherlands in this field constitute a promising basis to

successfully work towards capacity strengthening in the sector and assist in building a competent and professional government, while contributing to the achievement of the MDGs. One of the challenges of the new ministry is to gain clout within the Government in order to have the regulatory framework for several sub-sector mandates enforced.

**A higher proportion of the world's population with sustainable access to safe drinking water and sanitation and a considerable improvement in the living conditions of a significant number of slum dwellers.**

Strategic goals

The General Authority for Rural Water Supply Projects (GARWSP) has become the apex institution in the sub-sector with adequate capacity to manage its programmes, in a sufficiently transparent and accountable way. Donors provide programme-based, harmonised assistance to the sub-sector and GARWSP is ready to manage budget support.

The capacity of at least one Local Water Corporation has been enhanced through a Public Private Partnership to the extent that it operates autonomously in a self-sustaining manner.

Strategic targeted results of the Embassy

- Policy discourse on drinking water supply and sanitation:
  - The Demand Responsive Approach policy and strategy are agreed upon by stakeholders (2005).
  - Rural water supply and rural sanitation issues are considered in an integrated manner in the sub-sector policy and implementation strategy (2005).
- Strengthening capacities and building professional and competent government:
  - GARWSP is sufficiently strengthened to co-ordinate implementation with the Social Fund for Development and the Public Works Programme (2005).
  - Four branch offices of GARWSP are sufficiently strengthened to operate autonomously (2007).
  - A Public Private Partnership has been established between a local corporation for urban water supply and a Dutch water company (2008).
- Working towards programme based assistance:
  - The ongoing Water Supply Programme is closely aligned with GARWSP (2005).
  - Performance Indicators and baseline data are agreed upon for the rural water supply and sanitation sub-sectors (2005).
  - Rural water supply sub-sector monitoring and evaluation is sufficiently strengthened and is able to provide internationally acceptable monitoring data to assess progress towards MDGs (2006).

– Intervention strategy

The new Ministry of Water and Environment incorporates the sub-sectors of water resources management, urban water supply, rural water supply and environmental protection. GARWSP is the Government authority with the mandate for rural water supply and sanitation service delivery. Due to institutional changes in recent years the GARWSP has not yet been sufficiently developed to assume its leadership role in the sub-sector. However, the incorporation of the authority within MWE, the ambitious international agenda setting through the MDGs for increased water supply and sanitation services and the lead role of the Netherlands in this field in Yemen provide a solid basis for the strengthening of the administrative and technical capabilities of GARWSP through TA, both at the central and at the branch office level. Given the vast needs of the sub-sector investment funds also need to be made available. The Embassy plays a vital role in the sub-sector, because of its long-term commitment and its efforts to work towards (sub) sector budget support; it is keeping donor-donor and donor-stakeholder co-ordination in the sub-sector high on the agenda; and the Embassy facilitates the contacts between a local corporation for urban water supply and the Dutch drinking water industry.

### ANNEX 3 – Comparison of Sector Governance Ratings by RNE

**Table A3.1 - Governance Ratings for the Water Sector by RNE for 2001-2006**

Indicator	WATER SECTOR					
	2006	2005	2004	2003	2002	2001
Sector Objectives		B	C	B	B	
Sector Budget Support		B	C	D	D	
Sector Policies		B	B	B	B	
Commitment Civil Society		B	B	B	B	
Commitment Public Sector / Government		B	B	B	B	
Commitment Donors		C	C	C	C	
Capacity Public Sector / Government		C	C	C	C	
Progress Budget Support		B	C	C	D	

Source: RNE

A = Good, B = Satisfactory, C = Unsatisfactory and D = Poor.

**Table A3.2 - Governance Ratings for the Health Sector by RNE for 2001-2006**

Indicator	HEALTH SECTOR					
	2006	2005	2004	2003	2002	2001
Sector Objectives		C	C	C	C	
Sector Budget Support		C	C	D	D	
Sector Policies		B	B	B	B	
Commitment Civil Society		B	B	C	C	
Commitment Public Sector / Government		C	B	B	C	
Commitment Donors		C	C	C	C	
Capacity Public Sector / Government		C	C	C	C	
Progress Budget Support		C	C	C	D	

Source: RNE

A = Good, B = Satisfactory, C = Unsatisfactory and D = Poor.

**Table A3.3 - Governance Ratings for the Education Sector by RNE for 2001-2006**

Indicator	EDUCATION SECTOR					
	2006	2005	2004	2003	2002	2001
Sector Objectives			C	C	C	
Sector Budget Support			C	D	D	
Sector Policies			B	B	B	
Commitment Civil Society			B	C	D	
Commitment Public Sector / Government			B	B	C	
Commitment Donors			B	B	C	
Capacity Public Sector / Government			C	C	D	
Progress Budget Support			C	C	C	

Source: RNE

A = Good, B = Satisfactory, C = Unsatisfactory and D = Poor.